GUHRING



THREADING POWER



Dr. Jörg Gühring

President

Oliver Gühring

Sales and Marketing Director

7000

Employees world-wide



3500

Employees Germany



Internal training and further programme of education

International knowledge transfer thanks to world-wide exchange programme for employees



Dietmar Pfränger

R&D, Logistics, Technical and Production Director

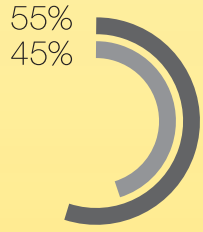
Bernd Schatz

Financial and Commercial Director

Core segment tools

50000
Standard tools

2000
Tool types



Everything from one supplier – comprehensive and global

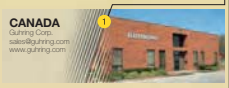
With a global network of manufacturing sites Guhring develops and produces precision tools for all the important markets. Users from the automotive industry, the aerospace industry or the machine tool and general industry rely on the trend-setting tools manufactured world-wide at the highest level to uniform quality standards.

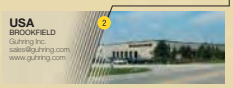
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PRODUCTION CENTRES

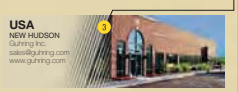
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SUBSIDIARIES

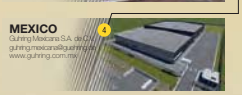
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SERVICE CENTRES

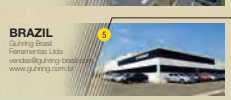


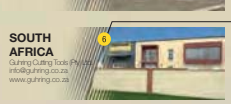




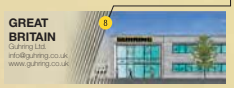




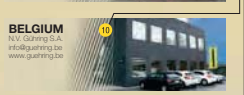




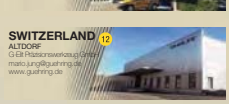


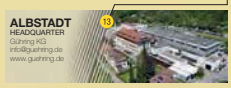


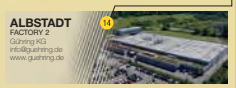








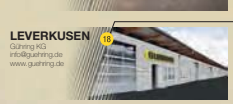


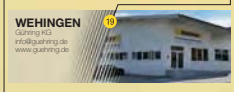


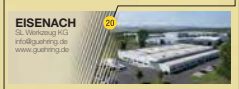




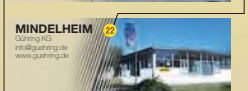


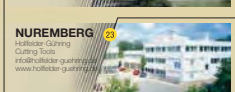


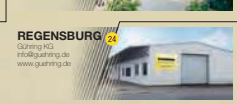












With innovative technologies Guhring meets specific customer requirements from process proposal to series application of the precision tools – flexibly, promptly, globally. For this, experts are in action internationally looking after customers on site. Production, service and contact persons are available from one supplier world-wide.

Own carbide production

Own machine construction

Own coating plants

Highest quality standards world-wide



CHEMNITZ 25
Dr. Gühring KG
info@guehring.de
www.guehring.de

KULMBACH 26
Gühring KG
service@german-carbide.com

MARKT-ERLBACH 27
Gühring KG
info@guehring.de
www.guehring.de

TREUEN FACTORY 1 28
Dr. Gühring KG
info@guehring.de
www.guehring.de

TREUEN FACTORY 2 29
Dr. Gühring KG
info@guehring.de
www.guehring.de

TREUEN FACTORY 3 30
Dr. Gühring KG
info@guehring.de
www.guehring.de

BERLIN 31
G-Est
Präzisionswerkzeuge
info@guehring.de
www.guehring.de

ZORBAU 32
Hoffelder Gühring GmbH
info@hoffelder-guehring.com

SPAIN 33
Gühring S.A.S
guhring@guhring.es
www.guhring.es

ITALY UBEMME 34
Ubemme Gühring Italia S.r.l.
info@ubemme.it
www.ubemme.it

ITALY MISSAGLIA 35
Gühring s.r.l. Unipersonale
info@guhring-italy.com
www.guhring-italy.com

FRANCE 36
Guhring France S.A.R.L.
info@guhring-france.com

RUMANIA 37
Guhring s.r.l. Romania
romania@guhring.de

HUNGARY 38
Tritan Gühring KFT.
info@tritan.hu
www.tritan.hu

AUSTRIA 39
Gühring Ges.m.b.H.
verkauf@guehring.at
www.guehring.at

POLAND 40
Gühring Sp. z.o.o.
handel@guehring.pl
www.guehring.pl

CZECH REPUBLIC 41
Gühring s.r.o.
informace@guehring.cz
www.guehring.cz

DENMARK 42
Gühring Aps
info@guehring.dk
www.guehring.dk

VIETNAM 43
Guhring Vietnam LLC.
info@guhring.vn

THAILAND 44
Guehring (Thailand) Co., Ltd.
info.thailand@guhring.de
www.guehring.co.th

INDIA 45
Guhring India Pvt. Ltd.
info@guhring.in
www.guhring.in

CHINA 46
Guhring Changzhou
info@guhringchina.com
www.guhringchina.com

TURKEY 47
Gühring Talem San. Tic. Ltd. Sti.
guhring@guhring.com.tr
www.guhring.com.tr

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Guhring - Russland
info@guhring.ru
www.guhring.ru

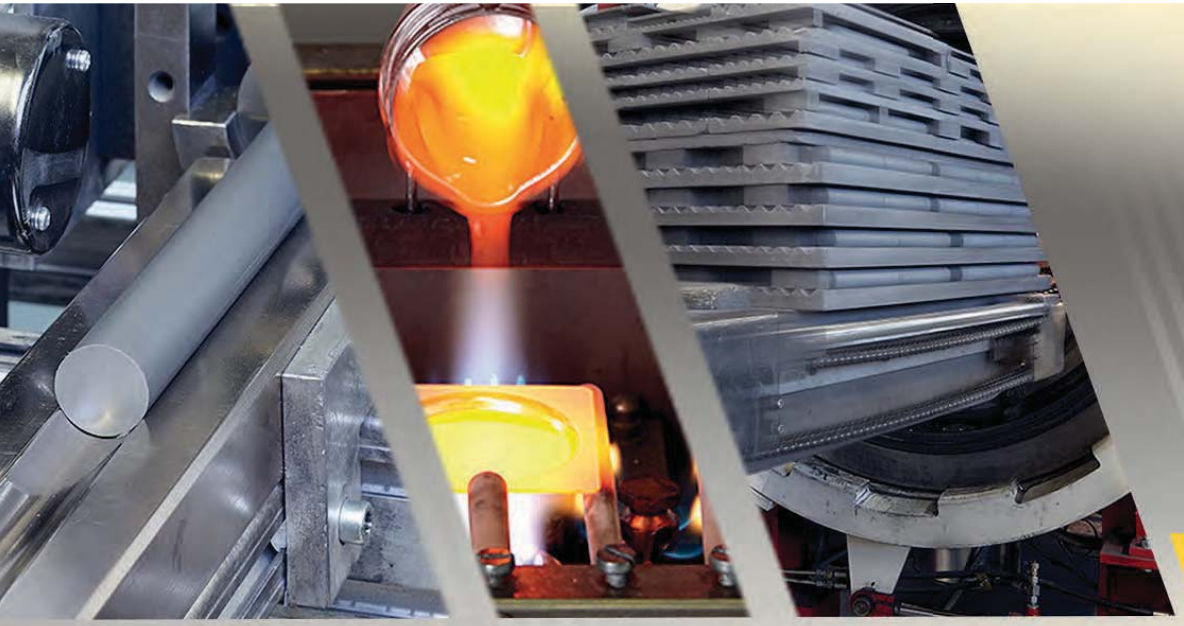
AUSTRALIA 49
Guhring Pty. Ltd.
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www.guhring.com.au

INDONESIA 50
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sales@guhring.co.id
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TAIWAN 51
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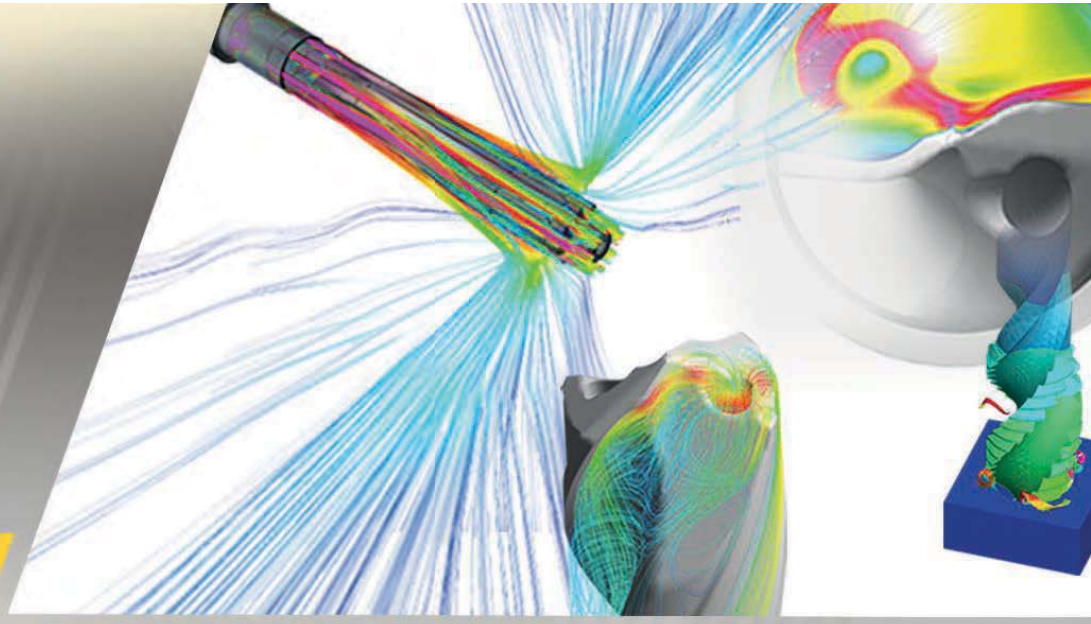


TOOL MATERIALS
Own carbide production

Optimal co-ordination of
all tool parameters thanks
to own R&D sectors

MACHINE & EQUIPMENT DIVISION
Own machine tool and equipment divisions





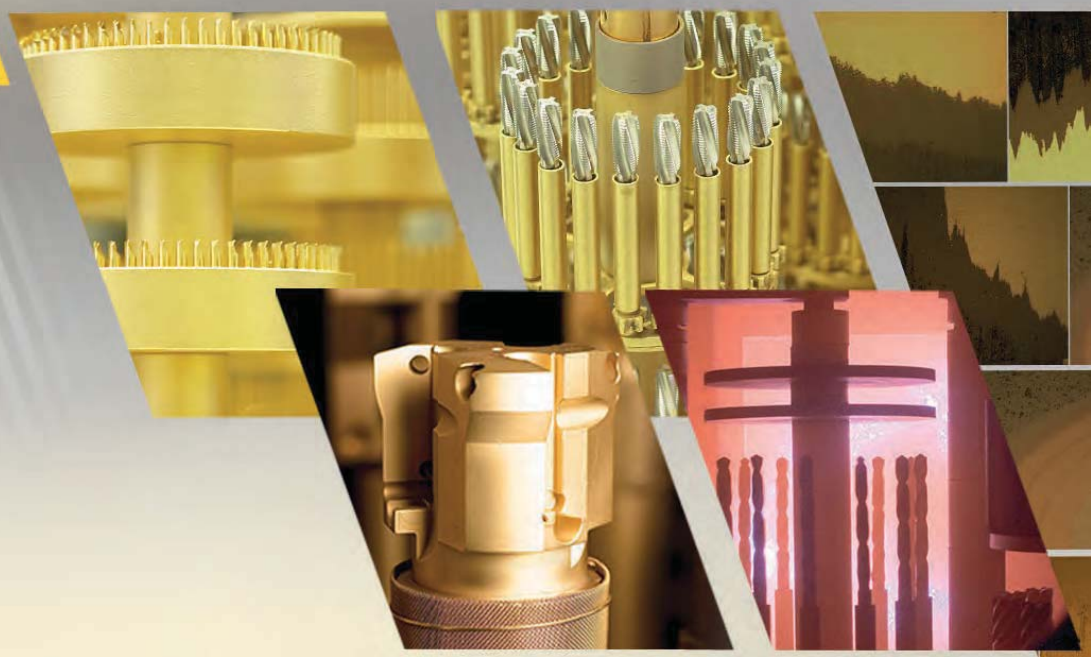


GEOMETRIES

Own R&D for tool development

COATINGS

Own coating systems and
own coating development



EVERYTHING FROM ONE SUPPLIER

Greater variety for your production with our Power threading tool range



- Thread milling cutters



- Micro-thread mill





- GÜHROSync



Taps

Fluteless taps

Micro-fluteless taps



MACHINES LONGER

ESPECIALLY WITH STAINLESS STEELS, THE PROBLEM SOLVER WITH HIGH WEAR-RESISTANCE

Further information regarding our Sirius-coating can be found using the QR-code or directly at www.guehring.de/download

Guhring no. 4218 can be found on page 38

The new VA taps

NEW *Strong helix for high process reliability, combi-coating for longer tool life*

Guhring no. 393 can be found on page 244



New Thread milling cutters

NEW

Special carbide, innovative geometry and ideal coating for the perfect tool



Hard machining > 45 HRC

Guhring no. 4227 can be found on page 703

New Thread milling cutters with clamping surface

NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW



Now with HB shank for secure clamping

Guhring no. 3556 can be found on page 209

Economical and process reliable production with threading tools from Guhring

NEW New Micro-thread milling cutters



Perfection in the detail for micro-threads

Guhring no. 4226 M1.6 can be found on page 215
Guhring no. 4225 M1.8 can be found on page 217



Size ratio 1:1



LOCATION

LAIZ



LOCATION

TREUEN





GUHRING

PRODUCTION
LOCATIONS
THREADING TOOLS





PICTOGRAMS
AT A GLANCE

ISO code

P	Steel, high-alloyed steel
M	Stainless steel
K	Grey cast iron, spher, graphite/mall. cast iron
N	Aluminium and other non-ferrous metals
S	Special, super and titanium alloys
H	Hardened steel and chilled cast iron

On the following price and programme pages you will find for every tool recommendations regarding suitability for the application groups and details of max. tensile strength and hardness:

- ● optimal suitability
- ○ limited suitability

Pictograms

Tool material

HSS | HSS-E | HSS-E-PM

High-speed steel

VHM

Finest grain solid carbide (carbide-UF)

Thread depth

1,5xD | 2xD | 2,5xD | 3xD

Tolerance on Ø

2B | 2BX | 3B | 3BX | 4HX | 6H | 6HX | 6GX | 2a | 6g

ISO1/4H | ISO2/6H | ISO3/6G | ....

Thread type


Through holes


Blind holes


Through holes and blind holes

Cutting direction



right



left

Internal coolant


with IC


without IC

Form

A | B | C | C(K) | D | E

Description

V — First tap

M — Second tap

F — Bottoming tap

Standard

DIN 352 | DIN 371 | DIN 376 | DIN 374 | DIN 371/376 | DIN 2189 | DIN 5156 | ....

to DIN

WN

to Gühring Standard

Type

N | N R40 | H | H R15 | VA | Al | GG | Ti Ni | ....

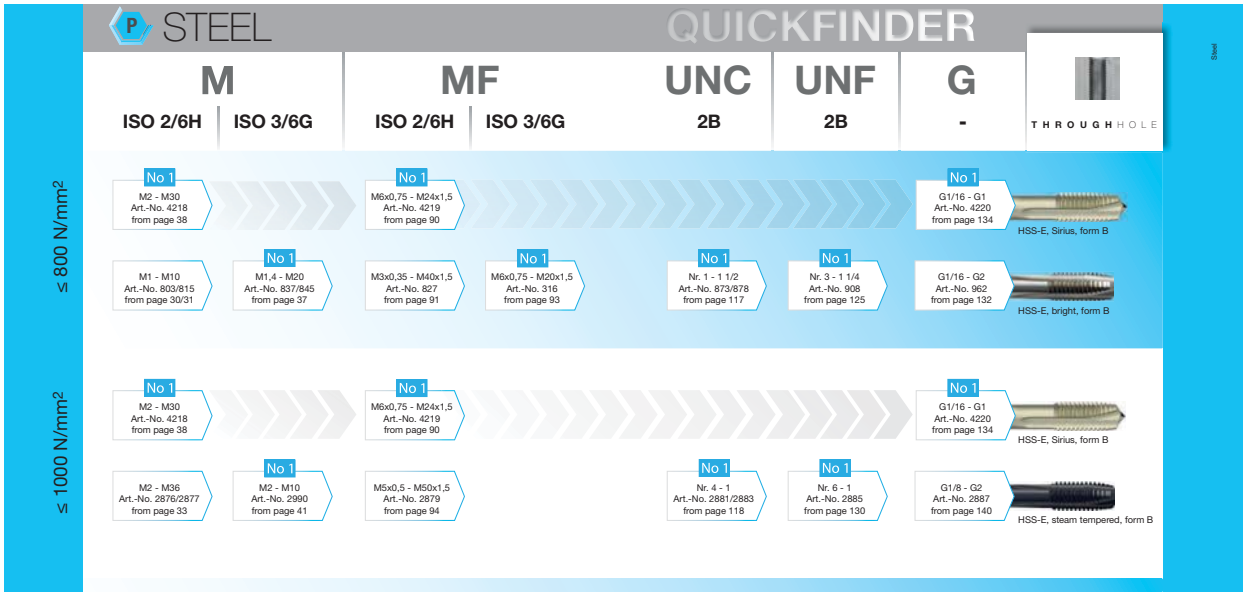
Coatings

- ○ bright
- ◌ steam tempered
- ● nitrided
- (A) TiAlN
- (C) TiCN
- (Cb) Carbo
- (P) AlCrN
- (S) TiN
- (M) MolyGlide
- (S) Sirius

TOOL SELECTION made easy

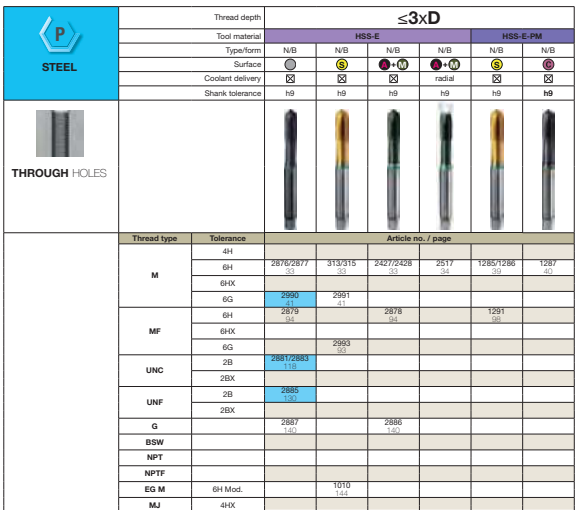
QUICKFINDER

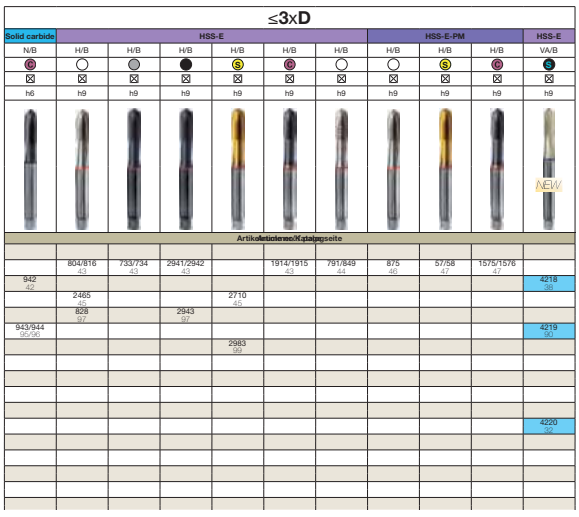
From your application quick and easy to the ideal tool!



COMPASS

The complete programme in a clear overview - including application recommendations and cutting data!





Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
P Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR	1.0037	12	15	15	15	20	20
		C15	1.0401						
		11SMnPb30	1.0718						
Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2	1.0577	10	12	12	12	15	15
		C60	1.0601						
		31CrMo12	1.8515						
Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4	1.7225	6	8	8	8	10	10
		36CrNiMo4	1.6511						
		X36CrMo17	1.2316						
		HS 6-5-2	1.3343						

Recommended cutting speed vc m/min										
40	-	-	-	-	-	-	-	-	-	25
30	6	6	6	6	6	6	8	10	10	20
25	10	10	10	12	12	10	12	15	15	15

SELECT AND ORDER

PRODUCT PAGE

All data at a glance!

Machine taps for ISO metric threads

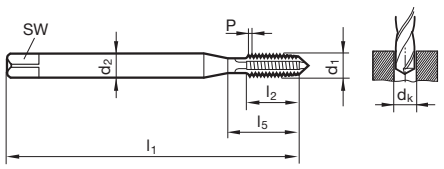
Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	☒

NEW

P	●
M	●
K	○
N	○
S	○
H	

Cutting data page 21

Application recommendation:
● optimal suitability
○ limited suitability





DIN 2184-1 DIN 371/DIN 376 Article no. **4218**

1 Article No.

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

2 Nominal size

When ordering please always state the **die Article No. and the nominal size**, i.e.: machine taps for ISO metric threads for nominal size M5 = **4218 5,000**

For our latest prices, please refer to our separate price list.

Re-production – even in part – is not permitted.

Possible misprints or any type of intermediate changes do not entitle to any claims. All DIN marked products can be supplied deviating from the catalogue dimensions as long as they correspond to the specified DIN standard.

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Gühring KG
P.O. Box 10 02 47 · D-72423 Albstadt
Herderstraße 50-54 · D-72458 Albstadt

Tel.: +49 74 31 17-0
Fax: +49 74 31 17-21 279

Internet: www.guehring.de
E-Mail: info@guehring.de

















Steel

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Taps ..... from page 18
Fluteless taps ..... from page 26
Thread milling cutters ..... from page 28

Stainless steel

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Taps ..... from page 228
Fluteless taps ..... from page 232
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Grey cast iron, spheroidal/malleable cast iron

Quickfinder ..... from page 338
Taps ..... from page 348
Fluteless taps ..... from page 352
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Aluminium, non-ferrous metals, plastics

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Special-, super- and Ti-alloys

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Hardened steel

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Dies ..... from page 706

Hand taps ..... from page 721

Tapping chucks ..... from page 735

Technical section ..... from page 773

Contents ..... from page 824

Article no. index ..... from page 854



STEEL



P

General steels with tensile strengths from 500 to 1200 N/mm^2, tool steels, heat-treatable steels, high speed steels

P STEEL

M

ISO 2/6H

≤ 800 N/mm²

No 1
M2 - M30
Art.-No. 4218
from page 38

M1 - M10
Art.-No. 803/815
from page 30/31

≤ 1000 N/mm²

No 1
M2 - M30
Art.-No. 4218
from page 38

M2 - M36
Art.-No. 2876/2877
from page 33

≤ 1200 N/mm²

No 1
M2 - M30
Art.-No. 4218
from page 38

M2 - M24
Art.-No. 2941/2942
from page 43

ISO 3/6G

≤ 800 N/mm²

No 1
M1,4 - M20
Art.-No. 837/845
from page 37

≤ 1000 N/mm²

No 1
M2 - M10
Art.-No. 2990
from page 41

MF

ISO 2/6H

≤ 800 N/mm²

No 1
M6x0,75 - M24x1,5
Art.-No. 4219
from page 90

M3x0,35 - M40x1,5
Art.-No. 827
from page 91

≤ 1000 N/mm²

No 1
M6x0,75 - M24x1,5
Art.-No. 4219
from page 90

M5x0,5 - M50x1,5
Art.-No. 2879
from page 94

≤ 1200 N/mm²

No 1
M6x0,75 - M24x1,5
Art.-No. 4219
from page 90

M3x0,35 - M24x1,5
Art.-No. 2943
from page 97

ISO 3/6G

≤ 800 N/mm²

No 1
M6x0,75 - M20x1,5
Art.-No. 316
from page 93

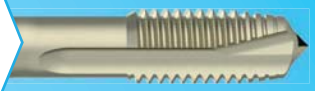
No 1 ideal tool

QUICKFINDER

UNC	UNF	G	
2B	2B	-	THROUGH HOLE



No 1
G1/16 - G1
Art.-No. 4220
from page 134



HSS-E, Sirius, form B

No 1
Nr. 1 - 1 1/2
Art.-No. 873/878
from page 117

No 1
Nr. 3 - 1 1/4
Art.-No. 908
from page 125

G1/16 - G2
Art.-No. 962
from page 132



HSS-E, bright, form B

No 1
G1/16 - G1
Art.-No. 4220
from page 134



HSS-E, Sirius, form B

No 1
Nr. 4 - 1
Art.-No. 2881/2883
from page 118

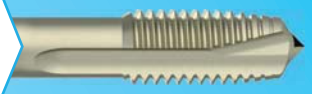
No 1
Nr. 6 - 1
Art.-No. 2885
from page 130

G1/8 - G2
Art.-No. 2887
from page 140



HSS-E, steam tempered, form B

No 1
G1/16 - G1
Art.-No. 4220
from page 134



HSS-E, Sirius, form B



HSS-E, nitrided, form B

P STEEL

M

ISO 2/6H

≤ 800 N/mm²

No 1
M2 - M30
Art.-No. 393
from page 71

M2 - M30
Art.-No. 810/822
from page 60

≤ 1000 N/mm²

No 1
M2 - M30
Art.-No. 393
from page 71

M2 - M36
Art.-No. 836/826
from page 66

≤ 1200 N/mm²

No 1
M2 - M30
Art.-No. 393
from page 71

M2 - M30
Art.-No. 2850/2851
from page 81

ISO 3/6G

No 1
M3 - M24
Art.-No. 844/848
from page 61

No 1
M2 - M20
Art.-No. 2994
from page 73

No 1
M2 - M10
Art.-No. 2985
from page 84

MF

ISO 2/6H

No 1
M6x0,75 - M24x1,5
Art.-No. 394
from page 115

M3x0,35 - M30x2
Art.-No. 834
from page 105

No 1
M6x0,75 - M24x1,5
Art.-No. 394
from page 115

M5x0,5 - M30x2
Art.-No. 2853
from page 107

No 1
M6x0,75 - M24x1,5
Art.-No. 394
from page 115

M6x0,75 - M24x1,5
Art.-No. 2852
from page 114

ISO 3/6G

No 1
M8x1 - M20x1,5
Art.-No. 2999
from page 108

No 1
M8x1 - M20x1,5
Art.-No. 2988
from page 116

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



BLIND HOLE

No 1
G1/16 - G1
Art.-No. 395
from page 139



HSS-E, TiAlN, form C

No 1
Nr. 2 - 1
Art.-No. 876/881
from page 122

No 1
Nr. 3 - 1
Art.-No. 911
from page 128

G1/16 - G1 1/2
Art.-No. 965
from page 136



HSS-E, bright, form C

No 1
G1/16 - G1
Art.-No. 395
from page 139



HSS-E, TiAlN, form C

No 1
Nr.2 - 1
Art.-No. 2855/2857
from page 123

No 1
Nr.10 - 7/8
Art.-No. 2859
from page 129

G1/8 - G2
Art.-No. 2861
from page 137



HSS-E, steam tempered, form C

No 1
G1/16 - G1
Art.-No. 395
from page 139



HSS-E, TiAlN, form C



HSS-E, steam tempered, form C

STEEL

without lubrication

M

6HX

No 1
M1 - M20
Art.-No. 921/925
from page 149

6GX

No 1
M2 - M10
Art.-No. 920
from page 150

MF

6HX

No 1
M8x1 - M20x1,5
Art.-No. 929
from page 165

6GX

No 1
M8x1 - M18x1,5
Art.-No. 928
from page 168

with lubrication

M

6HX

M3 - M39
Art.-No. 919/923
from page 152

No 1
M3 - M39
Art.-No. 2012/2013
from page 152

6GX

No 1
M3 - M20
Art.-No. 918/922
from page 153

MF

6HX

M6x0,75 - M24x1,5
Art.-No. 1275/927
from page 169

No 1
M6x0,75 - M20x1,5
Art.-No. 2008
from page 170

6GX

No 1
M8x1 - M20x1,5
Art.-No. 1277/926
from page 172

with internal cooling

M

6HX

No 1
M3 - M20
Art.-No. 1270/1271
from page 159

No 1
M3 - M20
Art.-No. 1725/1727
from page 159

No 1
M3 - M20
Art.-No. 1972/1931
from page 163

6GX

No 1
M5 - M10
Art.-No. 1713
from page 160

No 1
M3 - M20
Art.-No. 1726/1728
from page 161

MF

6HX

No 1
M8x1 - M24x1,5
Art.-No. 1272/1273
from page 178

No 1
M8x1 - M24x1,5
Art.-No. 1729/1731
from page 178

No 1
M10x1 - M24x1,5
Art.-No. 1581
from page 181

6GX

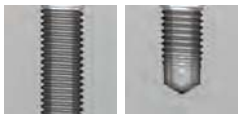
No 1
M8x1 - M24x1,5
Art.-No. 1715/1716
from page 179

No 1
M8x1 - M24x1,5
Art.-No. 1730/1732
from page 179

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



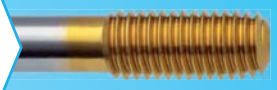
THROUGH HOLE
BLIND HOLE

THROUGH HOLE

No 1
Nr. 4 - 7/8
Art.-No. 2273/2274
from page 182

No 1
Nr. 4 - 1
Art.-No. 1283/2275
from page 183

No 1
G1/16 - G1 1/4
Art.-No. 966
from page 184



HSS-E, TiN, form C

BLIND HOLE

No 1
Nr. 4 - 7/8
Art.-No. 1582/1583
from page 182

No 1
Nr. 4 - 1
Art.-No. 1584/1585
from page 183

No 1
G1/16 - G1 1/4
Art.-No. 1586
from page 184

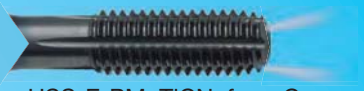


HSS-E, TiN, form C



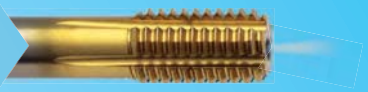
HSS-E, TiCN, form C

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C

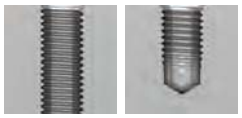
P STEEL

	M UNIVERSAL	MF UNIVERSAL
1.5xD	No 1 M3 - M20 Art.-No. 3525 from page 188	No 1 M4x0,5 - M16x1,5 Art.-No. 3527 from page 191
2xD	No 1 M3 - M20 Art.-No. 3526 from page 189	No 1 M4x0,5 - M16x1,5 Art.-No. 3528 from page 192
2.5xD	No 1 M3 - M20 Art.-No. 3759 from page 190	No 1 M4x0,5 - M16x1,5 Art.-No. 3762 from page 193
3xD	No 1 M1,6 - M16 Art.-No. 4226 from page 215	
universal	No 1 Ø8x0,5 - Ø20xP3,5 Art.-No. 3541 from page 209	No 1 Ø8x0,5 - Ø20xP3,5 Art.-No. 3541 from page 209

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-

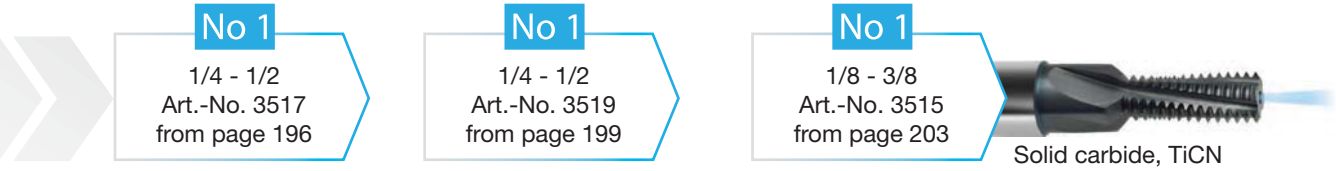


THROUGH HOLE
BLIND HOLE



UNC	UNF	G
No 1 1/4 - 1/2 Art.-No. 3516 from page 195	No 1 1/4 - 1/2 Art.-No. 3518 from page 198	No 1 1/8 - 3/8 Art.-No. 3514 from page 202

Solid carbide, TiCN



UNC	UNF	G
No 1 1/4 - 1/2 Art.-No. 3517 from page 196	No 1 1/4 - 1/2 Art.-No. 3519 from page 199	No 1 1/8 - 3/8 Art.-No. 3515 from page 203

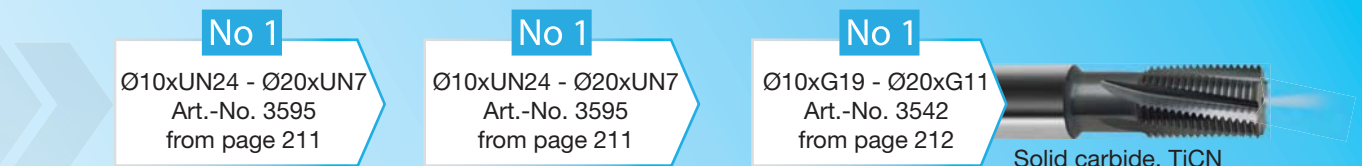
Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN



UNC	UNF	G
No 1 Ø10xUN24 - Ø20xUN7 Art.-No. 3595 from page 211	No 1 Ø10xUN24 - Ø20xUN7 Art.-No. 3595 from page 211	No 1 Ø10xG19 - Ø20xG11 Art.-No. 3542 from page 212

Solid carbide, TiCN

STEEL

THROUGH HOLES



Thread depth		≤1,5xD						
Tool material		HSS-E						
Type/form		N/C	N/C	N/C	N/D	NR28/D	N/-	
Surface		◯	◯	◯	◯	◯	◯	
Coolant delivery		☒	☒	☒	☒	☒	☒	
Shank tolerance		h9	h9	h9	h9	h9	h9	
						 Machine combination drill taps	 Machine nut taps	
Thread type	**Tolerance**	**Article no. / page**						
M	4H							
	6H	995 53		806/818 50/51	801/813 49	1839 87	851 85	
	6HX							
	6G			795 52				
MF	6H			830 100				
	6HX							
	6G			829 100				
UNC	2B			1977 121				
	2BX							
UNF	2B			1987 126				
	2BX							
G				963 133				
BSW								
NPT			973 146					
NPTF								
EG M	6H Mod.							
MJ	4HX							
MJF	4HX							
UNJC	3BX							
UNJF	3BX							
PG			979 147					
Suitable lubricant		◯/●/△	◯/●/△	◯/●/△	◯/●/△	◯/●/△	◯/●/△	

No 1 =

◯ = Air
● = Neat oil
◯ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
P	Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR	1.0037	6	6	6	6	6	6
			C15	1.0401						
			11SMnPb30	1.0718						
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2	1.0577	-	4	-	-	-	-
			C60	1.0601						
			31CrMo12	1.8515						
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4	1.7225	-	-	-	-	-	-
			36CrNiMo4	1.6511						
			X36CrMo17	1.2316						
			HS 6-5-2	1.3343						

≤1,5xD			≤3xD							
HSS-E										
N/B	N/B	N/B	NL15/D	N/B	N/B	N/B	N/B	N/B	N/B	N/B
○	○	○	○	○	○	○	●	Ⓢ	Ⓒ	○
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
 for machining sheet metal	 for machining sheet metal				 machine nut tap					 LH spiral
Article no. / page										
						794 36				
839/847 54	838/846 54	802 55	808/820 89	991 35	998 86	803/815 30/31	945/948 30/31	912/915 30/31	1246/1249 30/31	789/790 32
796 56	869 56	797 56				837/845 37				
						827 91	2888 91	832 91		
						316 93				
						873/878 117	2889/2890 117			
						908 125	2891 125			
						962 132	2894 132			
							2892/2893 142			
				980 147						
●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△

Recommended cutting speed vc m/min										
10	**10**	**10**	**10**	**10**	**6**	**10**	**10**	**12**	**12**	**10**
-	-	-	-	6	-	6	6	8	8	6
-	-	-	-	-	-	-	-	-	-	-

STEEL

THROUGH HOLES



Thread depth		≤3xD						
Tool material		HSS-E				HSS-E-PM		
Type/form		N/B	N/B	N/B	N/B	N/B	N/B	
Surface		○	S	A+M	A+M	S	C	
Coolant delivery		☒	☒	☒	radial	☒	☒	
Shank tolerance		h9	h9	h9	h9	h9	h9	
Thread type	**Tolerance**	**Article no. / page**						
M	4H							
	6H	2876/2877 33	313/315 33	2427/2428 33	2517 34	1285/1286 39	1287 40	
	6HX							
	6G	2990 41	2991 41					
MF	6H	2879 94		2878 94		1291 98		
	6HX							
	6G		2993 93					
UNC	2B	2881/2883 118						
	2BX							
UNF	2B	2885 130						
	2BX							
G		2887 140		2886 140				
BSW								
NPT								
NPTF								
EG M	6H Mod.		1010 144					
MJ	4HX							
MJF	4HX							
UNJC	3BX							
UNJF	3BX							
PG								
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
P	Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR	1.0037	**12**	**15**	**15**	**15**	**20**	**20**
			C15	1.0401						
			11SMnPb30	1.0718						
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2	1.0577	**10**	**12**	**12**	**12**	**15**	**15**
			C60	1.0601						
			31CrMo12	1.8515						
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4	1.7225	6	8	8	8	**10**	**10**
			36CrNiMo4	1.6511						
			X36CrMo17	1.2316						
			HS 6-5-2	1.3343						

≤3xD

Solid carbide	HSS-E						HSS-E-PM			HSS-E
N/B	H/B	H/B	H/B	H/B	H/B	H AZ/B	H/B	H/B	H/B	N/B
C	○	●	●	S	C	○	○	S	C	S
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
h6	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
										 NEW
Article no. / page										
	804/816 43	733/734 43	2941/2942 43		1914/1915 43	791/849 44	875 46	57/58 47	1575/1576 47	
942 42										4218 38
	2465 45			2710 45						
	828 97		2943 97							
943/944 95/96										4219 90
				2983 99						
										4220 134
				980 147						
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Recommended cutting speed vc m/min										
40	-	-	-	-	-	-	-	-	-	**25**
30	6	6	6	6	6	6	8	10	10	**20**
25	**10**	**10**	**10**	**12**	**12**	**10**	**12**	**15**	**15**	**15**

STEEL

BLIND HOLES

Thread depth		≤1.5xD							
Tool material		HSS-E							
Type/form		N/C	N/C	N/C	NR15/C	NR15/C	NR15/C	NR15/C	NR15/C
Surface		○	○	○	○	○	●	Ⓢ	○
Coolant delivery		☒	☒	☒	☒	☒	☒	☒	axial
Shank tolerance		h9	h9	h9	h9	h9	h9	h9	h9
									
Thread type	**Tolerance**	**Article no. / page**							
M	4H								
	6H	995 53		806/818 50/51	992 58	809/821 57	946/949 57	913/916 57	1891/1898 59
	6HX								
	6G			795 52		799 52			
MF	6H			830 100		833 102	2838 102	1971 102	1905 104
	6HX								
	6G			829 100					
UNC	2B			1977 121		1978 119	2839/2840 120		
	2BX								
UNF	2B			1987 126		1988 127	2841 127		
	2BX								
G				963 133		964 135	2842 138		
BSW									
NPT			973 146						
NPTF									
EG M	6H Mod.								
MJ	4HX								
MJF	4HX								
UNJC	3BX								
UNJF	3BX								
PG			979 147						
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min							
P	Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR	1.0037	6	6	6	8	8	8	10	8
			C15	1.0401								
			11SMnPb30	1.0718								
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2	1.0577	-	-	-	-	-	-	-	-
			C60	1.0601								
			31CrMo12	1.8515								
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4	1.7225	-	-	-	-	-	-	-	-
			36CrNiMo4	1.6511								
			X36CrMo17	1.2316								
			HS 6-5-2	1.3343								

≤1.5xD					≤2xD					≤3xD				
HSS-E			HSS-E-PM		HSS-E		HSS-E-PM			HSS-E				
NR15/C	NR15/C	NR15/E	HR15/C	HR15/C	H/C	H/C	H/C	H/E	HR15/C	NR40/C	NR40/C	NR40/C	NR40/C	NR40/C
S	C	C	○	A	C	C	C	C	C	○	○	○	●	S
axial	☒	☒	☒	☒	axial	axial	axial	axial	axial	☒	☒	☒	☒	☒
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9
					 short-chipping	 short-chipping, extra length	 short-chipping	 short-chipping	 short-chipping, bright flutes		 extra long tap			
Article no. / page														
2436/2437 59	4154 48	4155 48	872/935 76	1577/1578 76						993 65	888 88	810/822 60	783/784 60	914/917 60
					778 79	779 80	302/297 78	1091/4165 78	1188/1194 77					
												844/848 61		
	4156 103	4157 103	874 112							1970 106		834 105	2843 105	852 105
							1090 113	1007 113	1200 112					
												876/881 122	2844/2845 122	
												911 128	2846 128	
		4158 135										965 136	2849 136	
													2847/2848 143	
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Recommended cutting speed vc m/min														
10	15	15	-	-	-	-	-	-	-	8	8	8	8	12
-	10	10	-	-	15	15	15	15	12	-	-	-	-	-
-	8	8	4	6	12	12	12	12	10	-	-		-	-

STEEL

BLIND HOLES



Thread depth		≤3xD							
Tool material		HSS-E							
Type/form		NR40/C	NL40/C	NR40/C	NR40/C	NR40/C	NR40/E	NR40/C	NR40/C
Surface		C	○	○	S	○	○	●	S
Coolant delivery		☒	☒	axial	axial	☒	☒	☒	☒
Shank tolerance		h9	h9	h9	h9	h9	h9	h9	h9
			 LH spiral						
Thread type	**Tolerance**	**Article no. / page**							
M	4H								
	6H	1252/1254 60	786/787 62	1893 63	2438/2439 64	889/890 66	2790/2791 69	836/826 66	2440/2441 66
	6HX								
	6G							2994 73	2995 73
MF	6H					2424 107	2792 107	2853 107	
	6HX								
	6G					2998 108		2999 108	1049 108
UNC	2B					2854/2856 123		2855/2857 123	
	2BX								
UNF	2B							2859 129	
	2BX								
G						2860 137		2861 137	
BSW									
NPT									
NPTF									
EG M	6H Mod.								1011 145
MJ	4HX								
MJF	4HX								
UNJC	3BX								
UNJF	3BX								
PG									
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min							
P	Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR	1.0037	12	8	8	12	10	10	10	15
			C15	1.0401								
			11SMnPb30	1.0718								
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2	1.0577	-	-	-	-	8	8	8	10
			C60	1.0601								
			31CrMo12	1.8515								
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4	1.7225	-	-	-	-	4	4	6	8
			36CrNiMo4	1.6511								
			X36CrMo17	1.2316								
			HS 6-5-2	1.3343								

≤3xD

HSS-E		HSS-E-PM				HSS-E						HSS-E-PM		HSS-E
NR40/C	NR40/C	NR40/C	NR40/C	NR50/C	NR50/C	HR40/C	HR40/C	HR40/C	HR40/C	HR40/C	HR40/C	VAR50/C	VAR50/C	VAR45/C
S	S	S	C	S	C	○	○	●	S	C	○	S	C	A
☒	☒	☒	☒	☒	axial	☒	☒	☒	☒	☒	axial	☒	axial	☒
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6	h9
tools with correction	extra length											synchro taps	synchro taps	
Article no. / page														
174/196 70		1288/1289 72	1290 73	767/1098 74	1152/1293 74	811/823 81	947/950 81	2850/2851 81	361/362 82	1916/1917 82	1894/1901 83			
	4153 67											761/763 75	1139/1142 75	393 71
								2985 84	2986 84					
273 109		1292 109		1100 110	1294 110	835 114	2940 114	2852 114						
												764 111	1144 111	394 115
								2988 116	2989 116					
1837 124														
1838 131														
937 141												4159 138		395 139
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△

Recommended cutting speed vc m/min														
15	**15**	**15**	**15**	**15**	**20**	-	-	-	-	-	-	**15**	**20**	**20**
10	**10**	**10**	**10**	**12**	**15**	-	-	-	-	-	-	**12**	**15**	**15**
8	8	8	8	8	10	6	6	6	8	**10**	**6**	8	10	**10**

STEEL



THROUGH HOLES AND **BLIND** HOLES



		≤1,5xD			≤3xD		
Tool material		HSS-E	HSS-E-PM	Solid carbide	HSS-E		
Type/form		N/C	N/C	N/C	N/C	N/C	N/C
Surface		S	S	S	S	C	P
Coolant delivery		☒	☒	axial	☒	☒	☒
Shank tolerance		h9	h9	h6	h9	h9	h9
Thread type	**Tolerance**	**Article no. / page**					
M	4H						
	6HX	921/925 149	1255/1256 149	2518 151	919/923 152	2012/2013 152	1587/1589 152
	6G						
	6GX	920 150	903/952 149		918/922 153		1588/1590 153
MF	6HX	929 165	1257/1258 166		1275/927 169	2008 170	1591/1593 169
	6G						
	6GX	928 168	1740 167		1277/926 172		1592 171
UNC	2B						
	2BX	2273/2274 182			1582/1583 182		
UNF	2B						
	2BX	1283/2275 183			1584/1585 183		
G		966 184			1586 184		
BSW							
NPT							
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
P	Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR	1.0037	12	15	35	15	15	15
			C15	1.0401						
			11SMnPb30	1.0718						
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2	1.0577	12	15	35	15	15	15
			C60	1.0601						
			31CrMo12	1.8515						
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4	1.7225	10	12	25	12	12	12
			36CrNiMo4	1.6511						
			X36CrMo17	1.2316						
			HS 6-5-2	1.3343						

≤3xD

HSS-E		HSS-E-PM								Solid carbide	
N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/E	N/C	N/E
S	C	S	S	P	S	S	C	A	S	C	C
axial	radial	⊠	⊠	⊠	radial	axial	radial	radial	axial	radial	radial
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
											
Article no. / page											
2442/2444 156	2446/2448 156	322/339 154	1266/1267 155	1599/1707 155	323/342 158	4143 162	1270/1271 159	1717/1719 159	1725/1727 159	1972/1931 163	1927 164
2443/2445 156	2447 157			1705/1708 153			1713 160	1718/1720 161	1726/1728 161		
		333 173	1268/1269 174	1711 175	338 177	4145 180	1272/1273 178	1721/1723 178	1729/1731 178	1581 181	
				1710/1712 176			1715/1716 179		1730/1732 179		
○/●/△	○/●/△/□	○/●/△	○/●/△	●/△	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□

Recommended cutting speed vc m/min											
15	15	20	20	20	20	20	20	20	20	35	35
15	15	20	20	20	20	20	20	20	20	35	35
12	12	15	15	15	15	15	15	15	15	25	25

STEEL

THROUGH HOLES AND **BLIND** HOLES





Thread depth	≤2xD				≤2,5xD		≤1,5xD	
Tool material		Solid carbide						
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Surface	C	C	C	C	C	C	C	C
Coolant delivery	☒	☒	axial	axial	axial	axial	axial	axial
Shank form	HA	HB	HA	HB	HA	HB	HA	HA
Spiral	27°	27°	27°	27°	27°	27°	10°	10°

Thread type	Article no. / page							
M	4132 186	4133 186	3737 186	3743 186	3735 187	3740 187	3525 188	3543 188
MF			3737 186	3743 186			3527 191	3545 191
UNC			4134 194	4135 194			3516 195	3534 195
UNF			4136 197	4137 197			3518 198	3536 198
G			3745 200	3748 200	3746 201	3750 201	3514 202	3529 202
BSW								
NPT			3753 205	3754 205			3520 206	3538 206
NPTF			3756 207	3757 207			3521 208	3539 208
EG M	EG-threads can be produced with every thread milling cutter type and dimension							
MJ								
MJF								
UNJC								
UNJF								
PG								
Suitable lubricant	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Air
● = Neat oil
◍ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Application recommendations							
P	Structural and free cutting steels, heat-treatable steels unalloyed	≤800 N/mm²	S235JR C15 11SMnPb30	1.0037 1.0401 1.0718	++	++	++	++	++	++	++	++
	Free-cutting steels, Unalloyed case hardened steels, Nitriding steels	800 - 1000 N/mm²	S355J2 C60 31CrMo12	1.0577 1.0601 1.8515	++	++	++	++	++	++	++	++
	Alloyed heat-treatable steels, tool steels, high speed steels	800 - 1200 N/mm²	42CrMo4 36CrNiMo4 X36CrMo17 HS 6-5-2	1.7225 1.6511 1.2316 1.3343	+	+	+	+	+	+	++	++

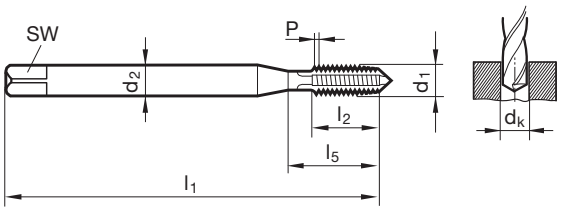
≤2xD		≤2,5xD		universal				≤3xD	
Solid carbide									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
C	C	C	C	C	C	C	C	C	C
axial	axial	axial	axial	axial	axial	axial	axial	☒	☒
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
									
Article no. / page									
3526 189	3544 189	3759 190	3760 190	3541 209	3556 209	4162 210	4163 210	4226 215	4225 217
3528 192	3546 192	3762 193	3763 193	3541 209	3556 209	4162 210	4163 210		4225 217
3517 196	3535 196			3595 211	3596 211				
3519 199	3537 199			3595 211	3596 211				
3515 203	3533 203	3765 204	3766 204	3542 212	3557 212	3542 212	3557 212	4228 216	
				3768 213	3769 213				
				3772 214	3773 214				
EG-threads can be produced with every thread milling cutter type and dimension									
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Application recommendations									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

Machine taps for ISO metric threads

Tool material		HSS-E			
Tolerance on Ø		ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface		○	S	●	C
Type		N	N	N	N
Form		B	B	B	B
Internal cooling					
P	≤ 800				
M					
K					
N					
S					
H					

Cutting data page 19





DIN 2184-1 DIN 371	Article no.	803	912	945	1246

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	40.000	5.500	
M 1.2	0.250	2.500	2.100	0.95	40.000	5.500	
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	8.000	
M 1.7	0.350	2.500	2.100	1.35	40.000	8.000	
M 1.8	0.350	2.500	2.100	1.45	40.000	8.000	
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

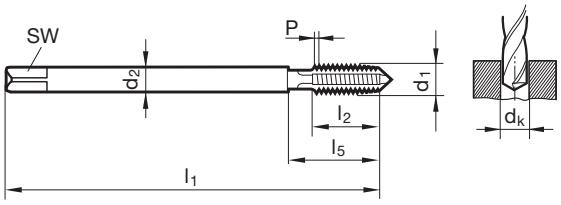
Machine taps for ISO metric threads

R

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

Tool material	HSS-E			
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	S	●	C
Type	N	N	N	N
Form	B	B	B	B
Internal cooling	✕	✕	✕	✕





DIN 2184-1 DIN 376 — Article no. **815** **915** **948** **1249**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.6	0.350	1.200		1.25	40.000	8.000	
M 1.8	0.350	1.200		1.45	40.000	8.000	
M2	0.400	1.400		1.60	45.000	8.000	13.500
M 2.2	0.450	1.600		1.75	45.000	9.000	14.500
M 2.3	0.400	1.600		1.90	45.000	9.000	14.500
M 2.5	0.450	1.800		2.05	50.000	9.000	14.500
M 2.6	0.450	1.800		2.15	50.000	9.000	14.500
M3	0.500	2.200		2.50	56.000	10.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	12.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000
M42	4.500	32.000	24.000	37.50	200.000	56.000	112.000
M45	4.500	36.000	29.000	40.50	220.000	58.000	117.000
M48	5.000	36.000	29.000	43.00	250.000	65.000	127.000
M52	5.000	40.000	32.000	47.00	250.000	65.000	128.000

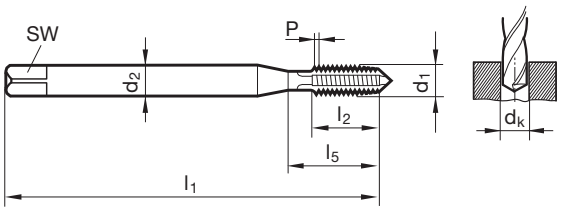
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N-LH
Form	B
Internal cooling	

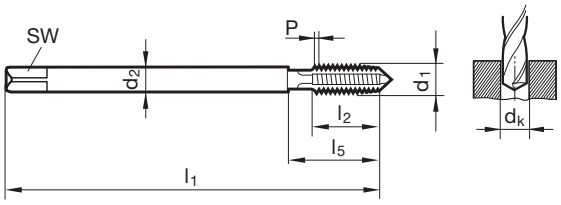
P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **789**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **790**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

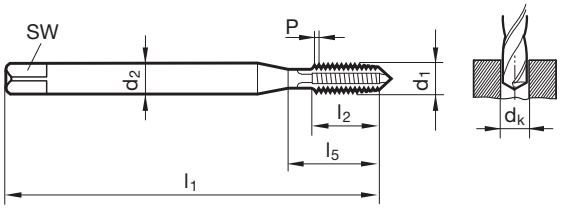
Machine taps for ISO metric threads

P	≤ 1000
M	○
K	
N	
S	
H	

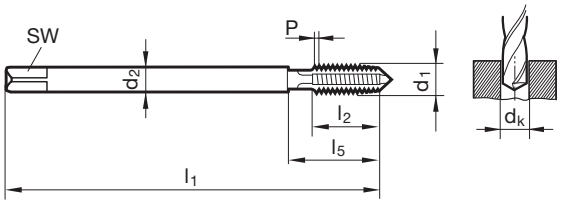
Cutting data page 20

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	S	A+M	
Type	N	N	N
Form	B	B	B
Internal cooling			

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **313** **2427** **2876**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **315** **2428** **2877**

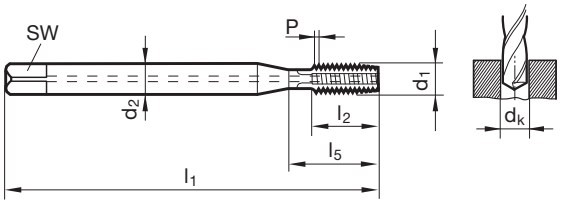
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000

Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	A+M
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	○
K	
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **2517**

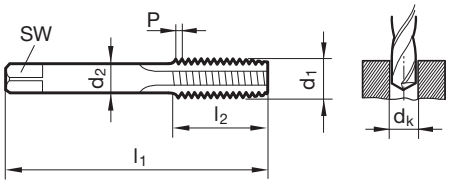
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	B
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-2 DIN 352 Article no. **991**

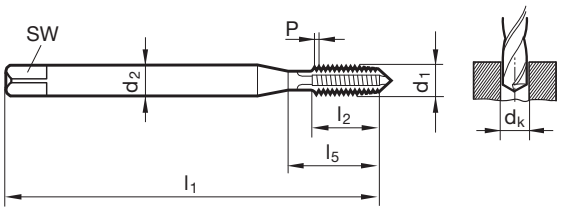
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000	
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000	
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000	
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000	
M 2.6	0.450	2.800	2.100	2.15	40.000	9.000	
M3	0.500	3.500	2.700	2.50	40.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	45.000	12.000	21.000
M 4.5	0.750	6.000	4.900	3.70	50.000	14.000	24.000
M5	0.800	6.000	4.900	4.20	50.000	14.000	24.000
M6	1.000	6.000	4.900	5.00	56.000	16.000	27.000
M7	1.000	6.000	4.900	6.00	56.000	16.000	32.000
M8	1.250	6.000	4.900	6.80	63.000	17.000	32.000
M9	1.250	7.000	5.500	7.80	63.000	17.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	20.000	36.000
M11	1.500	8.000	6.200	9.50	70.000	20.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	24.000	40.000
M14	2.000	11.000	9.000	12.00	80.000	26.000	42.000
M16	2.000	12.000	9.000	14.00	80.000	26.000	45.000
M18	2.500	14.000	11.000	15.50	95.000	30.000	50.000
M20	2.500	16.000	12.000	17.50	95.000	32.000	50.000
M22	2.500	18.000	14.500	19.50	100.000	32.000	50.000
M24	3.000	18.000	14.500	21.00	110.000	36.000	60.000

Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO1/4H
Surface	◯
Type	N
Form	B
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **794**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

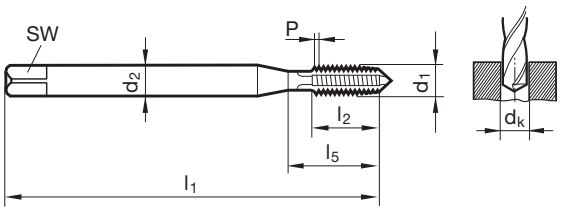
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO3/6G
Surface	◯
Type	N
Form	B
Internal cooling	

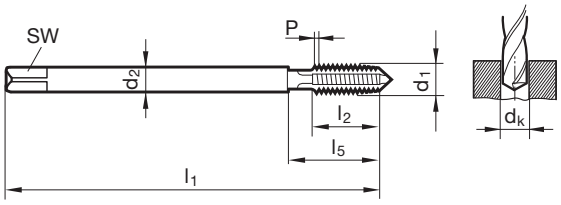
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **837**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	8.000	
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **845**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	1.400	1.250	1.60	45.000	8.000	13.500
M3	0.500	2.200	1.800	2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

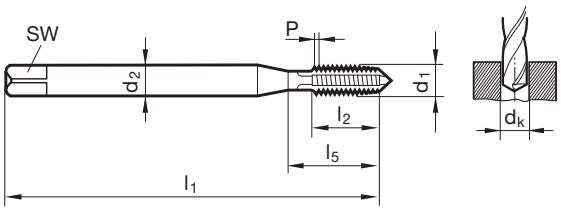
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 371/DIN 376 Article no. **4218**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

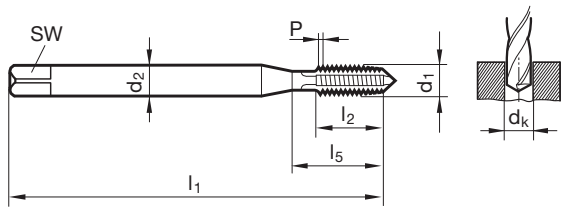
Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	S
Type	N
Form	B
Internal cooling	

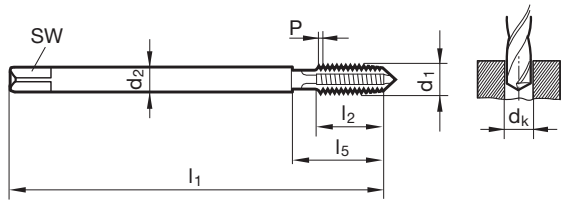
P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1285**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **1286**

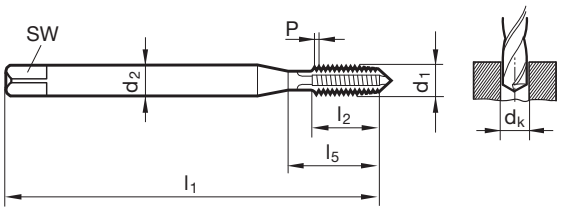
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	C
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20





DIN 2184-1 DIN 371 Article no. **1287**

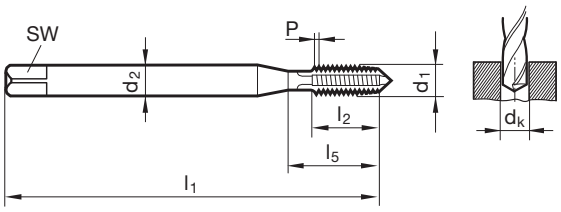
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	●	(S)
Type	N	N
Form	B	B
Internal cooling	✕	✕

P	≤ 1000
M	○
K	
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **2990** **2991**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

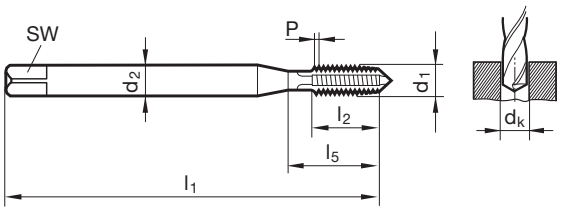
Machine taps for ISO metric threads



Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	
K	
N	
S	
H	

Cutting data page 21





DIN 2184-1 ~DIN 371 Article no. **942**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	12.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	15.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	19.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	22.500	39.000
M12	1.750	12.000	9.000	10.20	110.000	26.500	49.000

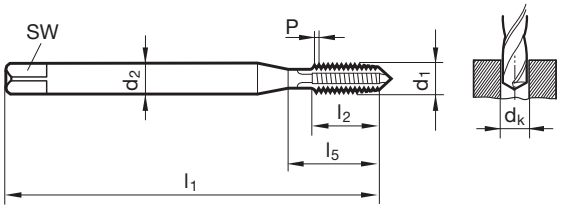
Machine taps for ISO metric threads

Tool material	HSS-E			
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface			C	
Type	H	H	H	H
Form	B	B	B	B
Internal cooling				

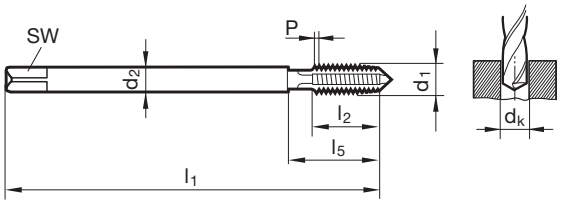
P	≤ 1200
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **733** **804** **1914** **2941**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **734** **816** **1915** **2942**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000

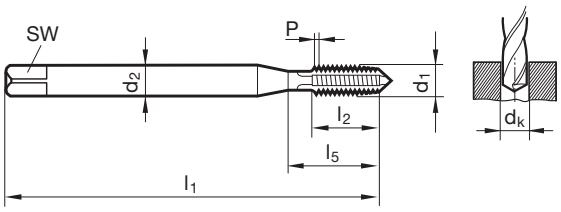
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	H AZ
Form	B
Internal cooling	

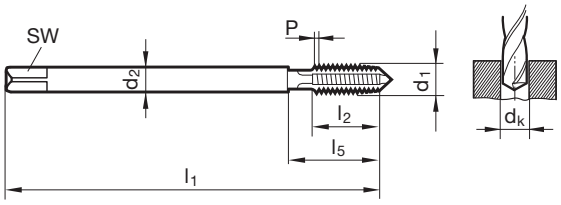
P	≤ 1200
M	
K	
N	
S	
H	

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DIN 376





DIN 2184-1 DIN 371 Article no. **791**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **849**

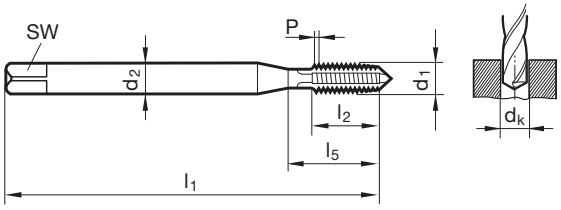
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	◯	Ⓢ
Type	H	H
Form	B	B
Internal cooling	✕	✕

P	≤ 1200
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 — Article no. **2465** **2710**

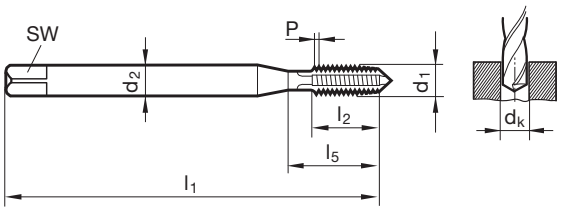
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	◯
Type	H
Form	B
Internal cooling	

P	≤ 1200
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **875**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

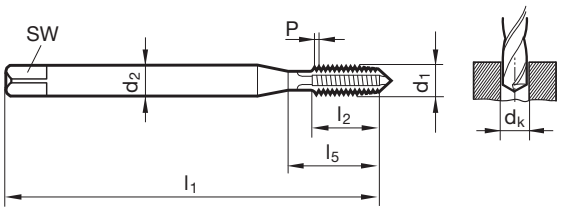
Machine taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	A
Type	H	H
Form	B	B
Internal cooling		

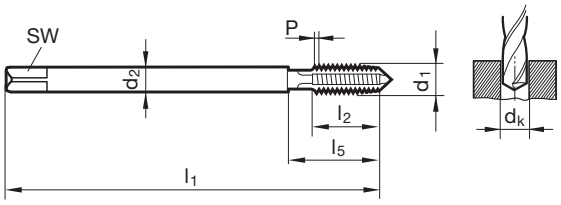
P	≤ 1200
M	
K	
N	
S	
H	

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DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **57** **1575**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **58** **1576**

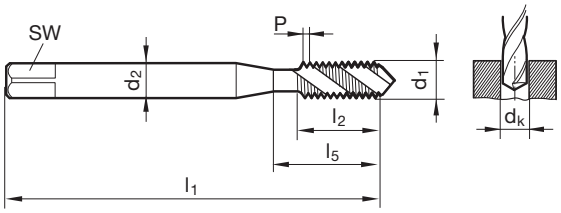
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	C	C
Type	N R15	N R15
Form	C	E
Internal cooling		

P	≤ 1000
M	○
K	○
N	
S	
H	

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DIN 2184-1 DIN 371/DIN 376 — Article no. **4154** **4155**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

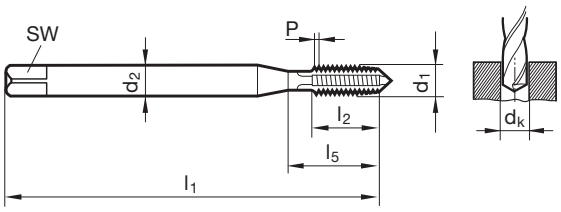
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	D
Internal cooling	

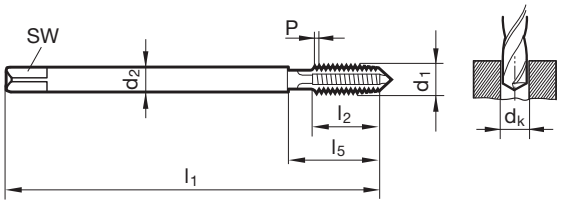
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **801**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **813**

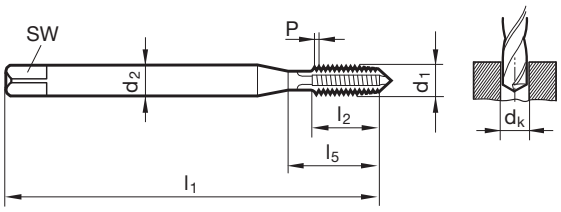
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	1.400		1.60	45.000	8.000	13.500
M 2.3	0.400	1.600	1.250	1.90	45.000	9.000	14.500
M 2.5	0.450	1.800		2.05	50.000	9.000	14.500
M 2.6	0.450	1.800	1.400	2.15	50.000	9.000	14.500
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **806**

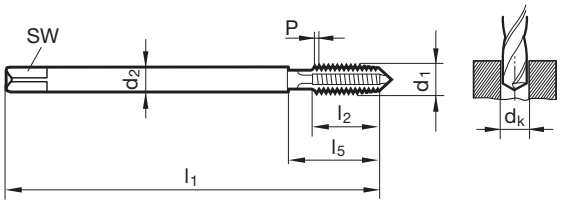
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	40.000	5.500	
M 1.2	0.250	2.500	2.100	0.95	40.000	5.500	
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	4.500	
M 1.7	0.350	2.500	2.100	1.35	40.000	4.500	
M 1.8	0.350	2.500	2.100	1.45	40.000	4.500	
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 376 Article no. **818**

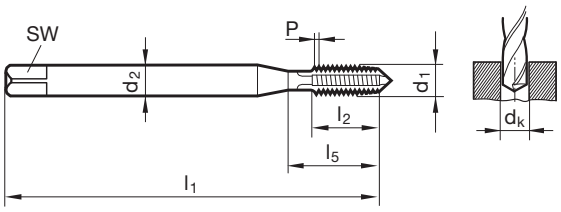
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.6	0.350	1.200		1.25	40.000	4.500	
M 1.7	0.350	1.200		1.35	40.000	4.500	
M2	0.400	1.400		1.60	45.000	4.500	13.500
M 2.5	0.450	1.800		2.05	50.000	5.000	14.500
M 2.6	0.450	1.800		2.15	50.000	5.000	14.500
M3	0.500	2.200		2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000
M36	4.000	28.000	22.000	32.00	200.000	40.000	102.000
M42	4.500	32.000	24.000	37.50	200.000	45.000	112.000
M48	5.000	36.000	29.000	43.00	250.000	50.000	127.000

Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	◯	◯
Type	N	N R15
Form	C	C
Internal cooling	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 — Article no. **795** **799**

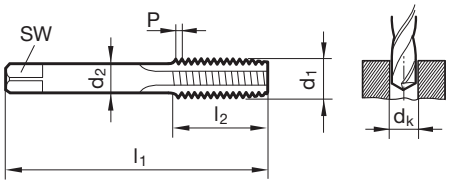
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22





DIN 2184-2 DIN 352 Article no. **995**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000	
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000	
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000	
M3	0.500	3.500	2.700	2.50	40.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	45.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	45.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	50.000	8.500	24.000
M6	1.000	6.000	4.900	5.00	56.000	11.000	27.000
M8	1.250	6.000	4.900	6.80	63.000	14.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	16.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	18.500	40.000
M16	2.000	12.000	9.000	14.00	80.000	20.000	45.000

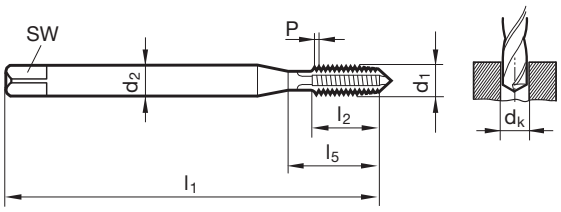
Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	◯	◯
Type	N	N
Form	B	B
Internal cooling	✕	✕

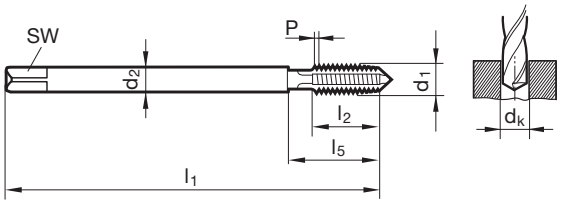
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **838** **839**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.2	0.250	2.500	2.100	0.95	40.000	5.500	
M 1.4	0.300	2.500	2.100	1.10	40.000	7.000	
M 1.6	0.350	2.500	2.100	1.25	40.000	8.000	
M 1.7	0.350	2.500	2.100	1.35	40.000	8.000	
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **846** **847**

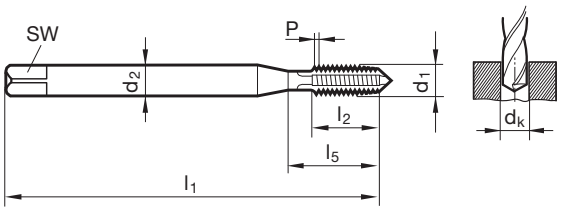
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200	1.800	2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	B
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **802**

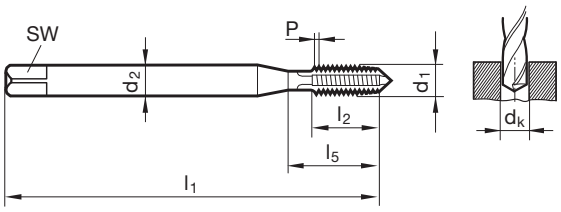
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	ISO3/6G	ISO3/6G	ISO3/6G
Surface	◯	◯	◯
Type	N	N	N
Form	B	B	B
Internal cooling	⊗	⊗	⊗

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 — Article no. **869** **796** **797**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

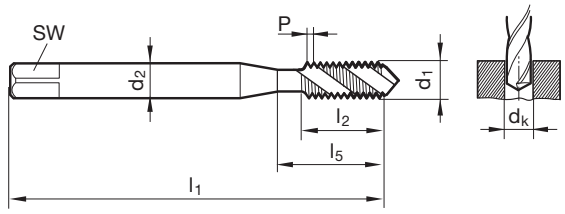
Machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	Ⓢ	●
Type	N R15	N R15	N R15
Form	C	C	C
Internal cooling	✗	✗	✗

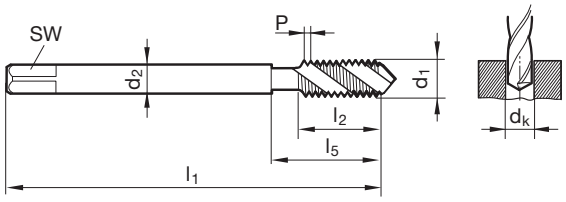
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **809** **913** **946**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **821** **916** **949**

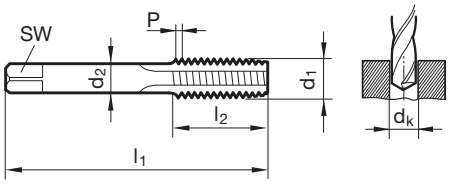
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

Machine taps for ISO metric threads

Tool material		HSS-E
Tolerance on Ø		ISO2/6H
Surface		◯
Type		N R15
Form		C
Internal cooling		

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-2 DIN 352 Article no. **992**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	40.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	45.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	50.000	8.500	24.000
M6	1.000	6.000	4.900	5.00	56.000	11.000	27.000
M7	1.000	6.000	4.900	6.00	56.000	11.000	32.000
M8	1.250	6.000	4.900	6.80	63.000	14.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	16.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	18.500	40.000
M14	2.000	11.000	9.000	12.00	80.000	20.000	42.000
M16	2.000	12.000	9.000	14.00	80.000	20.000	45.000
M20	2.500	16.000	12.000	17.50	95.000	25.000	50.000

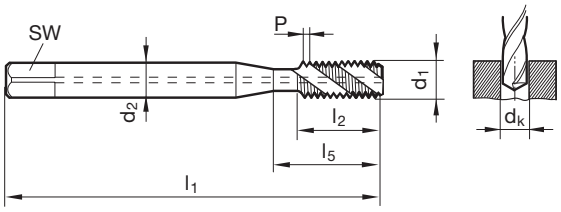
Oil feed taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	○	Ⓢ
Type	N R15	N R15
Form	C	C
Internal cooling		

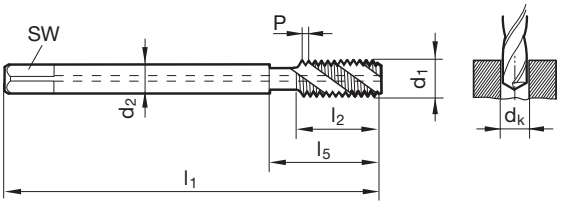
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **1891** **2436**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **1898** **2437**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

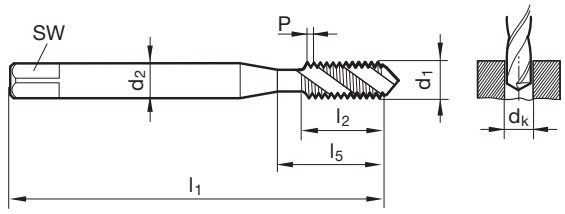
Machine taps for ISO metric threads

Tool material	HSS-E			
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface			S	C
Type	N R40	N R40	N R40	N R40
Form	C	C	C	C
Internal cooling				

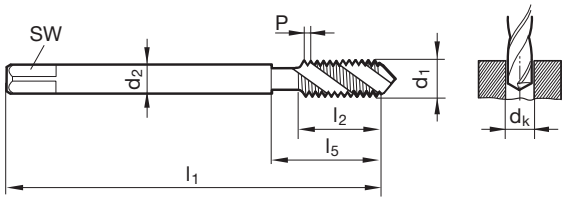
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **783** **810** **914** **1252**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **784** **822** **917** **1254**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

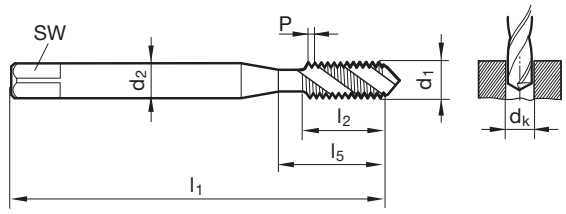
Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO3/6G
Surface	◯
Type	N R40
Form	C
Internal cooling	

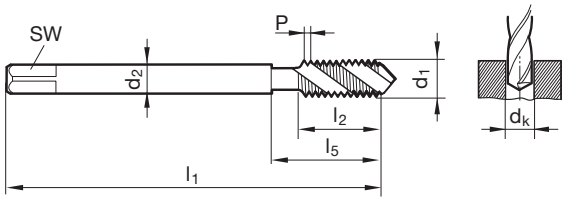
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **844**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **848**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200	1.800	2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

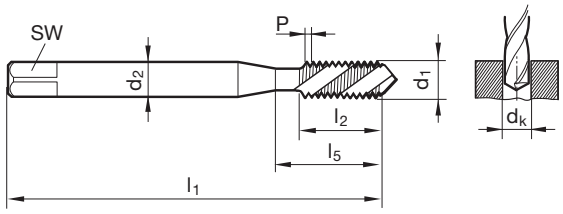
Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N L40-LH
Form	C
Internal cooling	

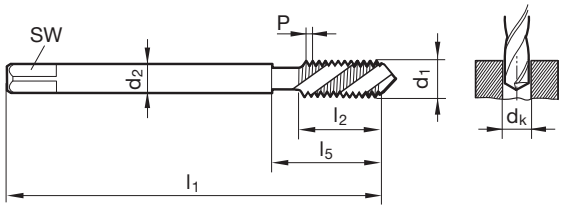
P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 24

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **786**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **787**

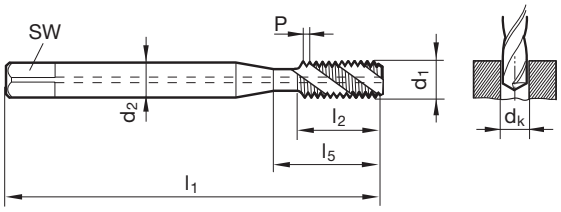
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Oil feed taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N R40
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 24





DIN 2184-1 DIN 371 Article no. **1893**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

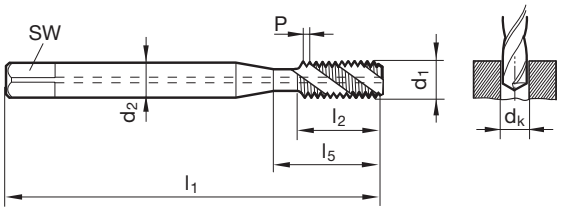
Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	S
Type	N R40
Form	C
Internal cooling	

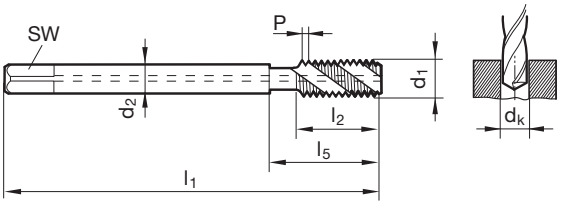
P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 24

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **2438**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **2439**

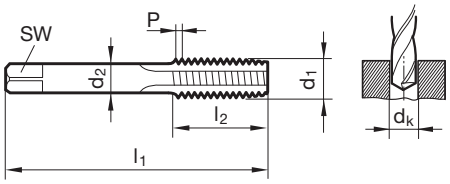
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N R40
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-2 DIN 352 Article no. **993**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000	
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000	
M3	0.500	3.500	2.700	2.50	40.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	45.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	45.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	50.000	8.500	24.000
M6	1.000	6.000	4.900	5.00	56.000	11.000	27.000
M8	1.250	6.000	4.900	6.80	63.000	14.000	32.000
M10	1.500	7.000	5.500	8.50	70.000	16.000	36.000
M12	1.750	9.000	7.000	10.20	75.000	18.500	40.000
M16	2.000	12.000	9.000	14.00	80.000	20.000	45.000
M18	2.500	14.000	11.000	15.50	95.000	25.000	50.000
M20	2.500	16.000	12.000	17.50	95.000	25.000	50.000
M22	2.500	18.000	14.500	19.50	100.000	27.000	50.000

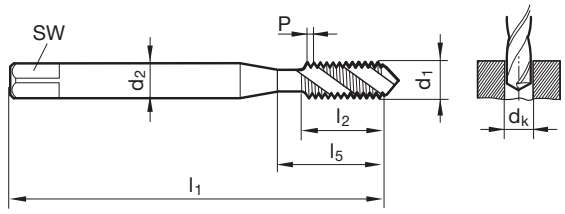
Machine taps for ISO metric threads

Tool material	HSS-E			
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H	ISO2/6H
Surface	●	○	A+M	S
Type	N R40	N R40	N R40	N R40
Form	C	C	C	C
Internal cooling	✕	✕	✕	✕

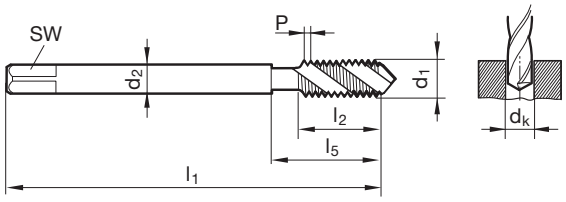
P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 24

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **836** **889** **2425** **2440**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **826** **890** **2426** **2441**

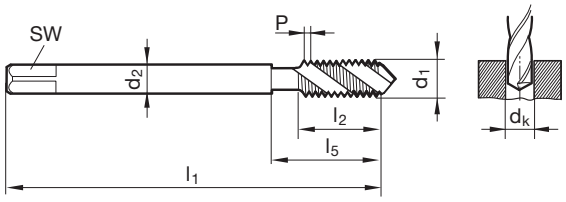
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M7	1.000	5.500	4.300	6.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000
M36	4.000	28.000	22.000	32.00	200.000	40.000	102.000

Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N R40
Form	C
Internal cooling	

P	≤ 1000
M	○
K	○
N	
S	
H	

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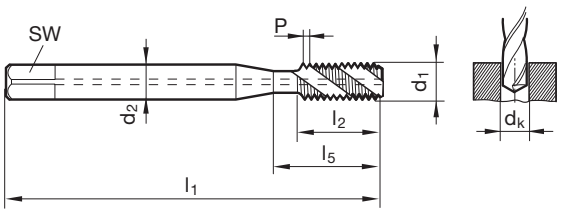
Company std. Company std. Article no. **4153**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.20	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.00	125.000	11.000	90.000
M8	1.250	6.000	4.900	6.80	140.000	14.000	97.000
M10	1.500	7.000	5.500	8.50	160.000	16.000	117.000
M12	1.750	9.000	7.000	10.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	14.00	220.000	20.000	168.000
M20	2.500	16.000	12.000	17.50	280.000	25.000	225.000

Oil feed taps for ISO metric threads

P	≤ 1000
M	○
K	○
N	
S	
H	

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	A+M
Type	N R40
Form	C
Internal cooling	





DIN 2184-1 DIN 371 Article no. **2514**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

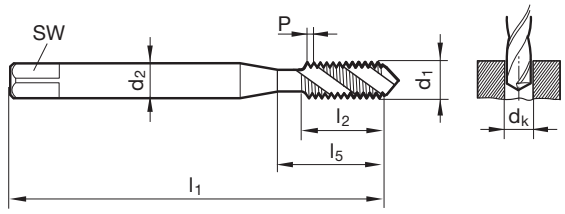
Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N R40
Form	E
Internal cooling	

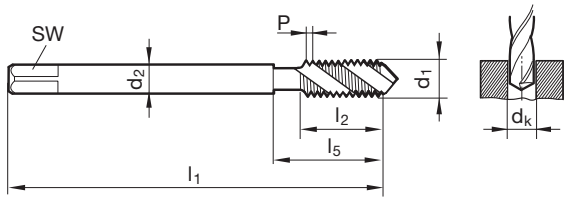
P	≤ 1000
M	○
K	○
N	○
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **2790**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **2791**

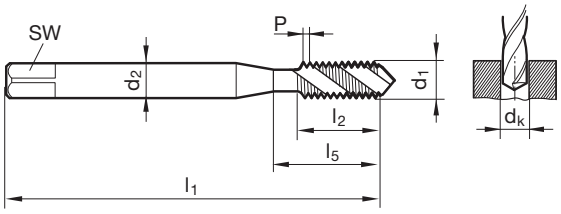
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000

Machine taps for ISO metric threads

Tool material		HSS-E
Tolerance on Ø		ISO2/6H
Surface		S
Type		N R40
Form		C
Internal cooling		

P	≤ 1000
M	○
K	○
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **174**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **196**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

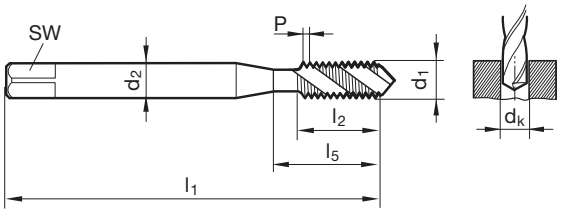
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 371/DIN 376 Article no. **393**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

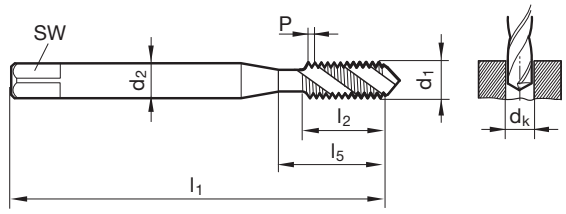
Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	S
Type	N R40
Form	C
Internal cooling	

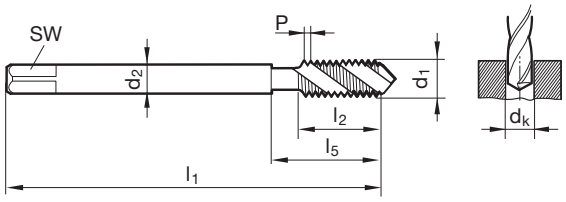
P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 25

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1288**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **1289**

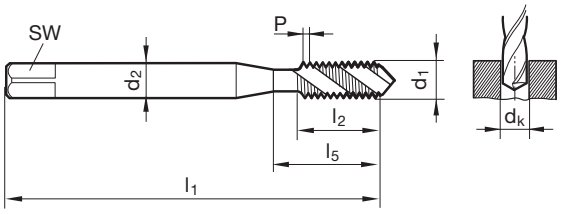
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads

P	≤ 1000	
M	○	
K	○	
N		
S		
H		

Cutting data page 24/25

Tool material	HSS-E-PM	HSS-E	
Tolerance on Ø	ISO2/6H	ISO3/6G	ISO3/6G
Surface	C		S
Type	N R40	N R40	N R40
Form	C	C	C
Internal cooling			





DIN 2184-1 DIN 371

Article no.	1290	2994	2995

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

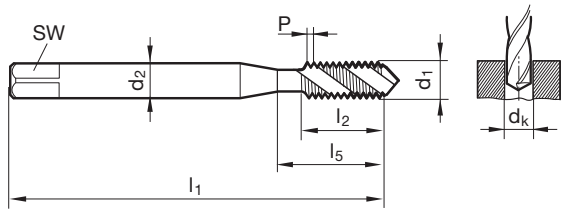
Machine taps for ISO metric threads

P	•
M	•
K	○
N	•
S	○
H	

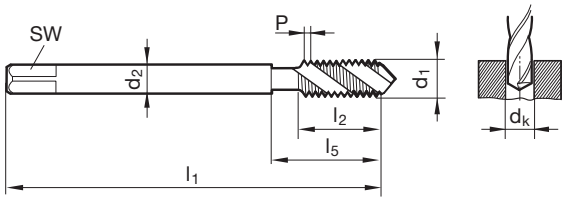
Cutting data page 25

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **767** **1152**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **1098** **1293**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

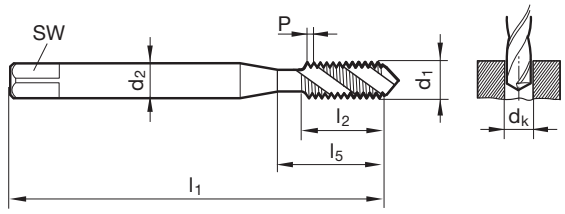
Machine taps for ISO metric threads

P	•
M	•
K	○
N	•
S	○
H	

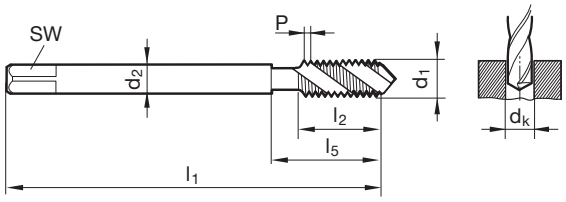
Cutting data page 25

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	C
Type	VA R50	VA R50
Form	C	C
Internal cooling		

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **761** **1139**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	2.500	18.000
M4	0.700	4.500	3.400	3.30	63.000	3.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	4.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	5.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	6.300	35.000
M10	1.500	10.000	8.000	8.50	100.000	7.500	39.000

DIN 2184-1 DIN 376 — Article no. **763** **1142**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	8.800	63.000
M14	2.000	11.000	9.000	12.00	110.000	10.000	58.000
M16	2.000	12.000	9.000	14.00	110.000	10.000	58.000
M20	2.500	16.000	12.000	17.50	140.000	12.500	85.000

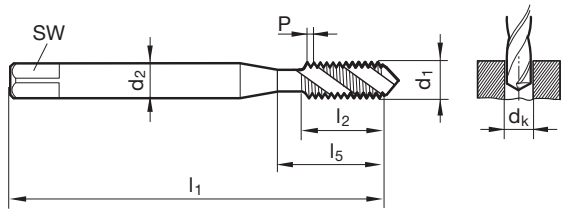
Machine taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	○	A
Type	H R15	H R15
Form	C	C
Internal cooling	✕	✕

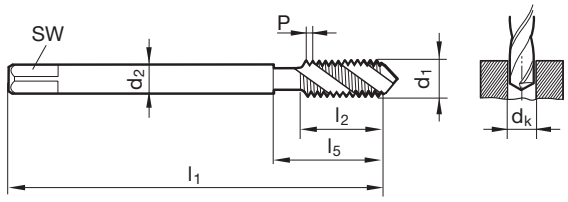
P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 23

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **872** **1577**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **935** **1578**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

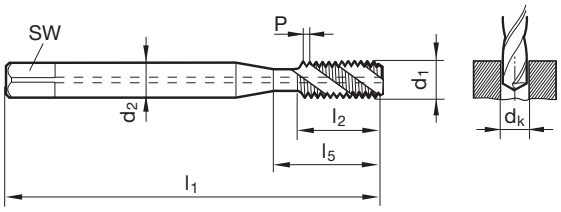
Oil feed taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	C
Type	H R15
Form	C
Internal cooling	

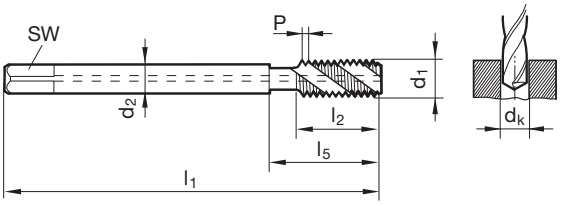
P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 23

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1188**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **1194**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

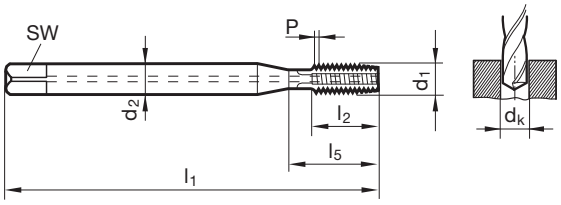
Oil feed taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	C
Type	H	H
Form	C	E
Internal cooling		

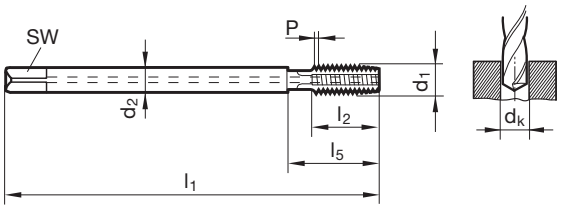
P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Cutting data page 23

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **302** **1091**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **297** **4165**

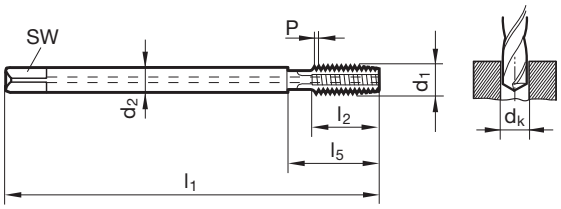
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

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DIN 2184-1 DIN 376 Article no. **778**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000

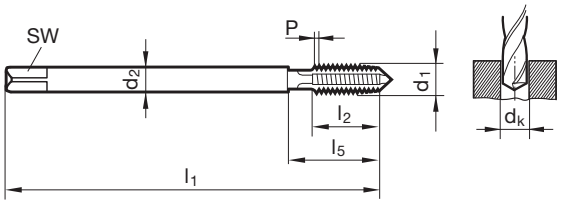
Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

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NEW





Company std. ~DIN 376 Article no. **779**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	160.000	26.000	100.000
M20	2.500	16.000	12.000	17.50	180.000	32.000	120.000
M24	3.000	18.000	14.500	21.00	200.000	36.000	120.000
M27	3.000	20.000	16.000	24.00	225.000	36.000	145.000
M30	3.500	22.000	18.000	26.50	250.000	40.000	160.000
M33	3.500	25.000	20.000	29.50	275.000	40.000	170.000
M36	4.000	28.000	22.000	32.00	300.000	50.000	180.000
M39	4.000	32.000	24.000	35.00	325.000	50.000	210.000

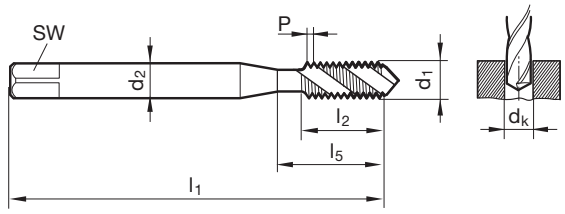
Machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●
Type	H R40	H R40	H R40
Form	C	C	C
Internal cooling	✕	✕	✕

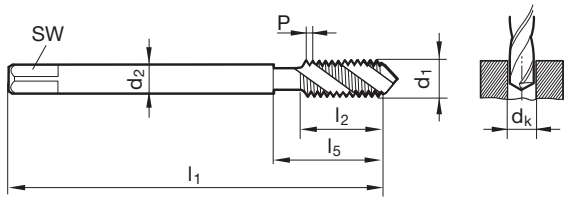
P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **811** **947** **2850**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **823** **950** **2851**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M 3.5	0.600	2.500	2.100	2.90	56.000	7.000	20.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

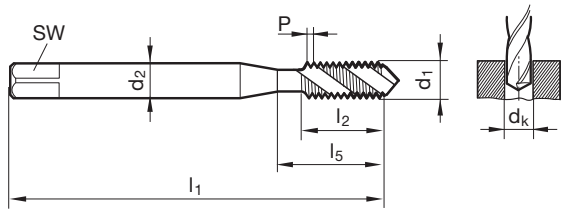
Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	H R40	H R40
Form	C	C
Internal cooling		

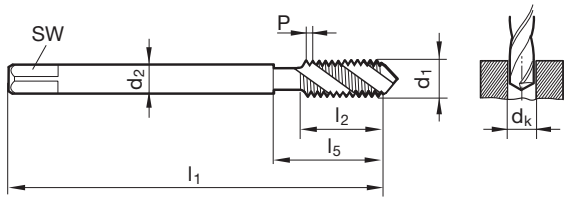
P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 25

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **361** **1916**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M7	1.000	7.000	5.500	6.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **362** **1917**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

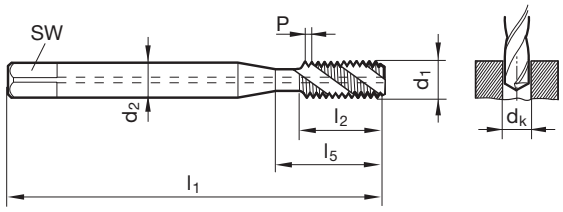
Oil feed taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	H R40
Form	C
Internal cooling	

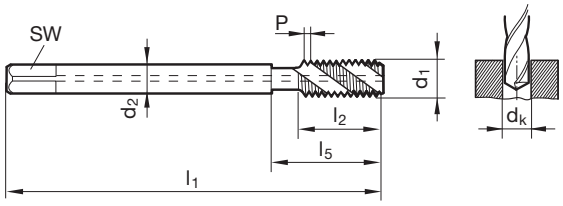
P	≤ 1200
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1894**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **1901**

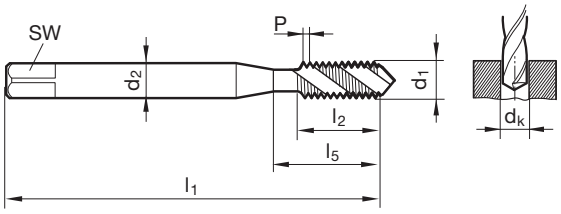
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	●	Ⓢ
Type	H R40	H R40
Form	C	C
Internal cooling	✕	✕

P	≤ 1200
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 371 — Article no. **2985** **2986**

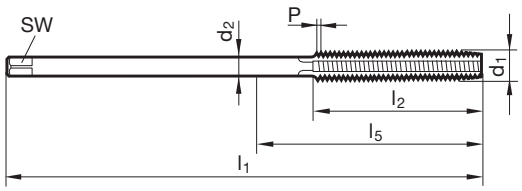
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

Machine nut taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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DIN 357 DIN 357 Article no. **851**

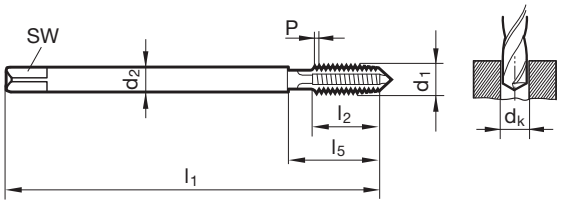
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	70.000	22.000	30.000
M4	0.700	2.800	2.100	3.30	90.000	25.000	33.000
M5	0.800	3.500	2.700	4.20	100.000	28.000	38.000
M6	1.000	4.500	3.400	5.00	110.000	32.000	44.000
M8	1.250	6.000	4.900	6.80	125.000	40.000	61.000
M10	1.500	7.000	5.500	8.50	140.000	45.000	85.000
M12	1.750	9.000	7.000	10.20	180.000	50.000	120.000
M16	2.000	12.000	9.000	14.00	200.000	63.000	145.000
M20	2.500	16.000	12.000	17.50	250.000	70.000	170.000
M30	3.500	22.000	18.000	26.50	315.000	100.000	230.000

Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	B
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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Company std. Company std. Article no. **998**

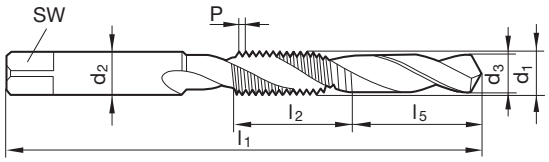
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	70.000	18.000	35.000
M4	0.700	2.800	2.100	3.30	90.000	22.000	55.000
M5	0.800	3.500	2.700	4.20	100.000	24.000	65.000
M6	1.000	4.500	3.400	5.00	110.000	25.000	75.000
M8	1.250	6.000	4.900	6.80	125.000	28.000	68.000
M10	1.500	7.000	5.500	8.50	140.000	30.000	80.000
M12	1.750	9.000	7.000	10.20	180.000	35.000	115.000
M14	2.000	11.000	9.000	12.00	200.000	35.000	125.000
M16	2.000	12.000	9.000	14.00	200.000	40.000	130.000
M20	2.500	16.000	12.000	17.50	250.000	45.000	165.000

Machine combination drill taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	D
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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Company std. Company std. Article no. **1839**

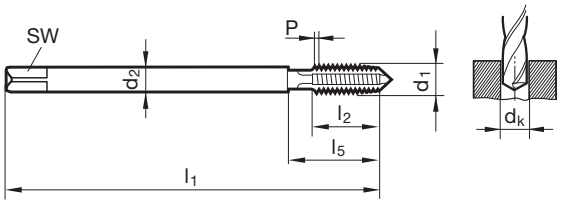
d1	P	d2	d3	SW	l1	l5	l2	Code no.
	mm	mm	mm	mm	mm	mm	mm	
M3	0.500	3.500	2.500	2.700	62.000	11.000	12.000	3.000
M4	0.700	4.500	3.300	3.400	66.000	10.000	16.000	4.000
M5	0.800	6.000	4.200	4.900	75.000	12.000	18.000	5.000
M6	1.000	6.000	5.000	4.900	81.000	14.000	20.000	6.000
M8	1.250	6.000	6.800	4.900	93.000	20.000	12.000	8.000
M10	1.500	7.000	8.500	5.500	99.000	22.000	14.000	10.000
M12	1.750	9.000	10.200	7.000	106.000	25.000	16.000	12.000

Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N R40
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

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Company std. Company std. Article no. **888**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	90.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	125.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	140.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	160.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	180.000	14.000	
M10	1.500	7.000	5.500	8.50	200.000	16.000	140.000
M12	1.750	9.000	7.000	10.20	220.000	18.500	160.000
M14	2.000	11.000	9.000	12.00	220.000	20.000	160.000
M16	2.000	12.000	9.000	14.00	220.000	20.000	16.000
M20	2.500	16.000	12.000	17.50	280.000	25.000	220.000

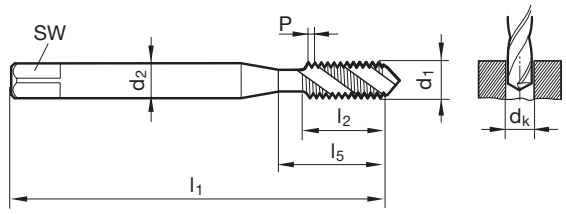
Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N L15
Form	D
Internal cooling	

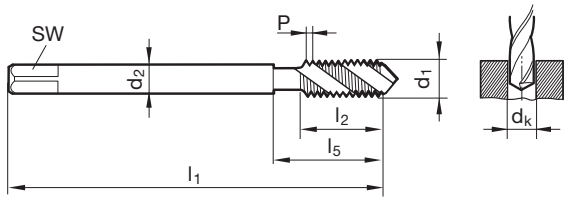
P	≤ 800
M	
K	
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **808**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **820**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200	1.800	2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

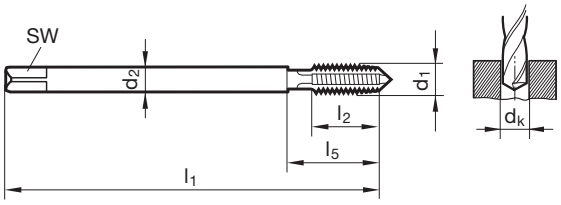
Machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 374 Article no. **4219**

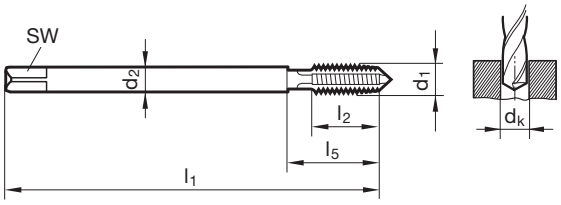
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007

Machine taps for ISO metric fine threads

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	(S)	●
Type	N	N	N
Form	B	B	B
Internal cooling	✕	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **827** **832** **2888**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	7.000	18.000	3.002
M 3.5 X0.35	2.500	2.100	3.15	56.000	8.000	20.000	3.502
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 6 X0.75	4.500	3.400	5.20	100.000	13.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	13.000	30.000	7.004
M 8 X0.5	6.000	4.900	7.50	80.000	14.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 X0.75	7.000	5.500	9.20	90.000	16.000	35.000	10.004
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	17.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M11 x 1	8.000	6.200	10.00	90.000	20.000	33.000	11.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M15 x 1	12.000	9.000	14.00	100.000	20.000	40.000	15.005
M15 X1.5	12.000	9.000	13.50	100.000	20.000	44.000	15.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M18 x 2	14.000	11.000	16.00	125.000	30.000	58.000	18.008
M20 x 1	16.000	12.000	19.00	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M20 x 2	16.000	12.000	18.00	140.000	32.000	60.000	20.008
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M22 x 2	18.000	14.500	20.00	140.000	32.000	62.000	22.008
M24 x 1	18.000	14.500	23.00	140.000	28.000	48.000	24.005

DIN 2184-1 DIN 374 Article no. **827** **832** **2888**

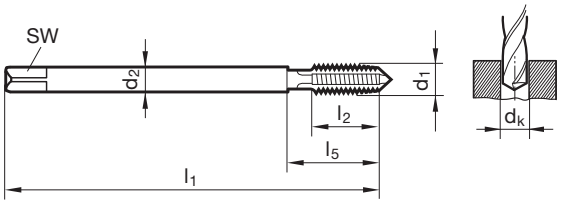
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	28.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	28.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	28.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	28.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	28.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	28.000	53.000	30.008
M32 X1.5	22.000	18.000	30.50	150.000	28.000	53.000	32.007
M33 X1.5	25.000	20.000	31.50	160.000	30.000	56.000	33.007
M35 X1.5	28.000	22.000	33.50	170.000	30.000	56.000	35.007
M36 X1.5	28.000	22.000	34.50	170.000	30.000	56.000	36.007
M38 X1.5	28.000	22.000	36.50	170.000	30.000	56.000	38.007
M40 X1.5	32.000	24.000	38.50	170.000	30.000	57.000	40.007

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	S	○
Type	N	N
Form	B	B
Internal cooling	✗	✗

P	≤ 1000
M	○
K	
N	
S	
H	

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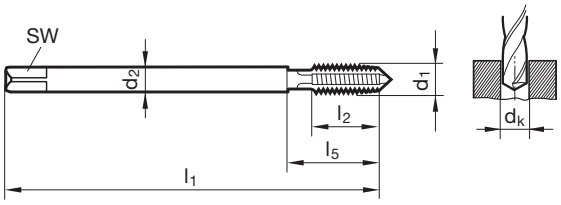
DIN 2184-1 DIN 374 — Article no. **2993** **316**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007

Machine taps for ISO metric fine threads

P	≤ 1000	Cutting data page 20
M	○	
K		
N		
S		
H		

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	A+M	
Type	N	N
Form	B	B
Internal cooling		







DIN 2184-1 DIN 374 — Article no. **2878** **2879**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	28.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	28.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	28.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	28.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	28.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	28.000	53.000	30.008
M32 X1.5	22.000	18.000	30.50	150.000	28.000	53.000	32.007
M36 X1.5	28.000	22.000	34.50	170.000	30.000	56.000	36.007
M40 X1.5	32.000	24.000	38.50	170.000	30.000	57.000	40.007
M42 X1.5	32.000	24.000	40.50	170.000	30.000	57.000	42.007
M45 X1.5	36.000	29.000	43.50	180.000	32.000	60.000	45.007
M48 X1.5	36.000	29.000	46.50	190.000	32.000	60.000	48.007
M50 X1.5	36.000	29.000	48.50	190.000	32.000	60.000	50.007

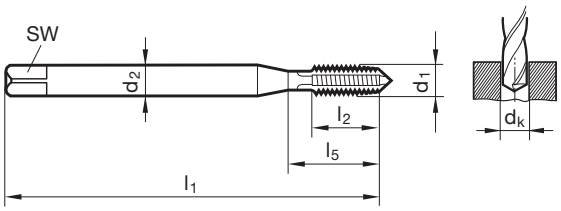
Machine taps for ISO metric fine threads



Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	
K	
N	
S	
H	

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DIN 2184-1 ~DIN 371 Article no. **943**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	6.000	4.900	4.50	70.000	7.500	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	7.500	30.000	6.003
M 6 X0.75	6.000	4.900	5.20	80.000	11.500	30.000	6.004
M8 x 1	8.000	6.200	7.00	90.000	15.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	15.000	35.000	10.005
M10 X1.25	10.000	8.000	8.80	100.000	19.000	39.000	10.006
M12 x 1	12.000	9.000	11.00	100.000	15.000	40.000	12.005
M12 X1.25	12.000	9.000	10.80	100.000	19.000	40.000	12.006
M12 X1.5	12.000	9.000	10.50	100.000	22.500	40.000	12.007

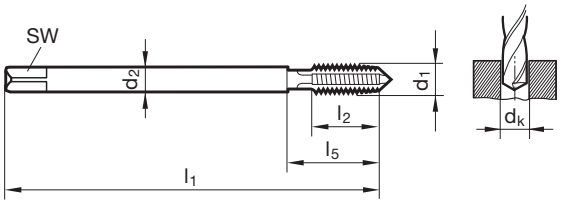
Machine taps for ISO metric fine threads

h6

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 Article no. **944**

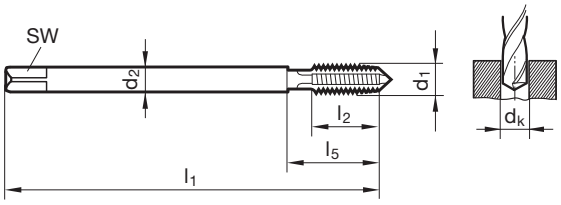
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M14 X1.25	11.000	9.000	12.80	100.000	19.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	22.500	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	15.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.500	44.000	16.007

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	○	●
Type	H	H
Form	B	B
Internal cooling	⊠	⊠

P	≤ 1200
M	
K	
N	
S	
H	

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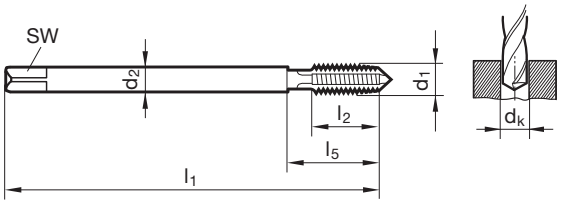
DIN 2184-1 DIN 374 — Article no. **828** **2943**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	7.000	18.000	3.002
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	S
Type	N
Form	B
Internal cooling	

P	≤ 1000	Cutting data page 20
M	•	
K		
N		
S		
H		





DIN 2184-1 DIN 374 Article no. **1291**

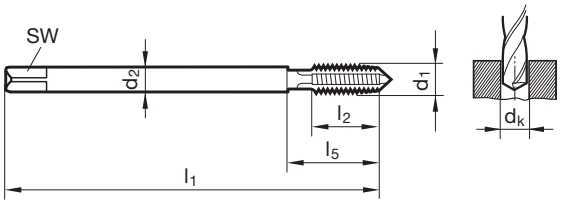
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008

Machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	ISO3/6G
Surface	S
Type	H
Form	B
Internal cooling	

P	≤ 1200
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 Article no. **2983**

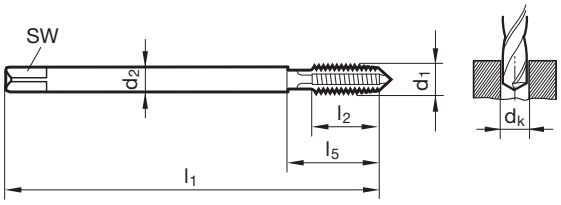
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO3/6G
Surface	◯	◯
Type	N	N
Form	C	C
Internal cooling	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **830** **829**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	4.000	18.000	3.002
M 3.5 X0.35	2.500	2.100	3.15	56.000	4.000	20.000	3.502
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	8.000	30.000	7.004
M 8 X0.5	6.000	4.900	7.50	80.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	11.000	35.000	9.005
M10 X0.75	7.000	5.500	9.20	90.000	11.000	35.000	10.004
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M11 x 1	8.000	6.200	10.00	90.000	11.000	33.000	11.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M15 x 1	12.000	9.000	14.00	100.000	11.000	40.000	15.005
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M18 x 2	14.000	11.000	16.00	125.000	20.000	58.000	18.008
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M20 x 2	16.000	12.000	18.00	140.000	20.000	60.000	20.008
M22 x 1	18.000	14.500	21.00	125.000	12.000	44.000	22.005
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M22 x 2	18.000	14.500	20.00	140.000	22.000	62.000	22.008
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M25 X1.5	18.000	14.500	23.50	140.000	20.000	50.000	25.007

DIN 2184-1 DIN 374 Article no. **830** **829**

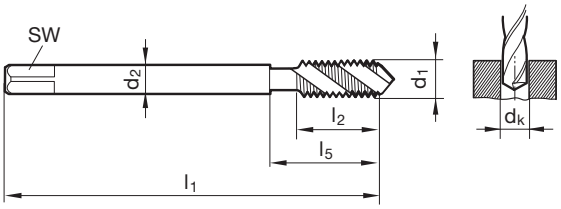
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M26 X1.5	18.000	14.500	24.50	140.000	20.000	50.000	26.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	20.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008
M32 X1.5	22.000	18.000	30.50	150.000	25.000	53.000	32.007
M35 X1.5	28.000	22.000	33.50	170.000	25.000	56.000	35.007
M36 X1.5	28.000	22.000	34.50	170.000	25.000	56.000	36.007
M38 X1.5	28.000	22.000	36.50	170.000	25.000	56.000	38.007
M40 X1.5	32.000	24.000	38.50	170.000	25.000	57.000	40.007
M50 X1.5	36.000	29.000	48.50	190.000	27.000	60.000	50.007
M63 X1.5	50.000	39.000	61.50	275.000	25.000	62.000	63.007

Machine taps for ISO metric fine threads

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	(S)	●
Type	N R15	N R15	N R15
Form	C	C	C
Internal cooling	✗	✗	✗

P	≤ 800
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **833** **1971** **2838**

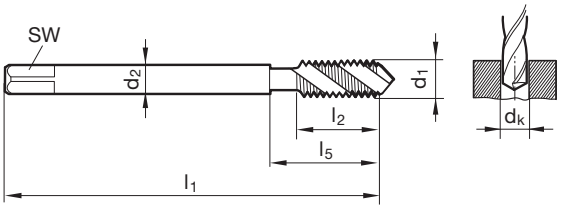
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M27 X1.5	20.000	16.000	25.50	140.000	20.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	C	C
Type	N R15	N R15
Form	C	E
Internal cooling		

P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 23





DIN 2184-1 DIN 374 — Article no. **4156** **4157**

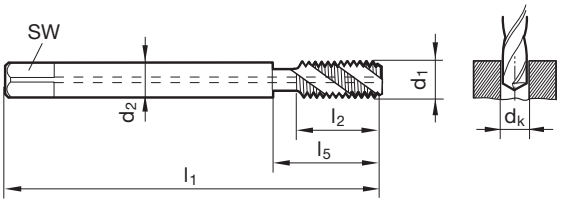
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	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007

Oil feed taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N R15
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22





DIN 2184-1 DIN 374 Article no. **1905**

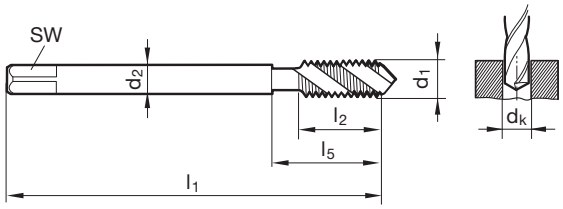
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	Ⓢ	●
Type	N R40	N R40	N R40
Form	C	C	C
Internal cooling	⊠	⊠	⊠





DIN 2184-1 DIN 374 — Article no. **834** **852** **2843**

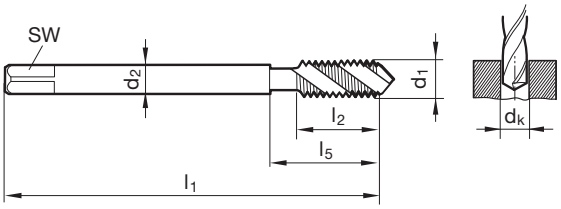
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	4.000	18.000	3.002
M 3.5 X0.35	2.500	2.100	3.15	56.000	4.000	20.000	3.502
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.5	6.000	4.900	7.50	80.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 X0.75	7.000	5.500	9.20	90.000	11.000	35.000	10.004
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 x 1	16.000	12.000	19.00	125.000	12.000	44.000	20.005
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	20.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	20.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	20.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008

Machine taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N R40
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23





DIN 2184-2 DIN 2181 Article no. **1970**

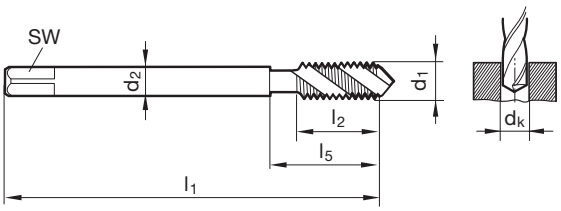
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.20	56.000	8.000	27.000	6.004
M 8 X0.5	6.000	4.900	7.50	56.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	56.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	63.000	11.000	30.000	8.005
M10 X0.75	7.000	5.500	9.20	63.000	11.000	32.000	10.004
M10 x 1	7.000	5.500	9.00	63.000	11.000	32.000	10.005
M11 x 1	8.000	6.200	10.00	63.000	11.000	33.000	11.005
M12 x 1	9.000	7.000	11.00	70.000	11.000	35.000	12.005
M12 X1.5	9.000	7.000	10.50	70.000	16.000	35.000	12.007

Machine taps for ISO metric fine threads

P	≤ 1000
M	○
K	○
N	○
S	
H	

Cutting data page 24

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	○
Type	N R40	N R40	N R40
Form	C	C	E
Internal cooling	⊠	⊠	⊠





DIN 2184-1 DIN 374 — Article no. **2424** **2853** **2792**

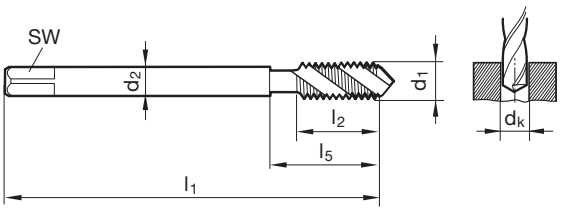
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	11.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	11.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 x 1	14.000	11.000	17.00	110.000	12.000	44.000	18.005
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008
M26 X1.5	18.000	14.500	24.50	140.000	20.000	50.000	26.007
M27 X1.5	20.000	16.000	25.50	140.000	20.000	53.000	27.007
M27 x 2	20.000	16.000	25.00	140.000	20.000	53.000	27.008
M28 X1.5	20.000	16.000	26.50	140.000	20.000	53.000	28.007
M30 X1.5	22.000	18.000	28.50	150.000	20.000	53.000	30.007
M30 x 2	22.000	18.000	28.00	150.000	20.000	53.000	30.008

Machine taps for ISO metric fine threads

P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 24

Tool material	HSS-E		
Tolerance on Ø	ISO3/6G	ISO3/6G	ISO3/6G
Surface	S	○	●
Type	N R40	N R40	N R40
Form	C	C	C
Internal cooling	✕	✕	✕





DIN 2184-1 DIN 374	Article no.	1049	2998	2999

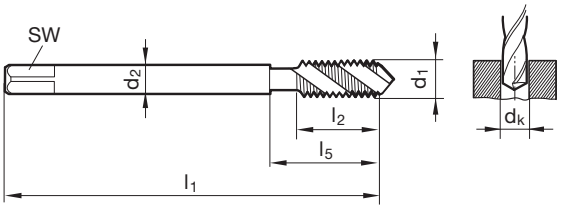
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

P	≤ 1000	
M	○	
K	○	
N		
S		
H		

Cutting data page 25

Tool material	HSS-E	HSS-E-PM
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	S
Type	N R40	N R40
Form	C	C
Internal cooling		







DIN 2184-1 DIN 374 — Article no. **273** **1292**

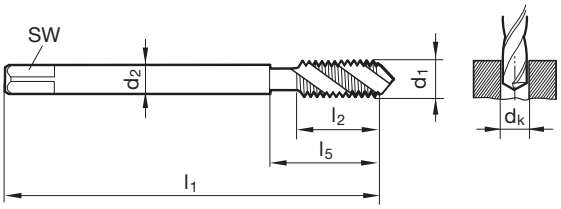
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	22.000	48.000	24.008

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 25







DIN 2184-1 DIN 374 — Article no. **1100** **1294**

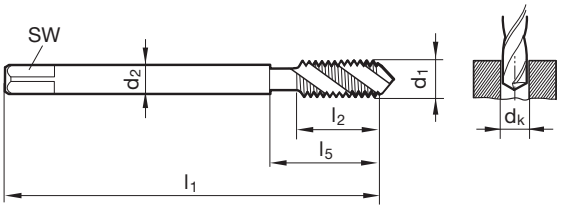
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	C
Type	VA R50	VA R50
Form	C	C
Internal cooling		

P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 25







DIN 2184-1 DIN 374 — Article no. **764** **1144**

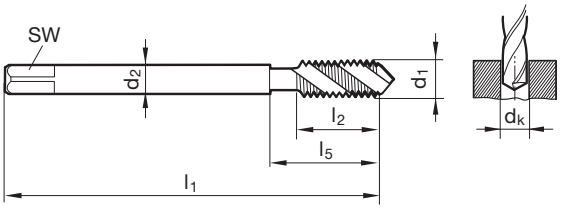
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	5.000	44.000	8.005
M8 x 1	6.000	4.900	7.00	90.000	5.000	47.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	47.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	44.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	5.000	53.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	7.500	53.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	7.500	48.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	7.500	48.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	7.500	58.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	7.500	70.000	20.007

Machine taps for ISO metric fine threads

P	≤ 1200
M	
K	
N	
S	
H	

Cutting data page 23

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	6HX
Surface	◯	C
Type	H R15	H R15
Form	C	C
Internal cooling		







DIN 2184-1 DIN 374 — Article no. **874** **1200**

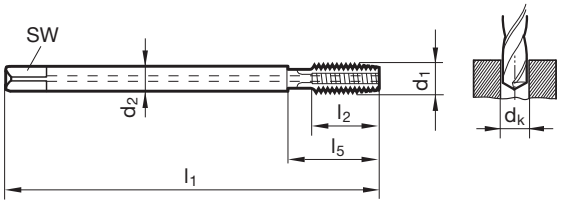
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	11.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Oil feed taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	C
Type	H	H
Form	E	C
Internal cooling		

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

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DIN 2184-1 DIN 374 — Article no. **1007** **1090**

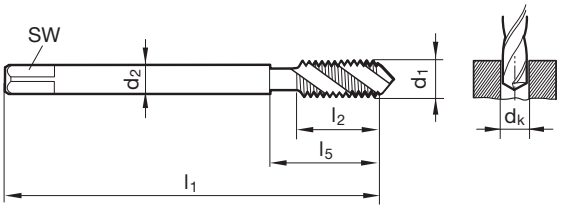
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

Machine taps for ISO metric fine threads

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	●	●
Type	H R40	H R40	H R40
Form	C	C	C
Internal cooling	✕	✕	✕

P	≤ 1200
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **835** **2852** **2940**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

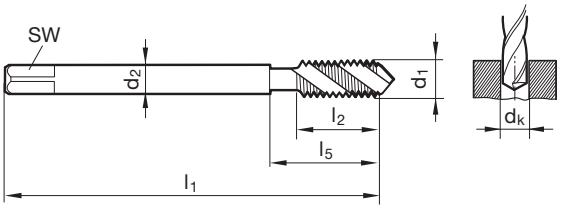
Machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 374 Article no. **394**

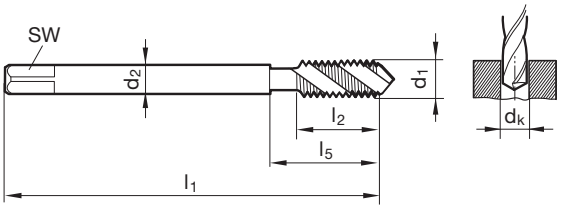
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO3/6G	ISO3/6G
Surface	S	
Type	H R40	H R40
Form	C	C
Internal cooling		

P	≤ 1200
M	
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **2989** **2988**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

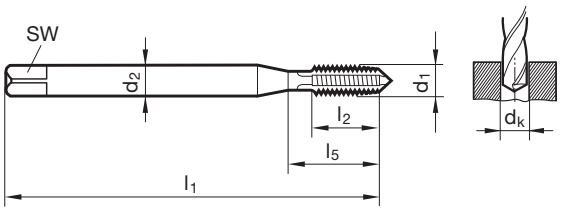
Machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N	N
Form	B	B
Internal cooling	✕	✕

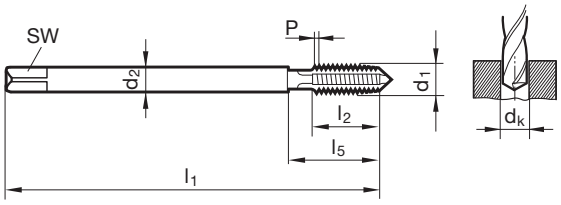
P	≤ 800
M	
K	
N	
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **873** **2889**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1 - 64	2.800	2.100	1.55	45.000	8.000		1.854
2 - 56	2.800	2.100	1.85	45.000	9.000	14.500	2.184
3 - 48	2.800	2.100	2.10	50.000	9.000	14.500	2.515
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **878** **2890**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400
1 1/8 - 7	22.000	18.000	25.00	180.000	44.000	85.000	28.575
1 1/4 - 7	22.000	18.000	28.00	180.000	44.000	85.000	31.750
1 1/2 - 6	28.000	22.000	34.00	200.000	50.000	102.000	38.100

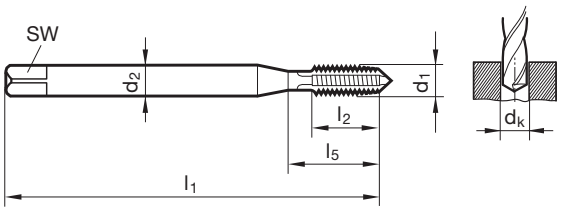
Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	
Type	N
Form	B
Internal cooling	

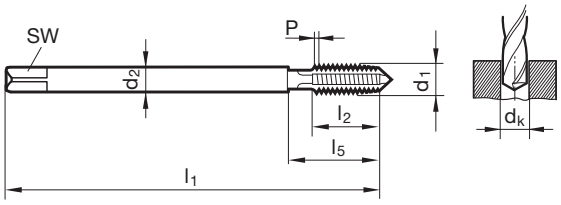
P	≤ 1000
M	○
K	
N	
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **2881**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **2883**

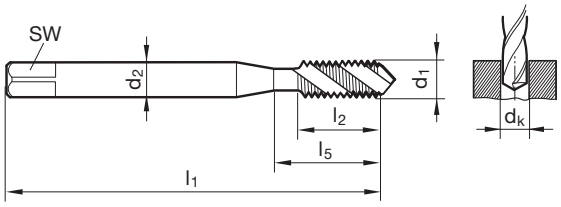
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400

Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	◯
Type	N R15
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22





DIN 2184-1 ~DIN 371 Article no. **1978**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

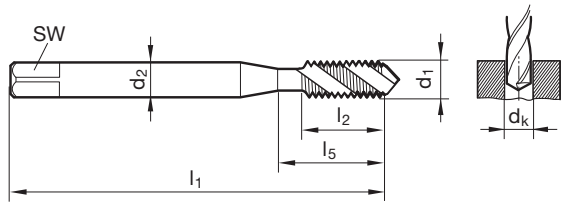
Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	
Type	N R15
Form	C
Internal cooling	

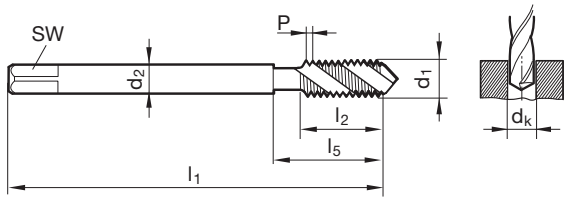
P	≤ 800
M	
K	
N	
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **2839**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826

DIN 2184-1 ~DIN 376 Article no. **2840**

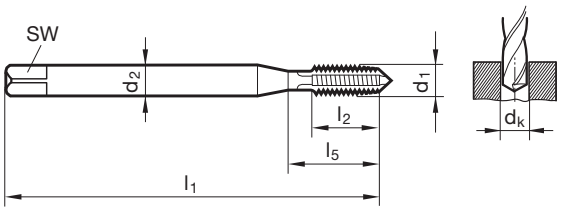
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	32.000	73.000	25.400

Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22





DIN 2184-1 ~DIN 371 Article no. **1977**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 48	2.800	2.100	2.10	50.000	6.000	14.500	2.515
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

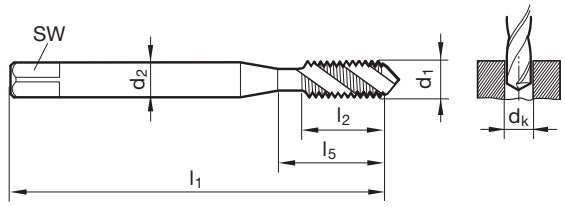
Machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling	✕	✕

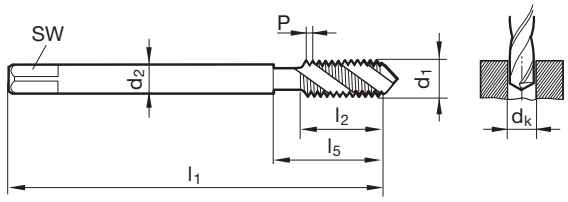
P	≤ 800
M	
K	
N	
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **876** **2844**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
3 - 48	2.800	2.100	2.10	50.000	6.000	14.500	2.515
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **881** **2845**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	32.000	73.000	25.400

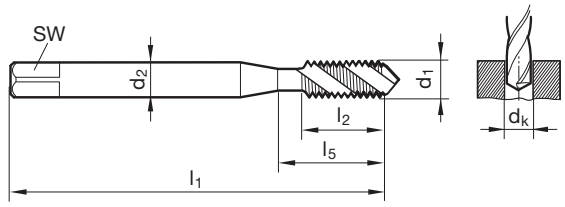
Machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling	⊗	⊗

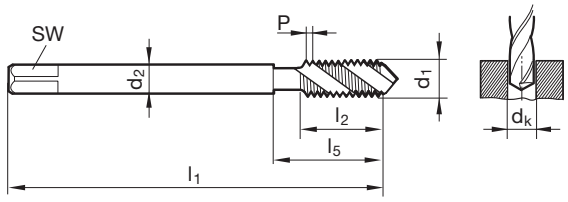
P	≤ 1000
M	○
K	○
N	○
S	
H	

Cutting data page 24

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **2854** **2855**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **2856** **2857**

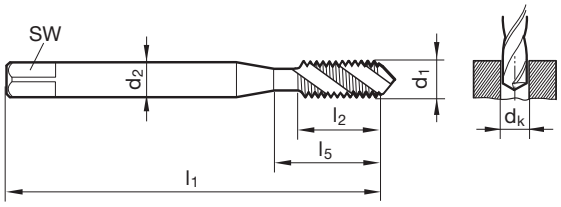
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	32.000	73.000	25.400

Machine taps for UNC-threads

P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 25

Tool material	**HSS-E**
Tolerance on Ø	2B
Surface	S
Type	N R40
Form	C
Internal cooling	





DIN 2184-1 ~DIN 371 Article no. **1837**

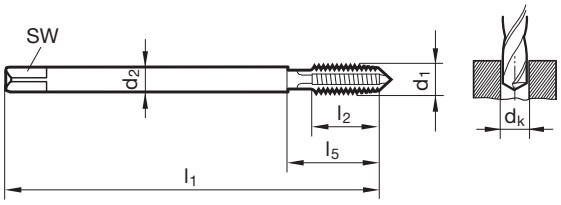
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

Machine taps for UNF-threads

P	≤ 800	
M		
K		
N		
S		
H		

Cutting data page 19

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N	N
Form	B	B
Internal cooling	✕	✕





DIN 2184-1 ~DIN 374 — Article no. **908** **2891**

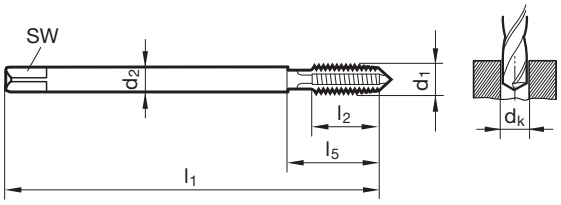
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800		2.15	50.000	9.000	14.500	2.515
4 - 48	2.200		2.40	56.000	10.000	18.000	2.845
5 - 44	2.500	2.100	2.70	56.000	10.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	11.000	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	12.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400
1 1/8 - 12	22.000	18.000	26.50	150.000	28.000	53.000	28.575
1 1/4 - 12	22.000	18.000	29.50	150.000	28.000	53.000	31.750

Machine taps for UNF-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22





DIN 2184-1 ~DIN 374 Article no. **1987**

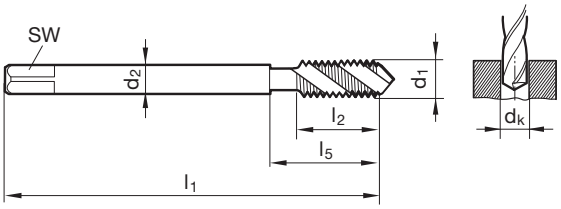
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800	1.400	2.15	50.000	5.000	14.500	2.515
4 - 48	2.200	1.800	2.40	56.000	6.000	18.000	2.845
5 - 44	2.500	2.100	2.70	56.000	6.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	7.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	14.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	16.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for UNF-threads

P	≤ 800	
M		
K		
N		
S		
H		

Cutting data page 22

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N R15	N R15
Form	C	C
Internal cooling	⊠	⊠







DIN 2184-1 ~DIN 374 Article no. **1988** **2841**

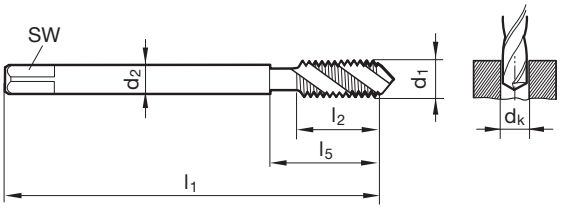
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800	1.400	2.15	50.000	5.000	14.500	2.515
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	7.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	14.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	16.000	44.000	19.050
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for UNF-threads

P	≤ 800	
M		
K		
N		
S		
H		

Cutting data page 23

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling	✕	✕







DIN 2184-1 ~DIN 374 | Article no. | **911** | **2846**

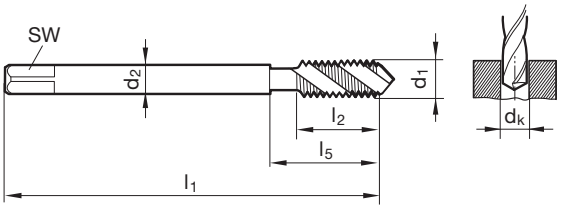
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
3 - 56	1.800	1.400	2.15	50.000	5.000	14.500	2.515
4 - 48	2.200	1.800	2.40	56.000	6.000	18.000	2.845
5 - 44	2.500	2.100	2.70	56.000	6.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
8 - 36	2.800	2.100	3.50	63.000	7.000	21.000	4.166
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	14.000	40.000	14.288
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	16.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for UNF-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	
Type	N R40
Form	C
Internal cooling	

P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 24





DIN 2184-1 ~DIN 374 Article no. **2859**

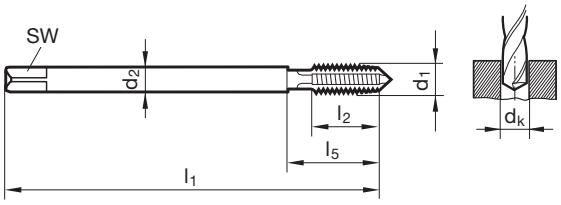
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225

Machine taps for UNF-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20





DIN 2184-1 ~DIN 374 Article no. **2885**

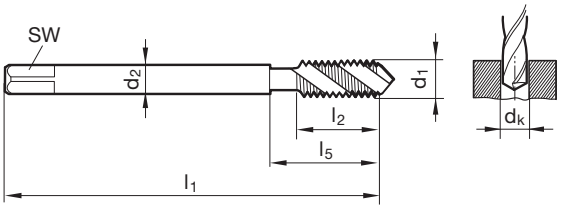
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	2.500	2.100	2.95	56.000	11.000	20.000	3.505
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400

Machine taps for UNF-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	S
Type	N R40
Form	C
Internal cooling	

P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 25





DIN 2184-1 ~DIN 374 Article no. **1838**

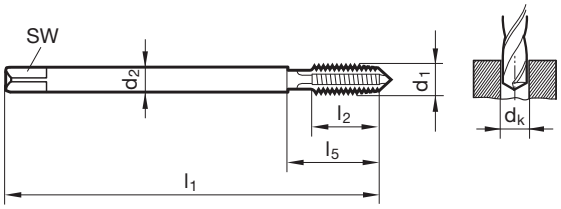
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	9.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for BSP-threads

Tool material	HSS-E	
Tolerance on Ø		
Surface	○	●
Type	N	N
Form	B	B
Internal cooling	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19







DIN 2184-1 DIN 5156 — Article no. **962** **2894**

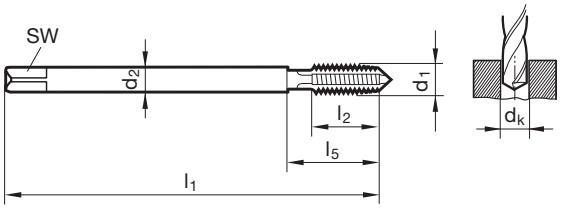
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	170.000	30.000	57.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	180.000	32.000	60.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	190.000	32.000	60.000	47.803
G2	11.000	45.000	35.000	57.00	220.000	40.000	95.000	59.614

Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22





DIN 2184-1 DIN 5156 Article no. **963**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/8	11.000	28.000	22.000	35.50	170.000	24.000	56.000	37.897
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	180.000	27.000	60.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803
G1 3/4	11.000	40.000	32.000	51.00	190.000	27.000	93.000	53.746
G2	11.000	45.000	35.000	57.00	220.000	32.000	95.000	59.614

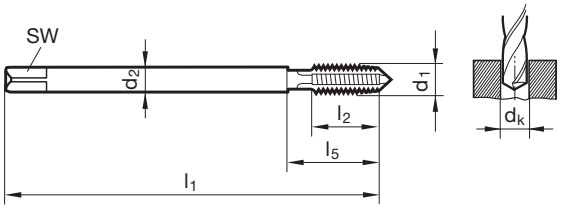
Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	B
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 21





DIN 2184-1 DIN 5156 Article no. **4220**

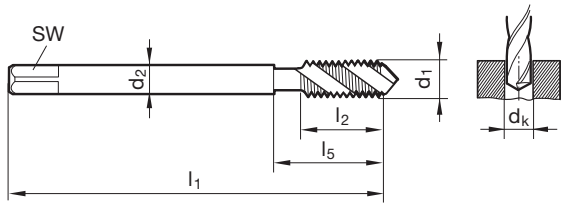
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249

Machine taps for BSP-threads

Tool material	HSS-E		
Tolerance on Ø			
Surface	○	●	C
Type	N R15	N R15	N R15
Form	C	C	E
Internal cooling	✕	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 22/23





DIN 2184-1 DIN 5156 — Article no. **964** **2842** **4158**

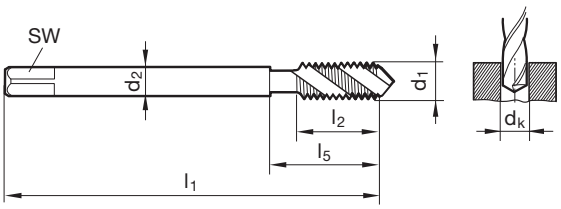
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for BSP-threads

Tool material	HSS-E	
Tolerance on Ø		
Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling	✕	✕

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23





DIN 2184-1 DIN 5156 — Article no. **965** **2849**

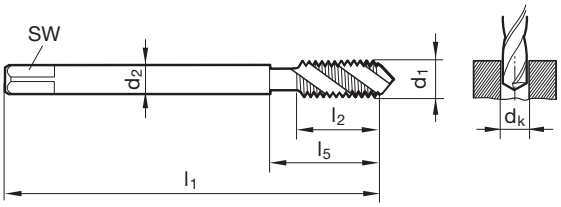
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803

Machine taps for BSP-threads

Tool material	HSS-E	
Tolerance on Ø		
Surface	○	●
Type	N R40	N R40
Form	C	C
Internal cooling	⊠	⊠

P	≤ 1000
M	○
K	○
N	○
S	
H	

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DIN 2184-1 DIN 5156 — Article no. **2860** **2861**

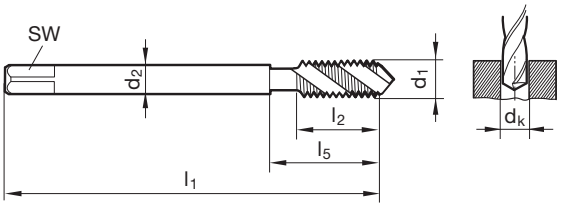
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/8	11.000	28.000	22.000	35.50	170.000	24.000	56.000	37.897
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803
G2	11.000	45.000	35.000	57.00	220.000	32.000	95.000	59.614

Machine taps for BSP-threads

Tool material	HSS-E-PM
Tolerance on Ø	
Surface	S
Type	VA R50
Form	C
Internal cooling	

P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 25





DIN 2184-1 DIN 5156 Article no. **4159**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	4.500	47.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	4.500	47.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	6.700	48.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	6.700	48.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	9.100	70.000	20.955

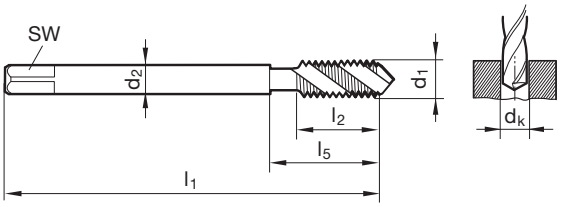
Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	X
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 5156 Article no. **395**

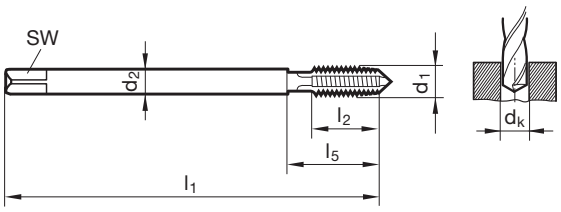
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for BSP-threads

P	≤ 1000	
M	○	
K		
N		
S		
H		

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Tool material	HSS-E	
Tolerance on Ø		
Surface	A+M	
Type	N	N
Form	B	B
Internal cooling		





DIN 2184-1 DIN 5156 — Article no. **2886** **2887**

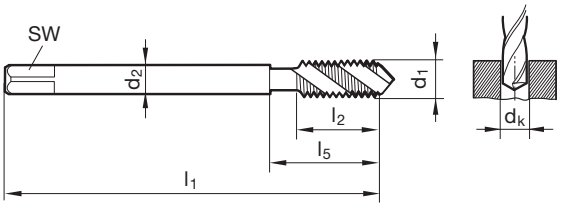
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	170.000	30.000	57.000	41.910
G1 1/2	11.000	36.000	29.000	45.25	190.000	32.000	60.000	47.803
G2	11.000	45.000	35.000	57.00	220.000	40.000	95.000	59.614

Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	S
Type	N R40
Form	C
Internal cooling	

P	≤ 1000
M	○
K	○
N	
S	
H	

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DIN 2184-1 DIN 5156 Article no. **937**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

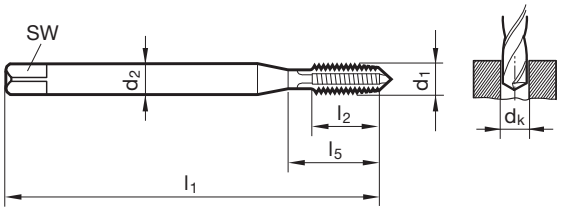
Machine taps for BSW-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	
Type	N
Form	B
Internal cooling	

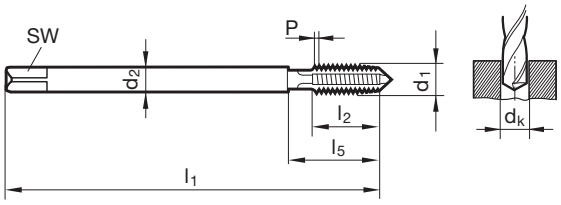
P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 19

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **2892**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W1/8	40.000	3.500	2.700	2.50	56.000	11.000	18.000	3.175
W5/32	32.000	4.500	3.400	3.20	63.000	12.000	21.000	3.969
W3/16	24.000	6.000	4.900	3.60	70.000	14.000	25.000	4.762
W1/4	20.000	7.000	5.500	5.10	80.000	16.000	30.000	6.350
W5/16	18.000	8.000	6.200	6.50	90.000	18.000	35.000	7.938
W3/8	16.000	10.000	8.000	7.90	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **2893**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W7/16	14.000	8.000	6.200	9.20	100.000	22.000	42.000	11.113
W1/2	12.000	9.000	7.000	10.50	110.000	25.000	49.000	12.700
W9/16	12.000	11.000	9.000	12.00	110.000	28.000	53.000	14.287
W5/8	11.000	12.000	9.000	13.50	110.000	30.000	53.000	15.876
W3/4	10.000	14.000	11.000	16.25	125.000	33.000	62.000	19.051
W7/8	9.000	18.000	14.500	19.25	140.000	35.000	62.000	22.226
W1	8.000	18.000	14.500	22.00	160.000	38.000	73.000	25.401

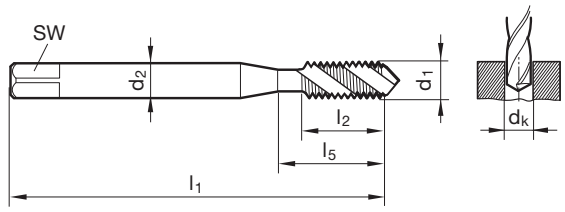
Machine taps for BSW-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	
Type	N R40
Form	C
Internal cooling	

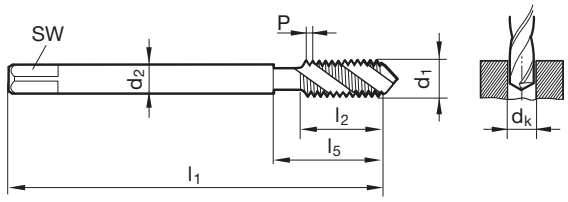
P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 23

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **2847**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W1/8	40.000	3.500	2.700	2.50	56.000	7.000	18.000	3.175
W3/16	24.000	6.000	4.900	3.60	70.000	11.000	25.000	4.762
W1/4	20.000	7.000	5.500	5.10	80.000	13.000	30.000	6.350
W5/16	18.000	8.000	6.200	6.50	90.000	14.000	35.000	7.938
W3/8	16.000	10.000	8.000	7.90	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **2848**

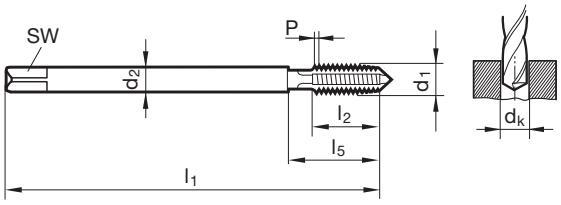
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
W3/8	16.000	7.000	5.500	7.90	100.000	16.000	39.000	9.525
W7/16	14.000	8.000	6.200	9.20	100.000	18.000	42.000	11.113
W1/2	12.000	9.000	7.000	10.50	110.000	20.000	49.000	12.700
W5/8	11.000	12.000	9.000	13.50	110.000	24.000	53.000	15.876
W3/4	10.000	14.000	11.000	16.25	125.000	25.000	62.000	19.051
W7/8	9.000	18.000	14.500	19.25	140.000	28.000	62.000	22.226
W1	8.000	18.000	14.500	22.00	160.000	32.000	73.000	25.401

Machine taps for EG-threads

Tool material	HSS-E
Tolerance on Ø	6H mod
Surface	S
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	○
K	
N	
S	
H	

Cutting data page 20





DIN 40435 DIN 40435 Article no. **1010**

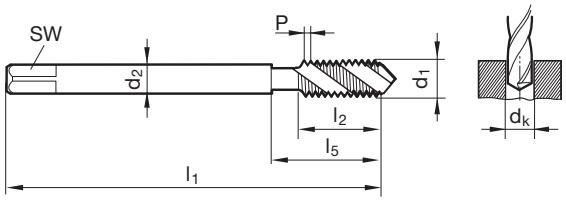
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
EG M4	0.700	6.000	4.900	4.20	70.000	12.000	25.000
EG M5	0.800	6.000	4.900	5.25	80.000	14.000	30.000
EG M6	1.000	8.000	6.200	6.30	90.000	17.000	35.000
EG M8	1.250	10.000	8.000	8.40	100.000	20.000	39.000
EG M10	1.500	9.000	7.000	10.50	100.000	20.000	40.000
EG M12	1.750	11.000	9.000	12.50	110.000	28.000	53.000
EG M14	2.000	12.000	9.000	14.50	110.000	26.000	54.000
EG M16	2.000	14.000	11.000	16.50	125.000	33.000	62.000

Machine taps for EG-threads

Tool material	HSS-E
Tolerance on Ø	6H mod
Surface	S
Type	N R40
Form	C
Internal cooling	

P	≤ 1000
M	○
K	○
N	
S	
H	

Cutting data page 24





DIN 40435 DIN 40435 Article no. **1011**

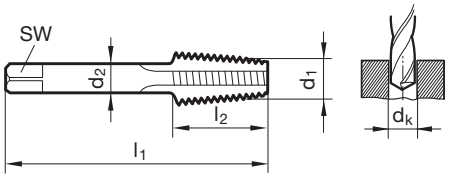
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
EG M4	0.700	6.000	4.900	4.20	70.000	7.500	25.000
EG M5	0.800	6.000	4.900	5.25	80.000	8.500	30.000
EG M6	1.000	8.000	6.200	6.30	90.000	11.000	35.000
EG M8	1.250	10.000	8.000	8.40	100.000	14.000	39.000
EG M10	1.500	9.000	7.000	10.50	100.000	16.000	40.000
EG M12	1.750	11.000	9.000	12.50	110.000	18.500	53.000
EG M14	2.000	12.000	9.000	14.50	110.000	20.000	54.000
EG M16	2.000	14.000	11.000	16.50	125.000	20.000	62.000

Machine taps for NPT-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	◯
Type	N
Form	C
Internal cooling	

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18/22





Company std. Company std. Article no. **973**

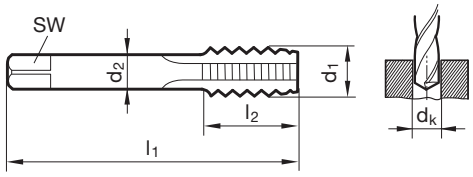
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27.000	6.000	4.900	6.15	56.000	14.000	27.000	8.190
1/8	27.000	7.000	5.500	8.40	63.000	15.000	29.000	10.620
1/4	18.000	11.000	9.000	11.10	63.000	21.000	33.000	14.140
3/8	18.000	12.000	9.000	14.30	70.000	21.000	35.000	17.570
1/2	14.000	16.000	12.000	17.90	80.000	27.000	41.000	21.900
3/4	14.000	20.000	16.000	23.30	100.000	27.000	42.000	27.230
1	11.500	25.000	20.000	29.00	110.000	32.000	53.000	34.180
1 1/4	11.500	32.000	24.000	37.70	125.000	33.000	54.500	42.900
1 1/2	11.500	36.000	29.000	43.70	140.000	33.000	56.000	48.940
2	11.500	36.000	29.000	55.60	160.000	33.000	63.000	61.000

Machine taps for PG-threads

Tool material	HSS-E	
Tolerance on Ø		
Surface	◯	◯
Type	N	N
Form	B	C
Internal cooling		

P	≤ 800
M	
K	
N	
S	
H	

Cutting data page 18-22





DIN 2184-2 DIN 40432 — Article no. **980** **979**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
PG7	20.000	9.000	7.000	11.40	70.000	22.000	35.000	12.500
PG9	18.000	12.000	9.000	14.00	70.000	22.000	35.000	15.200
PG11	18.000	14.000	11.000	17.30	80.000	22.000	40.000	18.600
PG13.5	18.000	16.000	12.000	19.00	80.000	22.000	40.000	20.400
PG16	18.000	18.000	14.500	21.30	80.000	22.000	40.000	22.500
PG21	16.000	22.000	18.000	26.90	90.000	22.000	42.000	28.300
PG29	16.000	28.000	22.000	35.50	100.000	25.000	45.000	37.000



FLUTELESS TAPS

P

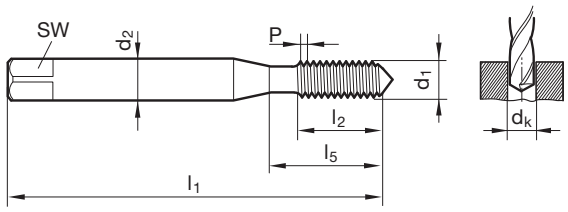
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM	HSS-E	HSS-E-PM
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	S
Type	N	N	N
Form	C	C	C
Internal cooling			

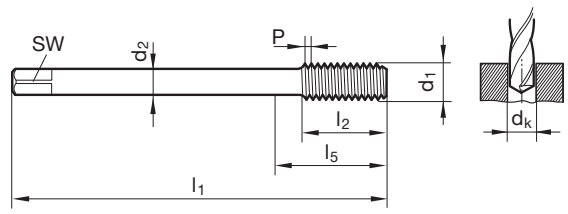
P	•
M	•
K	
N	○
S	
H	

Cutting data page 26

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **903** **921** **1255**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **952** **925** **1256**

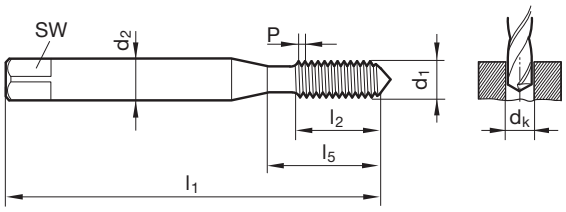
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Fluteless machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 26





DIN 2174 ~DIN 371 Article no. **920**

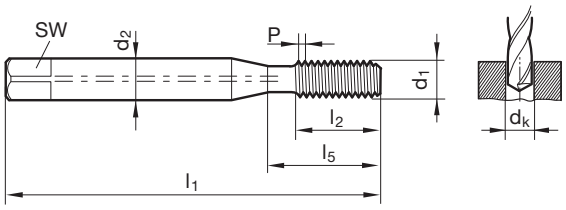
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 26





DIN 2174 ~DIN 371/~DIN 376 Article no. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

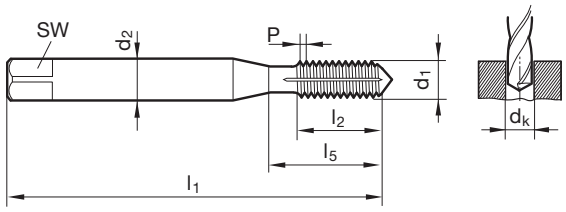
Fluteless machine taps for ISO metric threads

P	•
M	•
K	
N	○
S	○
H	

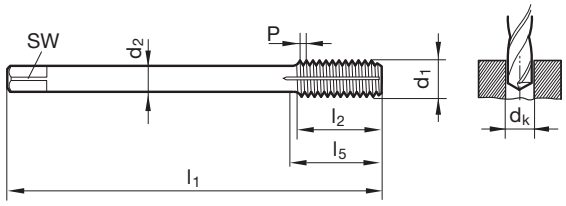
Cutting data page 26

Tool material	HSS-E		
Tolerance on Ø	6HX	6HX	6HX
Surface	S	P	C
Type	N	N	N
Form	C	C	C
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **919** **1587** **2012**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **923** **1589** **2013**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000

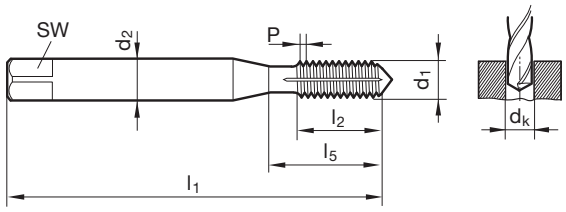
Fluteless machine taps for ISO metric threads

P	•	
M	•	
K		
N	○	
S	○	
H		

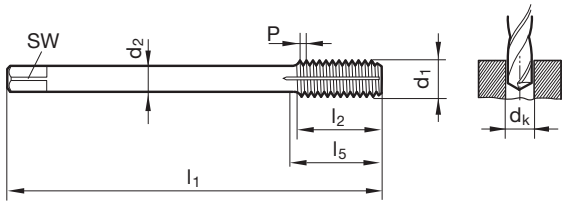
Cutting data page 26/27

Tool material	HSS-E		HSS-E-PM
Tolerance on Ø	6GX	6GX	6GX
Surface	S	P	P
Type	N	N	N
Form	C	C	C
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **918** **1588** **1705**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **922** **1590** **1708**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

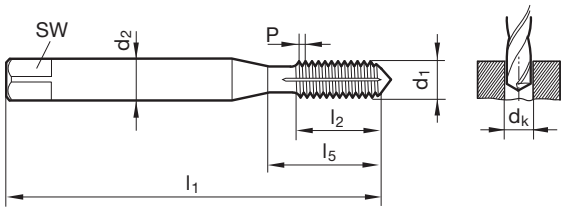
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

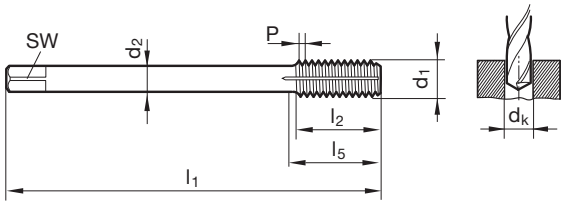
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 27

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

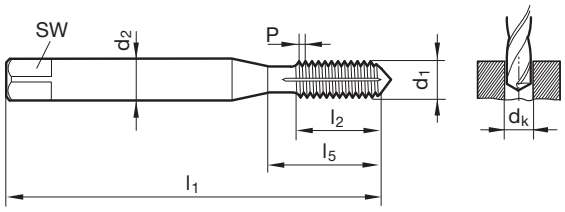
Fluteless machine taps for ISO metric threads

P	•	
M	•	
K		
N	○	
S	○	
H		

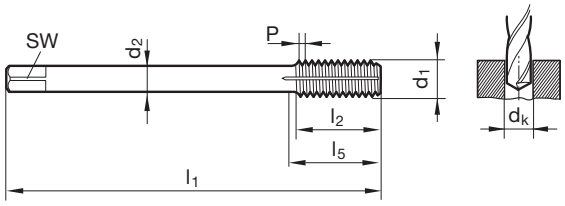
Cutting data page 27

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	P
Type	N	N
Form	C	C
Internal cooling		

~ DIN 371



~ DIN 376







DIN 2174 ~DIN 371 — Article no. **1266** **1599**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1267** **1707**

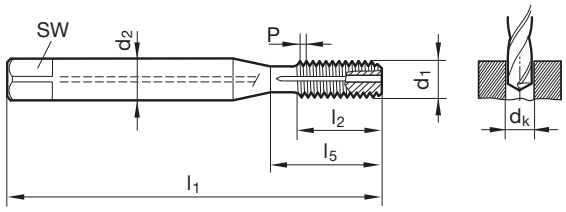
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

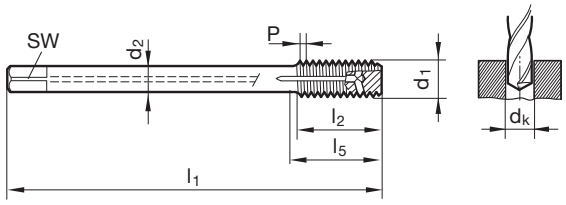
P	•	Cutting data page 27
M	•	
K		
N	○	
S	○	
H		

Tool material	HSS-E		
Tolerance on Ø	6HX	6GX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 — Article no. **2444** **2445** **2448**

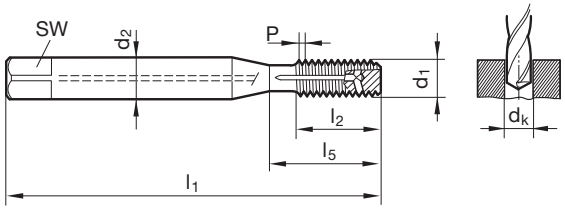
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 27





DIN 2174 ~DIN 371 Article no. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

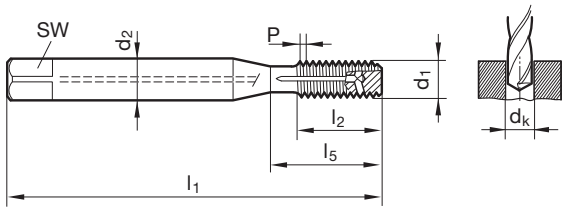
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

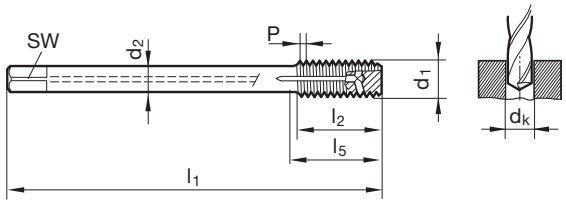
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 27

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

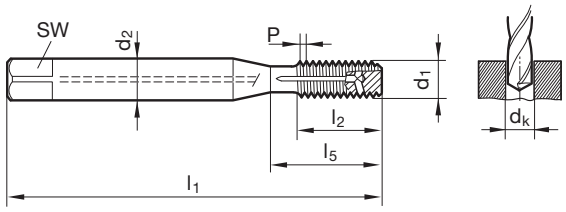
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

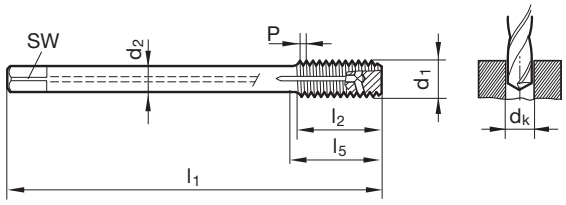
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 27

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **1270** **1717** **1725**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1271** **1719** **1727**

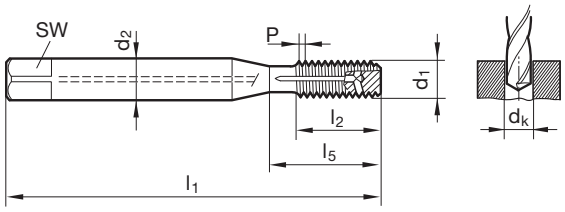
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 27





DIN 2174 ~DIN 371 Article no. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

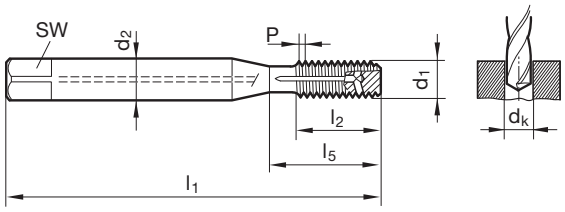
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	A	S
Type	N	N
Form	C	E
Internal cooling		

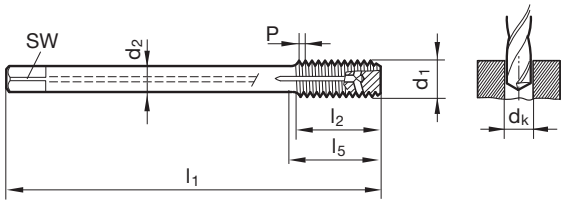
P	•
M	•
K	
N	
S	•
H	

Cutting data page 27

~ DIN 371



~ DIN 376







DIN 2174 ~DIN 371 — Article no. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1720** **1728**

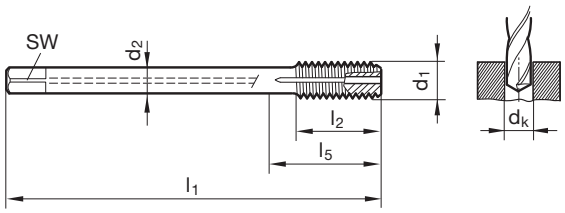
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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Company std. Company std. Article no. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

Oil feed fluteless taps f. ISO metric threads

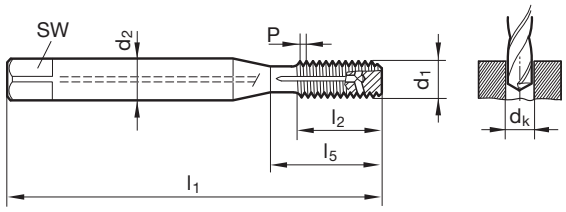


Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

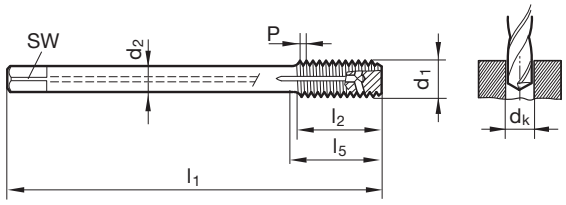
P	•
M	•
K	
N	≥ 7
S	•
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **1931**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

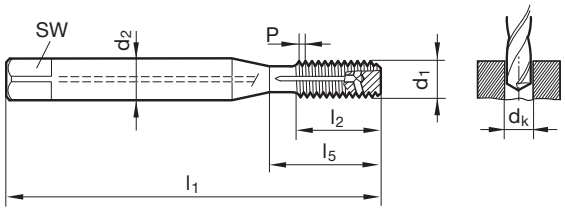
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	•
H	

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Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	





DIN 2174 ~DIN 371 Article no. **1927**

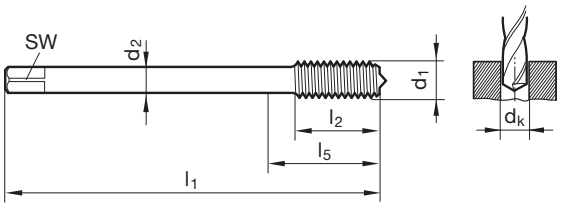
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 374 Article no. **929**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

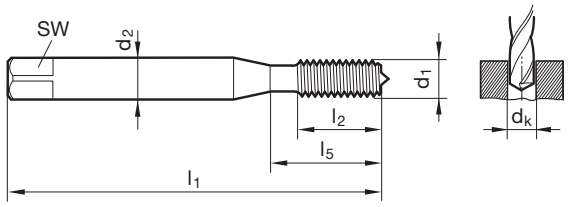
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

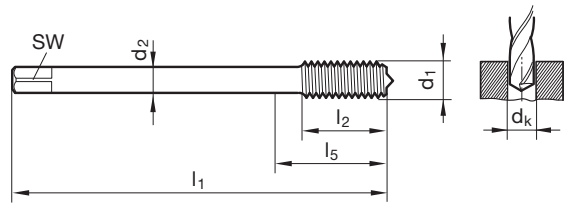
P	•
M	•
K	
N	○
S	
H	

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~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1257**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1258**

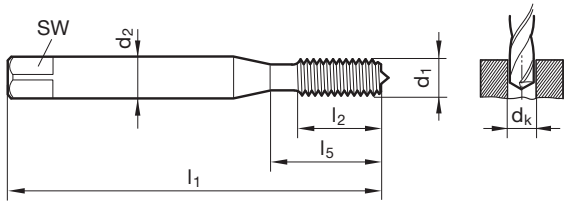
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 371 Article no. **1740**

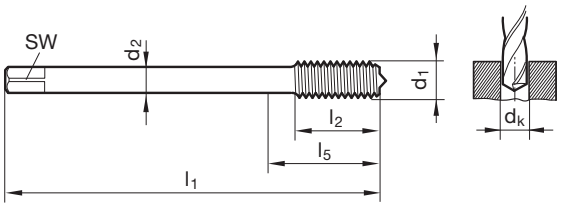
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 374 Article no. **928**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007

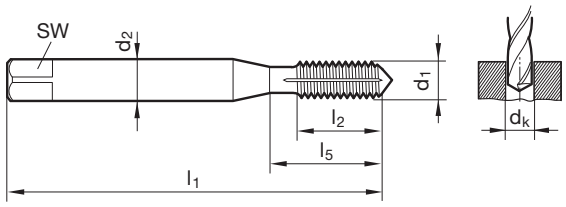
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	6HX	6HX
Surface	S	P
Type	N	N
Form	C	C
Internal cooling		

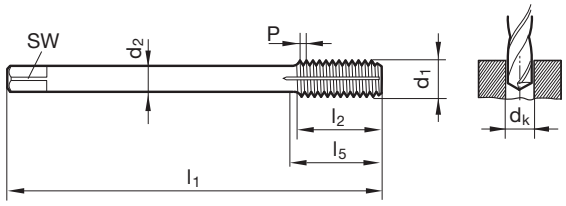
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1275** **1591**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **927** **1593**

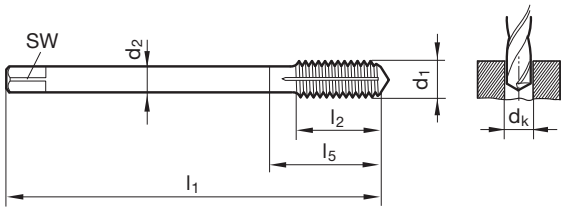
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Fluteless machine taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

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DIN 2174 ~DIN 374 Article no. **2008**

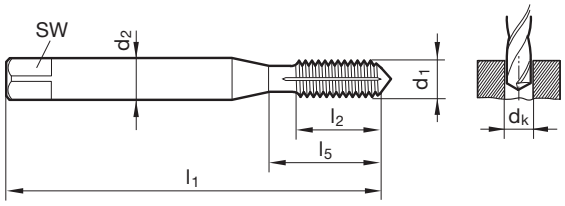
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

Fluteless machine taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	6GX
Surface	P
Type	N
Form	C
Internal cooling	

P	•
M	
K	
N	
S	
H	

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DIN 2174 ~DIN 371 Article no. **1592**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

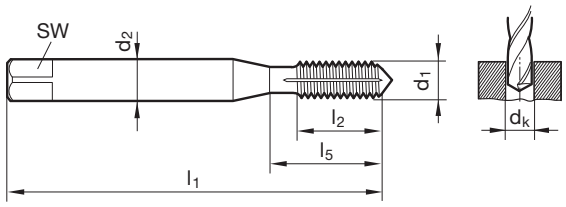
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

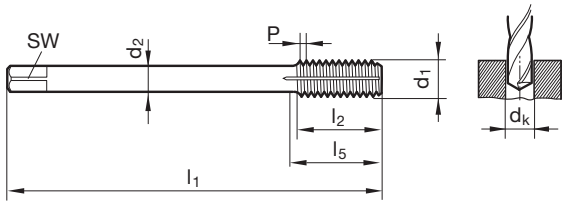
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1277**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **926**

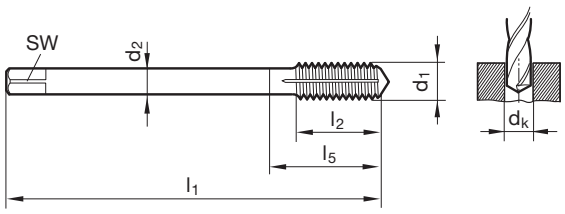
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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DIN 2174 ~DIN 374 Article no. **333**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

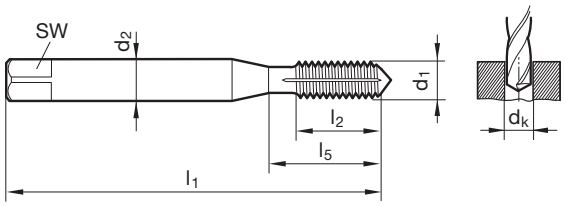
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

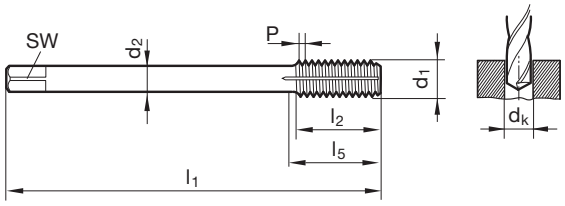
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1268**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1269**

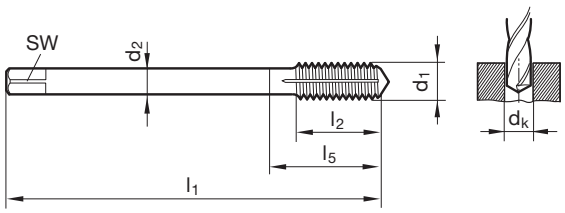
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	P
Type	N
Form	C
Internal cooling	

P	•
M	
K	
N	
S	
H	

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DIN 2174 ~DIN 374 Article no. **1711**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

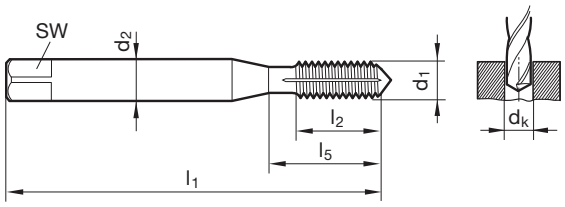
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	P
Type	N
Form	C
Internal cooling	

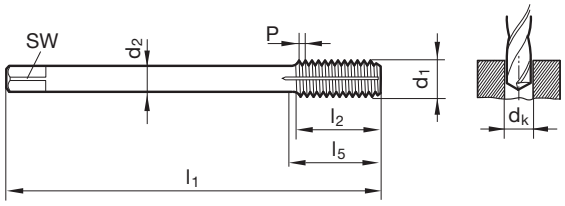
P	•
M	
K	
N	
S	
H	

Cutting data page 27

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1710**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1712**

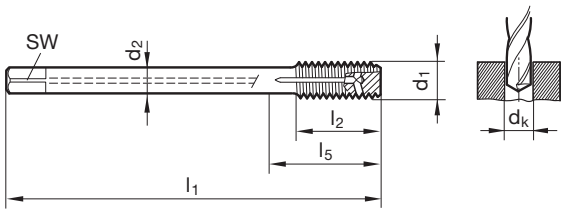
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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DIN 2174 ~DIN 374 Article no. **338**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

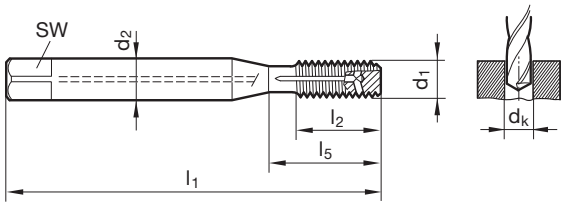
Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

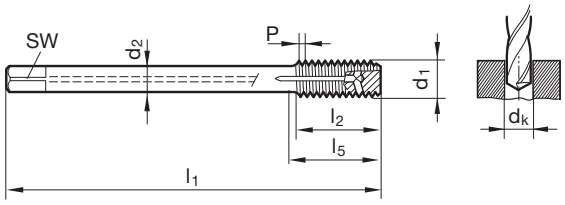
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 27

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 — Article no. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1273** **1723** **1731**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

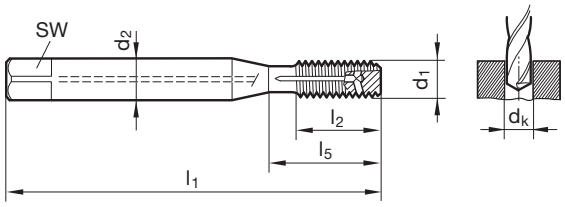
Oil feed fluteless taps f. ISO metric fine threads

P	•	
M	•	
K		
N	≥ 7	
S	•	
H		

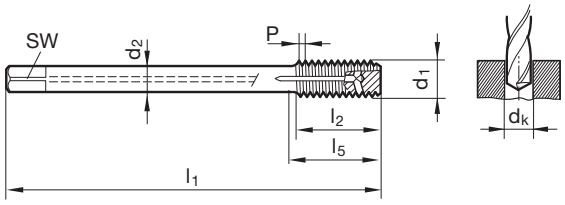
Cutting data page 27

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1716** **1732**

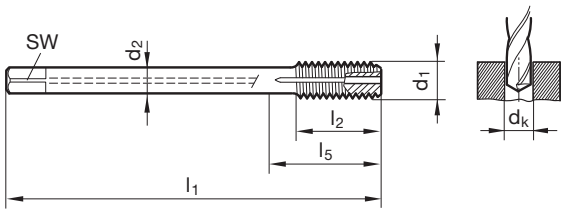
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 27





Company std. Company std. Article no. **4145**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007

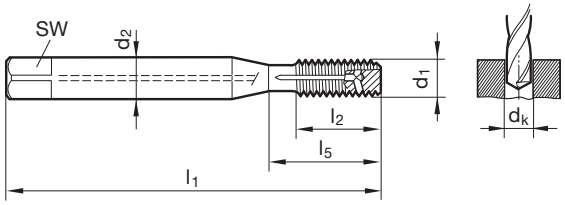
Oil feed fluteless taps f. ISO metric fine threads



P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 27

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	





DIN 2174 ~DIN 371/~DIN 376 Article no. **1581**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

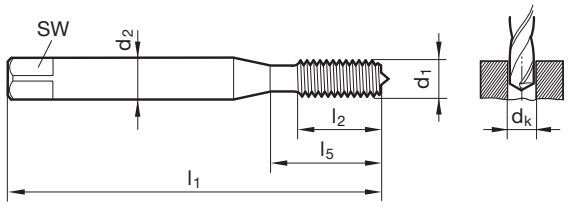
Fluteless machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

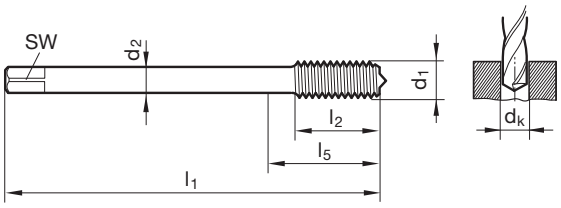
P	•
M	•
K	
N	○
S	
H	

Cutting data page 26

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225

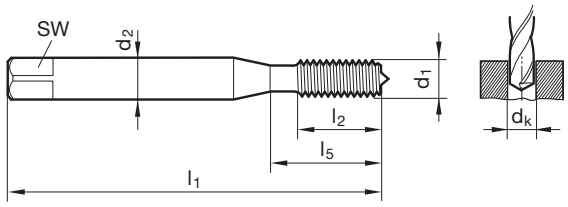
Fluteless machine taps for UNF-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

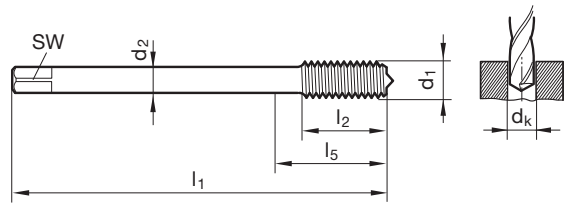
P	•
M	•
K	
N	○
S	
H	

Cutting data page 26

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374 — Article no. **2275** **1585**

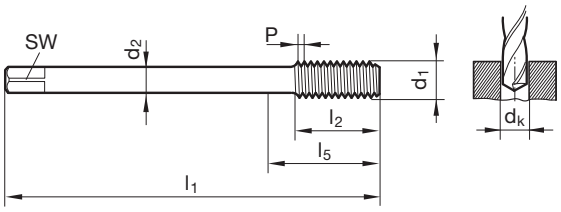
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.45	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	5.10	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.95	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	7.45	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	9.05	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	10.55	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	12.10	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	13.65	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	15.25	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	18.35	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	21.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	24.45	140.000	28.000	50.000	25.400

Fluteless machine taps for BSP-threads

Tool material	HSS-E	
Tolerance on Ø	X	X
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

P	•
M	•
K	
N	○
S	
H	

Cutting data page 26







DIN 2184-1 DIN 2189 — Article no. **966** **1586**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910



THREAD MILLING CUTTERS

P

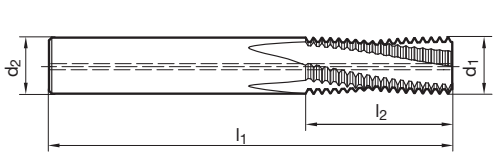
Thread milling cutters without chamfer for ISO metric threads

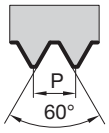
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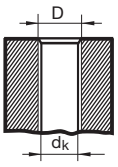
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 28

Tool material	Solid carbide			
Surface	C	C	C	C
Type	TM SP	TM SP	TM SP	TM SP
Internal cooling				
Shank form	HA	HB	HA	HB
		NEW		NEW









Company std.	Article no.	3737	3743	4132	4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007

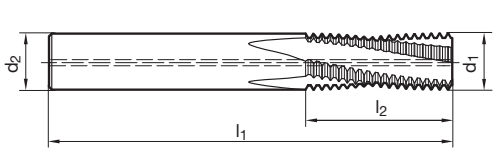
Thread milling cutters without chamfer for ISO metric threads

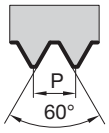
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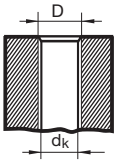
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3735	3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

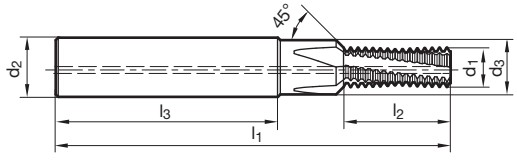
Thread milling cutters with chamfer for ISO metric threads

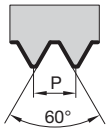
1,5xD

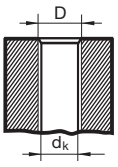
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3525** **3543**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

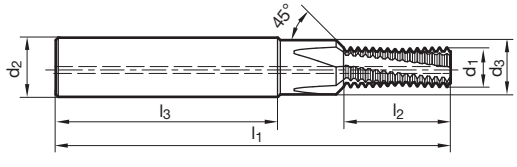
Thread milling cutters with chamfer for ISO metric threads

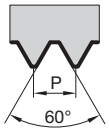
2xD

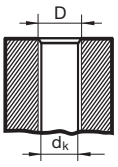
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3526	3544

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

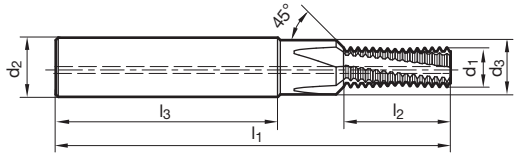
Thread milling cutters with chamfer for ISO metric threads

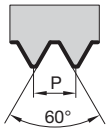
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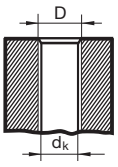
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3759** **3760**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

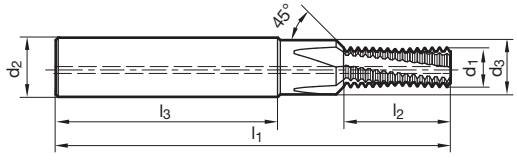
Thread milling cutters with chamfer for ISO metric fine threads

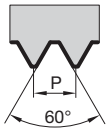
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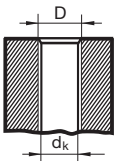
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	**3527**	**3545**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

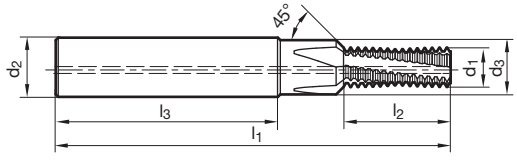
Thread milling cutters with chamfer for ISO metric fine threads

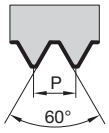
2xD

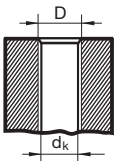
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3528** **3546**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

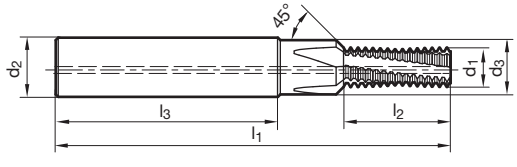
Thread milling cutters with chamfer for ISO metric fine threads

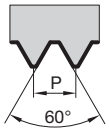
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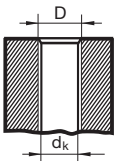
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

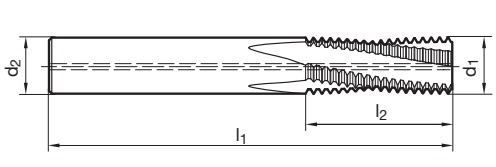
Thread milling cutters without chamfer for UNC-threads

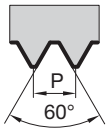
2xD

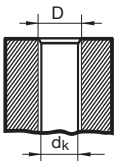
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4134** **4135**

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

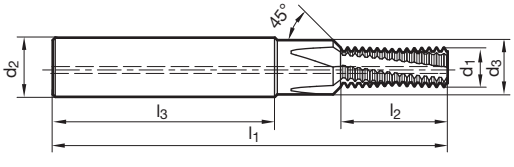
Thread milling cutters with chamfer for UNC-threads

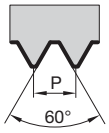
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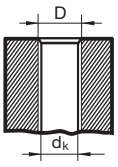
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3516** **3534**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

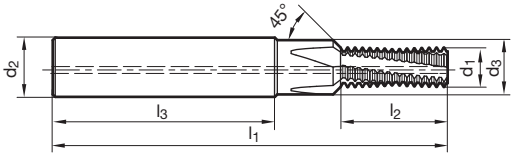
Thread milling cutters with chamfer for UNC-threads

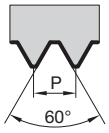
2xD

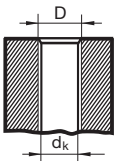
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

Thread milling cutters without chamfer for UNF-threads

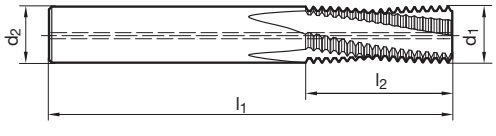
2xD

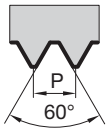
P	•
M	○
K	•
N	•
S	○
H	≤55

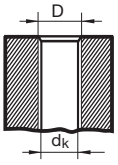
Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB

NEW











Company std. Article no. **4136** **4137**

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

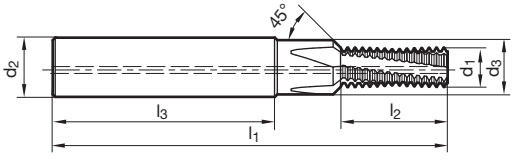
Thread milling cutters with chamfer for UNF-threads

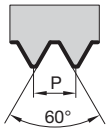
1,5xD

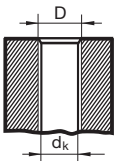
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3518** **3536**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

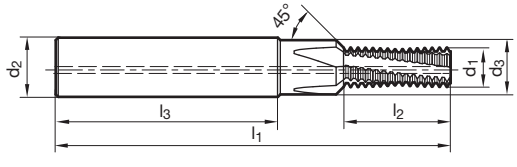
Thread milling cutters with chamfer for UNF-threads

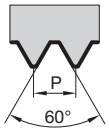
2xD

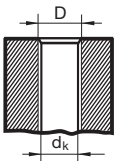
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3519	3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

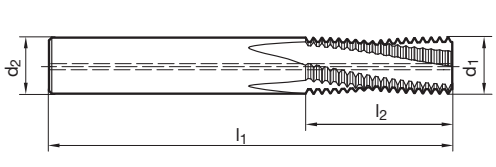
Thread milling cutters without chamfer for BSP-threads

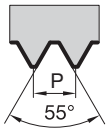
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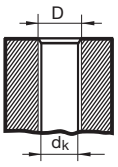
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

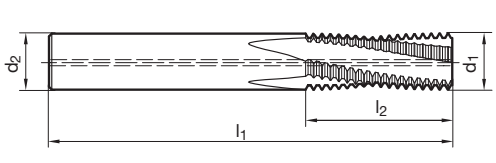
Thread milling cutters without chamfer for BSP-threads

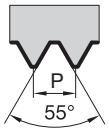
2,5xD

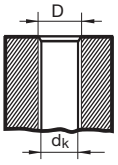
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3746	3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

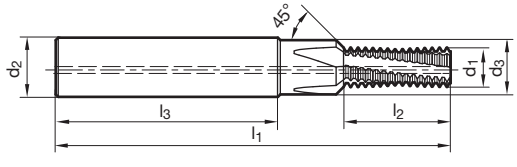
Thread milling cutters with chamfer for BSP-threads

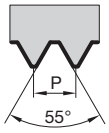
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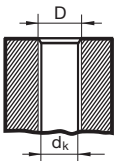
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3514** **3529**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

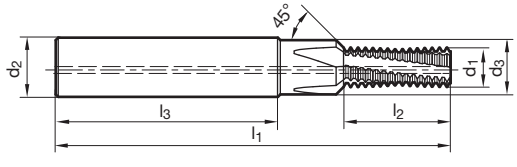
Thread milling cutters with chamfer for BSP-threads

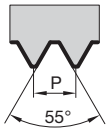
2xD

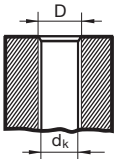
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

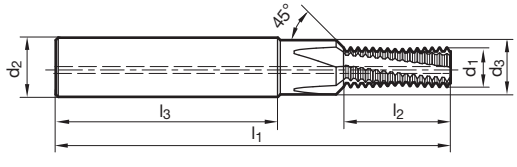
Thread milling cutters with chamfer for BSP-threads

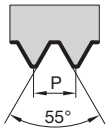
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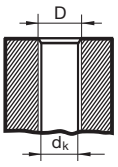
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3765** **3766**

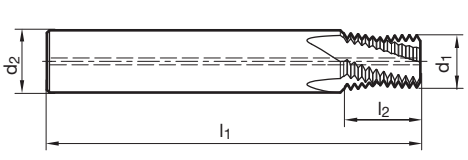
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

Thread milling cutters without chamfer for NPT-threads

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28





Company std. Article no. **3753** **3754**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

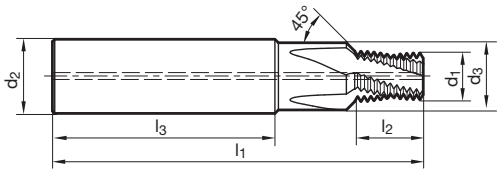
Thread milling cutters with chamfer for NPT-threads

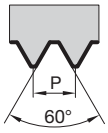
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

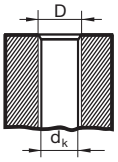
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28











Company std.	Article no.	3520	3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

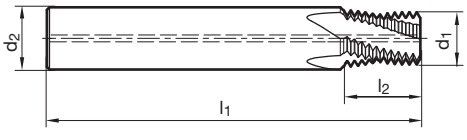
Thread milling cutters without chamfer for NPTF-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW







Company std.	Article no.	3756	3757

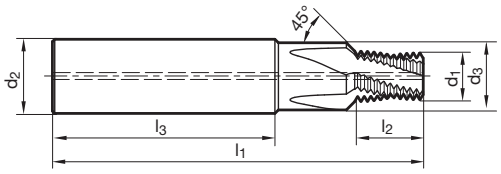
D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

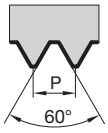
Thread milling cutters with chamfer for NPTF-threads

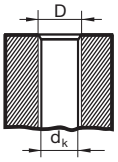
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 28











Company std.	Article no.	3521	3539

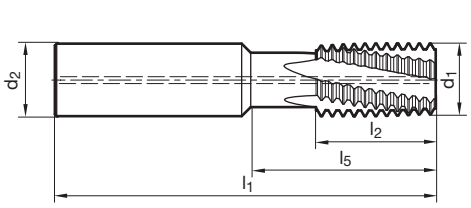
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

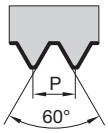
Universal thread milling cutters for ISO metric threads

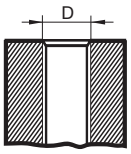
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29











Company std.	Article no.	3541	3556

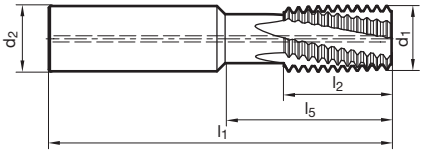
P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

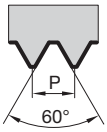
External thread milling cutters

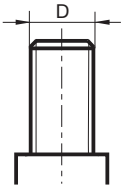
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

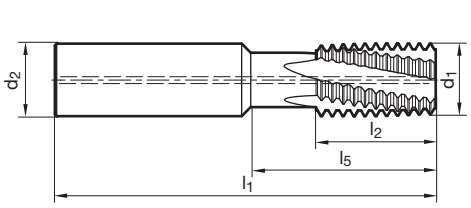
Universal thread milling cutters for UN-threads

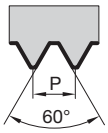
Tool material	Solid carbide	
Surface	C	C
Type	TMU UN	TMU UN
Internal cooling		
Shank form	HA	HB

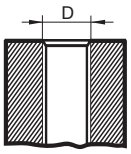
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29











Company std.	Article no.	3595	3596

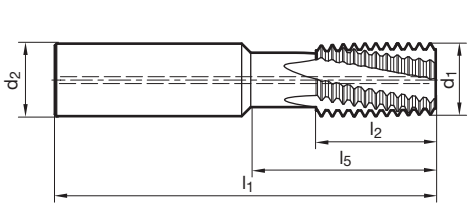
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

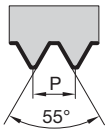
Universal thread milling cutters for BSP-threads

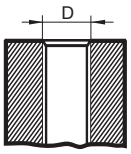
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29











Company std.	Article no.	3542	3557

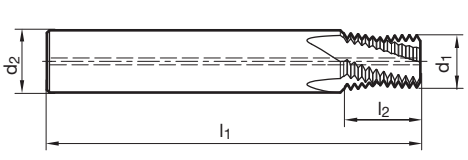
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

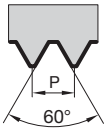
Universal thread milling cutters for NPT-threads

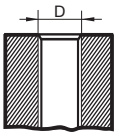
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29











Company std.	Article no.	3768	3769

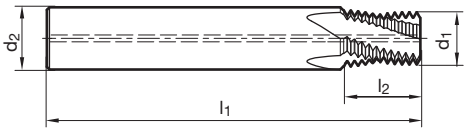
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

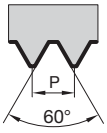
Universal thread milling cutters for NPTF-threads

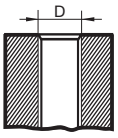
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 29

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3772	3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Micro-thread milling cutters

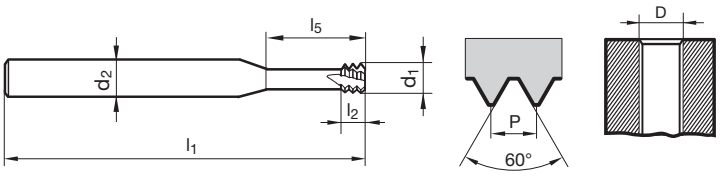
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 29

Tool material	**Solid carbide**
Surface	C
Type	SP M
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4226**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Micro-thread milling cutters

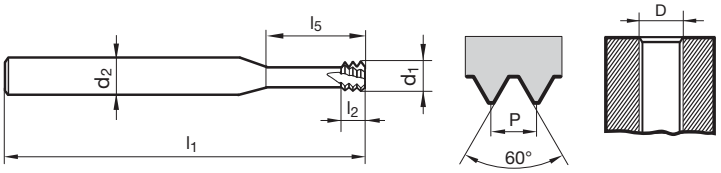
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 29

Tool material	**Solid carbide**
Surface	C
Type	SP G
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4228**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Micro-thread milling cutters

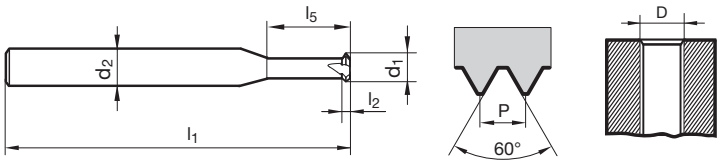
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 29

Tool material	**Solid carbide**
Surface	C
Type	SP M/MF
Threads	1,0
Shank form	HA

NEW





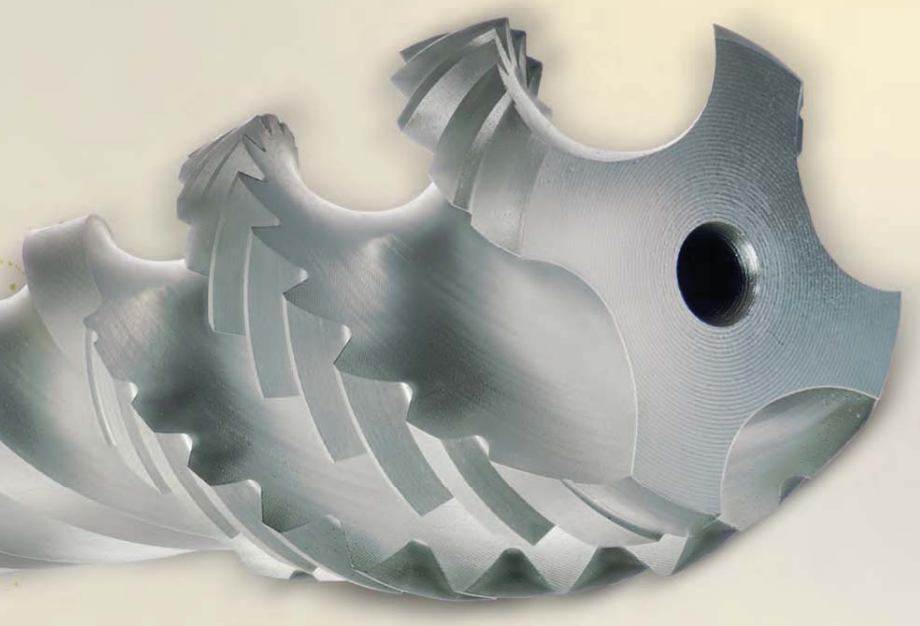
Company std. Article no. **4225**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

STA



INLESS STEEL



M

Stainless and acid-resistant steels, sulphured, austenitic and martensitic steels

STAINLESS STEEL

M

ISO 2/6H

No 1

M2 - M30
Art.-No. 4218
from page 239

M2 - M30
Art.-No. 2869/2870
from page 236

ISO 3/6G

MF

ISO 2/6H

No 1

M6x0,75 - M24x2
Art.-No. 4219
from page 248

M3x0,35 - M24x1,5
Art.-No. 2871
from page 257

ISO 3/6G

No 1 ideal tool

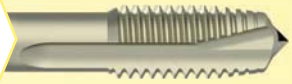
QUICKFINDER

UNC	UNF	G
2B	2B	-



THROUGH HOLE

No 1
G1/16 - G1
Art.-No. 4220
from page 264



HSS-E, Sirius, form B

No 1
No. 4 - 1
Art.-No. 2872/2873
from page 258

No 1
No. 4 - 1
Art.-No. 2874
from page 260

G1/16 - G1
Art.-No. 2875
from page 263



HSS-E, steam tempered, form B

STAINLESS STEEL

M

ISO 2/6H

No 1

M2 - M30
Art.-No. 393
from page 244

M3 - M30
Art.-No. 2862/2863
from page 243

No 1

M3 - M20
Art.-No. 761/763
from page 247

No 1

M3 - M20
Art.-No. 1139/1142
from page 247

ISO 3/6G

MF

ISO 2/6H

No 1

M6x0,75 - M24x1,5
Art.-No. 394
from page 252

M3x0,35 - M24x1,5
Art.-No. 2864
from page 251

No 1

M8x1 - M20x1,5
Art.-No. 764
from page 255

No 1

M8x1 - M20x1,5
Art.-No. 1144
from page 255

ISO 3/6G

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



BLIND HOLE

No 1

G1/16 - G1
Art.-No. 395
from page 267



HSS-E, TiAlN, form C

No 1

No. 2 - 7/8
Art.-No. 2865/2866
from page 259

No 1

No. 10 - 1
Art.-No. 2868
from page 262

G1/16 - G1 1/2
Art.-No. 968
from page 265



HSS-E, steam tempered, form C

No 1

G1/16 - G1/2
Art.-No. 4159
from page 266



HSS-E-PM, TiN, form C

FOR
SYNCHRO MACHINING
SHANK TOLERANCE h6



HSS-E-PM, TiCN, form C

STAINLESS STEEL

without lubrication

M		MF	
6HX	6GX	6HX	6GX
No 1 M1 - M20 Art.-No. 921/925 from page 271	No 1 M2 - M10 Art.-No. 920 from page 272	No 1 M8x1 - M20x1,5 Art.-No. 929 from page 286	No 1 M8x1 - M18x1,5 Art.-No. 928 from page 290

with lubrication

M3 - M39 Art.-No. 919/923 from page 274	No 1 M3 - M39 Art.-No. 918/922 from page 274	M6x0,75 - M24x1,5 Art.-No. 1275/927 from page 288	No 1 M8x1 - M20x1,5 Art.-No. 1277/926 from page 292
No 1 M3 - M39 Art.-No. 2012/2013 from page 274		No 1 M6x0,75 - M20x1,5 Art.-No. 2008 from page 291	

with internal cooling

No 1 M3 - M20 Art.-No. 1270/1271 from page 280	No 1 M5 - M10 Art.-No. 1713 from page 281	No 1 M8x1 - M24x1,5 Art.-No. 1272/1273 from page 296	No 1 M8x1 - M24x1,5 Art.-No. 1715/1716 from page 297
No 1 M3 - M20 Art.-No. 1725/1727 from page 280	No 1 M3 - M20 Art.-No. 1726/1728 from page 282	No 1 M8x1 - M24x1,5 Art.-No. 1729/1731 from page 296	No 1 M8x1 - M24x1,5 Art.-No. 1730/1732 from page 297
No 1 M3 - M20 Art.-No. 1972/1931 from page 284		No 1 M10x1 - M24x1,5 Art.-No. 1581 from page 299	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



THROUGH HOLE
BLIND HOLE

THROUGH HOLE

No 1
Nr. 4 - 7/8
Art.-No. 2273/2274
from page 300

No 1
Nr. 4 - 1
Art.-No. 1283/2275
from page 301

No 1
G1/16 - G1 1/4
Art.-No. 966
from page 302



HSS-E, TiN, form C

BLIND HOLE

No 1
Nr. 4 - 7/8
Art.-No. 1582/1583
from page 300

No 1
Nr. 4 - 1
Art.-No. 1584/1585
from page 301

No 1
G1/16 - G1 1/4
Art.-No. 1586
from page 302



HSS-E, TiN, form C



HSS-E, TiCN, form C

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C

STAINLESS STEEL

	M UNIVERSAL	MF UNIVERSAL
1.5xD	No 1 M3 - M20 Art.-No. 3525 from page 306	No 1 M4x0,5 - M16x1,5 Art.-No. 3527 from page 309
2xD	No 1 M3 - M20 Art.-No. 3526 from page 307	No 1 M4x0,5 - M16x1,5 Art.-No. 3528 from page 310
2.5xD	No 1 M3 - M20 Art.-No. 3759 from page 308	No 1 M4x0,5 - M16x1,5 Art.-No. 3762 from page 311
3xD	No 1 M1,6 - M16 Art.-No. 4226 from page 333	
universal	No 1 Ø8x0,5 - Ø30xP3,5 Art.-No. 3541 from page 327	No 1 Ø8x0,5 - Ø30xP3,5 Art.-No. 3541 from page 327

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



THROUGH HOLE
BLIND HOLE

UNC	UNF	G	
No 1 1/4 - 1/2 Art.-No. 3516 from page 313	No 1 1/4 - 1/2 Art.-No. 3518 from page 316	No 1 1/8 - 3/8 Art.-No. 3514 from page 320	 Solid carbide, TiCN
No 1 1/4 - 1/2 Art.-No. 3517 from page 314	No 1 1/4 - 1/2 Art.-No. 3519 from page 317	No 1 1/8 - 3/8 Art.-No. 3515 from page 321	 Solid carbide, TiCN
			 Solid carbide, TiCN
			 Solid carbide, TiCN
No 1 Ø10xUN24 - Ø20xUN7 Art.-No. 3595 from page 329	No 1 Ø10xUN24 - Ø20xUN7 Art.-No. 3595 from page 329	No 1 Ø10xG19 - Ø20xG11 Art.-No. 3542 from page 330	 Solid carbide, TiCN



M

COMPASS

STAINLESS STEEL



THROUGH HOLES

Thread depth		≤1,5xD						
Tool material		HSS-E					HSS-E-PM	
Type/form		VA/B	VA/B	VA/B	VA AZ/B	N/B	VA/B	VA/B
Surface		○	●	(S)	○	(S)	○	(S)
Coolant delivery		☒	☒	☒	☒	☒	☒	☒
Shank tolerance		h9	h9	h9	h9	h9	h9	h9
						 NEW		
Thread type	**Tolerance**	**Article no. / page**						
M	4H							
	6H	1870/1872 236	2869/2870 236	2086/2087 236	1871/792 240		877/879 237	1002 238
	6HX					4218 239		
	6G							
MF	6H	1873 256	2871 257	1001 257			887 256	1291 248
	6HX					4219 248		
	6G							
UNC	2B	1980/1985 258	2872/2873 258					
	2BX							
UNF	2B	1990 260	2874 260					
	2BX							
G		967 263	2875 263			4220 264		
BSW								
NPT								
NPTF								
EG M	6H Mod.							
MJ	4HX							
MJF	4HX							
UNJC	3BX							
UNJF	3BX							
PG								
Soluble oil		○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min						
M	Stainless steels, sulphured, austenitic	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	**8**	**8**	**10**	**8**	**10**	**8**	**10**
	Stainless- and acidresistant steels, martensitic	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	**6**	**6**	**8**	**6**	**12**	**6**	**8**
	Duplex and Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	-	-	-	-	**10**	-	-

STAINLESS STEEL



BLIND HOLES

Thread depth		≤1,5xD					
Tool material		HSS-E					
Type/form		VA R15 / C	VA R15 / C	VA R25 / C	VA R25 / C	NR15 / C	NR15 / C
Tool material		●	S	●	S	C	C
Coolant delivery		☒	☒	☒	☒	☒	☒
Shank tolerance		h9	h9	h9	h9	h9	h9
							
Thread type	**Tolerance**	**Article no. / page**					
M	4H						
	6H	843/785 241	2896/2895 241			4154 242	4155 242
	6HX						
	6G						
MF	6H	1874 249	2897 249			4156 250	4157 250
	6HX						
	6G						
UNC	2B						
	2BX						
UNF	2B	1991 261	2898 261				
	2BX						
G							
BSW							
NPT				1087 268	1088 268		
NPTF					4127 269		
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
	Suitable lubricant	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
M	Stainless steels, sulphured, austenitic	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	**6**	**8**	**6**	**8**	**8**	**8**
	Stainless- and acidresistant steels, martensitic	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	4	6	4	6	6	6
	Duplex and Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	-	-	-	-	-	-

≤3xD

HSS-E				HSS-E-PM					
NR40 / C	NR40 / C	NR40 / C	VA R45/C	NR40 / C	NR40 / C	NR50 / C	NR50 / C	VA R50/C	VA R50/C
○	●	○	A	○	S	S	C	S	C
☒	☒	axial	☒	☒	☒	☒	axial	☒	axial
h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
									
Article no. / page									
814/825 243	2862/2863 243	1892/1899 243		909/910 246	59/60 246	767/1098 245	1152/1293 245		
			393 244					761/763 247	1139/1142 247
	2864 251			936 253	1004 253	1100 254	1294 254		
			394 252					764 255	1144 255
1981/1986 259	2865/2866 259								
2867 262	2868 262								
	968 265		395 267	939 265				4159 266	
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Recommended cutting speed vc m/min									
6	**6**	**6**	**15**	**8**	**10**	**10**	**10**	**12**	**12**
4	4	**4**	**10**	**6**	**6**	6	6	**8**	**8**
-	-	-	**6**	-	-	-	-	-	-

STAINLESS STEEL



THROUGH HOLES AND **BLIND** HOLES

Thread depth		1.5xD		
Tool material		HSS-E	HSS-E-PM	Solid carbide
Type/form		N / C	N / C	N / C
Tool material		S	S	S
Coolant delivery		☒	☒	axial
Shank tolerance		h9	h9	h6
				
Thread type	**Tolerance**	**Article no. / page**		
M	4H			
	6H			
	6HX	921/925 271	1255/1256 271	2518 273
	6GX	920 272	903/952 271	
MF	6H			
	6HX	929 286	1257/1258 287	
	6GX	928 290	1740 289	
UNC	2BX	2273/2274 300		
	3BX			
UNF	2BX	1283/2275 301		
	3BX			
G		966 302		
BSW				
NPT				
NPTF				
EG M	6H Mod.			
MJ	4HX			
MJF	4HX			
UNJC	3BX			
UNJF	3BX			
PG				
Suitable lubricant		○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min		
M	Stainless steels, sulphured, austenitic	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	4	4	15
	Stainless- and acidresistant steels, martensitic	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	4	4	12
	Duplex and Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	-	-	-

≤3xD

HSS-E				HSS-E-PM							Solid carbide	
N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / E	N / C	N / E
S	C	S+	C	S	S	S	S	C	A	S	C	C
☒	☒	axial	radial	☒	☒	radial	axial	radial	radial	axial	radial	radial
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
												
Article no. / page												
919/923 274	2012/2013 274	2442/2444 277	2446/2448 277	322/339 275	1266/1267 276	323/342 279	4143 283	1270/1271 280	1717/1719 280	1725/1727 280	1972/1931 284	1927 285
918/922 274		2443/2445 277	2447 278					1713 281	1718/1720 282	1726/1728 282		
1275/927 288	2008 291			333 294	1268/1269 293	338 295	4145 298	1272/1273 296	1721/1723 296	1729/1731 296	1581 299	
1277/926 292								1715/1716 297		1730/1732 297		
1582/1583 300												
1584/1585 301												
1586 302												
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Recommended cutting speed vc m/min												
6	**8**	6	**8**	**8**	**8**	**8**	**8**	**10**	**10**	**8**	**15**	**15**
4	**6**	4	*6*	*6*	*6*	*6*	*6*	*8*	**8**	**6**	**12**	**12**
-	-	-	**8**	**8**	**8**	**8**	**8**	**10**	**10**	**8**	**15**	**15**

STAINLESS STEEL



THROUGH HOLES AND **BLIND** HOLES

Thread depth	≤2xD				≤2,5xD		≤1,5xD	
Tool material		Solid carbide						
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Surface	C	C	C	C	C	C	C	C
Coolant delivery	☒	☒	axial	axial	axial	axial	axial	axial
Shank form	HA	HB	HA	HB	HA	HB	HA	HA
Spiral	27°	27°	27°	27°	27°	27°	10°	10°



Thread type	Article no. / page							
M	4132 304	4133 304	3737 304	3743 304	3735 305	3740 305	3525 306	3543 306
MF			3737 304	3743 304			3527 309	3545 309
UNC			4134 312	4135 312			3516 313	3534 313
UNF			4136 315	4137 315			3518 316	3536 316
G			3745 318	3748 318	3746 319	3750 319	3514 320	3529 320
BSW								
NPT			3753 323	3754 323			3520 324	3538 324
NPTF			3756 325	3757 325			3521 326	3539 326
EG M	EG-threads can be produced with every thread milling cutter type and dimension							
MJ								
MJF								
UNJC								
UNJF								
PG								
Suitable lubricant	●/●	●/●	●/●	●/●	●/●	●/●	●/●	●/●

= No 1

○ = Air
● = Neat oil
● = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Application recommendations							
M	Stainless steels, sulphured, austenitic	≤1000 N/mm²	X5CrNi18-10 X6CrNiTi18-10 X8CrNiS18-9	1.4301 1.4571 1.4305	+	+	+	+	+	+	++	++
	Stainless- and acidresistant steels, martensitic	≤1000 N/mm²	X17CrNi16-2 X90CrMoV18 X2CrTi12	1.4057 1.4112 1.4512	+	+	+	+	+	+	++	++
	Duplex and Super Duplex	≤1300 N/mm²	X2CrNiMoN22-5-3 X2CrNiMoN25-7-4 X2CrNiMoCuWN25-7-4	1.4462 1.4410 1.4501	+	+	+	+	+	+	++	++

≤2xD		≤2,5xD		universal				≤3xD	
Solid carbide									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
C	C	C	C	C	C	C	C	C	C
axial	axial	axial	axial	axial	axial	axial	axial	☒	☒
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
						 for external threads	 for external threads		
Article no. / page									
3526 307	3544 307	3759 308	3760 308	3541 327	3556 327	4162 328	4163 328	4226 333	4225 335
3528 310	3546 310	3762 311	3763 311	3541 327	3556 327	4162 328	4163 328		4225 335
3517 314	3535 314			3595 329	3596 329				
3519 317	3537 317			3595 329	3596 329				
3515 321	3533 321	3765 322	3766 322	3542 330	3557 330			4228 334	
				3768 331	3769 331				
				3772 332	3773 332				
EG-threads can be produced with every thread milling cutter type and dimension									
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Application recommendations									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

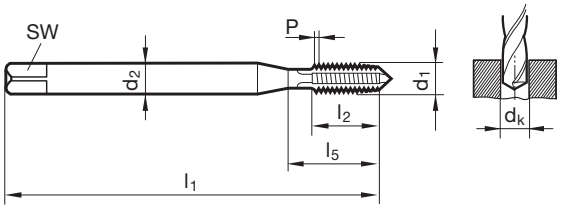
Machine taps for ISO metric threads

P	≤ 1000
M	•
K	
N	•
S	
H	

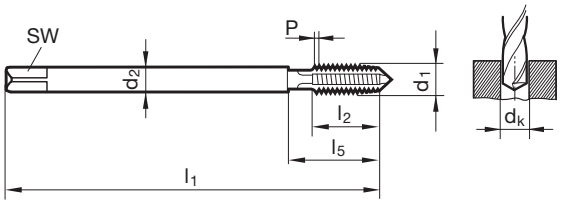
Cutting data page 229

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	(S)	●
Type	N	N	VA
Form	B	B	B
Internal cooling	✕	✕	✕

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **1870** **2086** **2869**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **1872** **2087** **2870**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

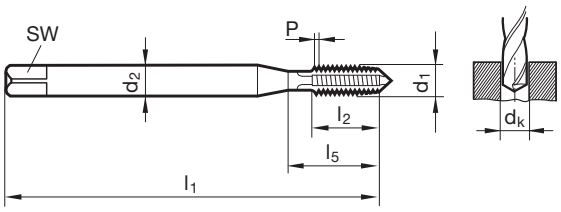
Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	B
Internal cooling	

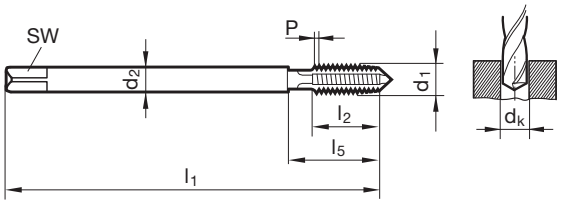
P	≤ 1000
M	•
K	
N	○
S	
H	

Cutting data page 229

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **877**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **879**

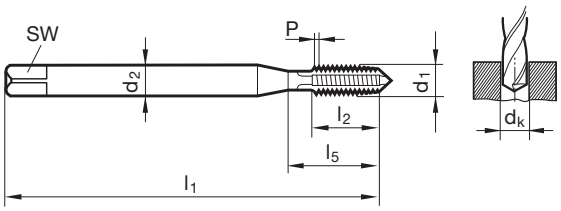
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	S
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	•
K	
N	
S	
H	

Cutting data page 229





DIN 2184-1 DIN 371/DIN 376 Article no. **1002**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000

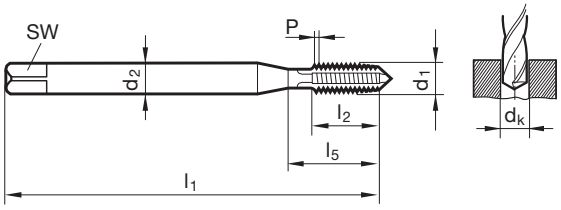
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	B
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 229





DIN 2184-1 DIN 371/DIN 376 Article no. **4218**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

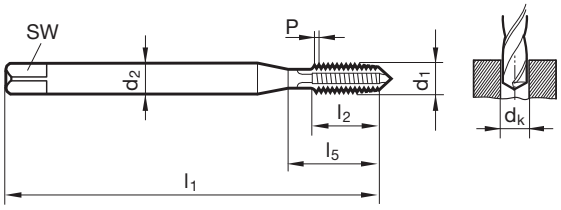
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	VA AZ
Form	B
Internal cooling	

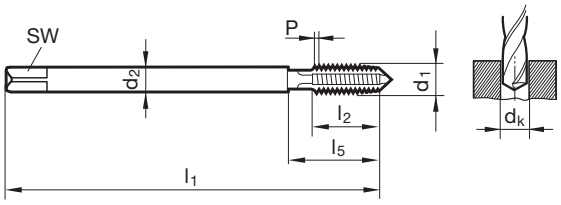
P	≤ 1000
M	•
K	
N	○
S	
H	

Cutting data page 229

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1871**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **792**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

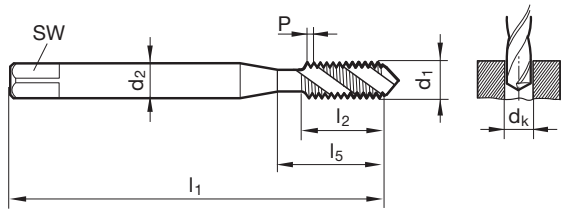
Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface		S
Type	VA R15	VA R15
Form	C	C
Internal cooling		

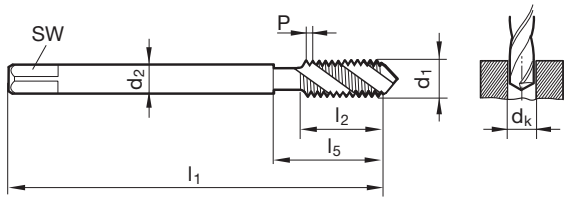
P
M •
K
N
S
H

Cutting data page 230

DIN 371



DIN 376







DIN 2184-1 DIN 371 Article no. **843** **2896**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **785** **2895**

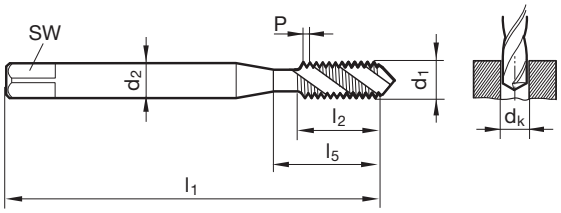
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

Machine taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	C	C
Type	N R15	N R15
Form	C	E
Internal cooling		

P	≤ 1000
M	○
K	○
N	
S	
H	

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DIN 2184-1 DIN 371/DIN 376 — Article no. **4154** **4155**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

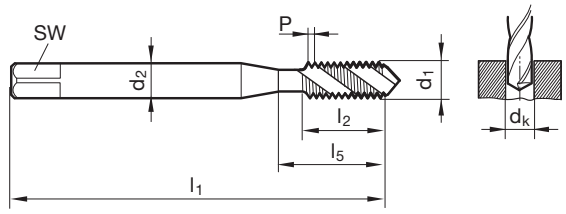
Machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	ISO2/6H	ISO2/6H	ISO2/6H
Surface	○	○	●
Type	VA R40	VA R40	VA R40
Form	C	C	C
Internal cooling	✕	✕	✕

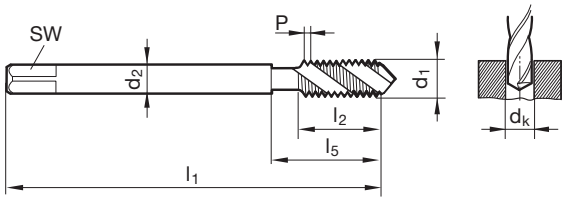
P	
M	•
K	
N	•
S	
H	

Cutting data page 231

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **814** **1892** **2862**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **825** **1899** **2863**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

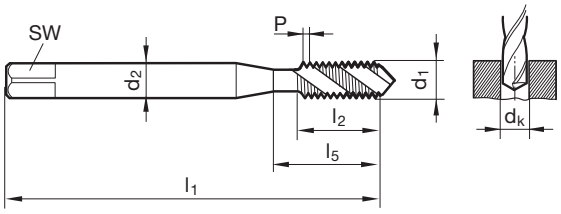
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 231





DIN 2184-1 DIN 371/DIN 376 Article no. **393**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

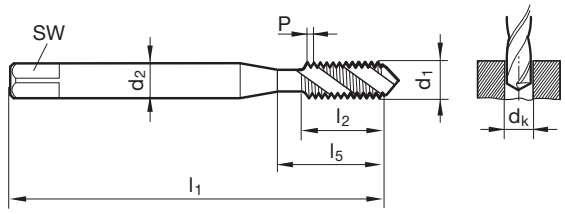
Machine taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		

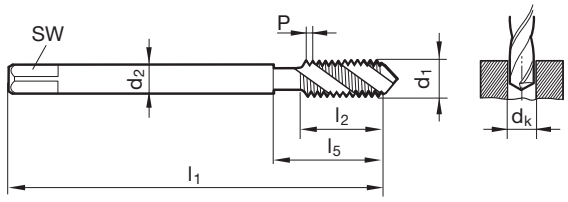
P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 231

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **767** **1152**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **1098** **1293**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

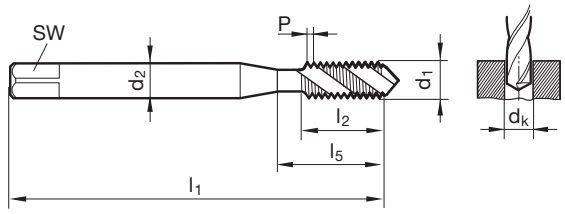
Machine taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	○
Type	VA R40	VA R40
Form	C	C
Internal cooling	✕	✕

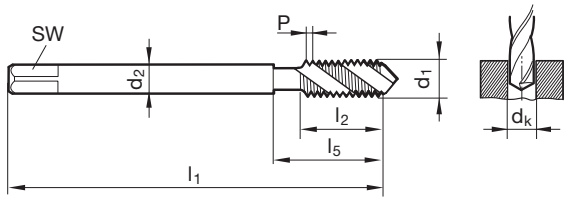
P	
M	•
K	
N	
S	
H	

Cutting data page 231

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **59** **909**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **60** **910**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

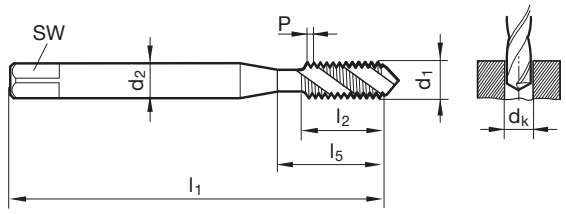
Machine taps for ISO metric threads

P	•	
M	•	
K	○	
N	•	
S	○	
H		

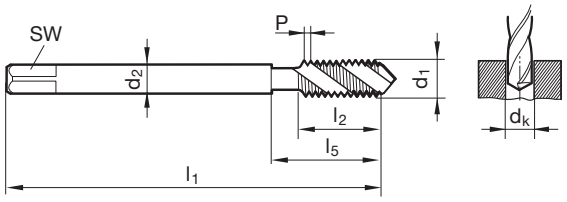
Cutting data page 231

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	C
Type	VA R50	VA R50
Form	C	C
Internal cooling		

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **761** **1139**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	2.500	18.000
M4	0.700	4.500	3.400	3.30	63.000	3.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	4.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	5.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	6.300	35.000
M10	1.500	10.000	8.000	8.50	100.000	7.500	39.000

DIN 2184-1 DIN 376 — Article no. **763** **1142**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	8.800	63.000
M14	2.000	11.000	9.000	12.00	110.000	10.000	58.000
M16	2.000	12.000	9.000	14.00	110.000	10.000	58.000
M20	2.500	16.000	12.000	17.50	140.000	12.500	85.000

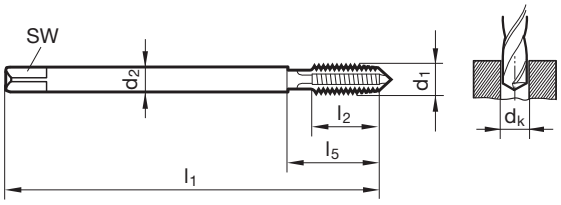
Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	HSS-E
Tolerance on Ø	ISO2/6H	6HX
Surface	S	S
Type	N	N
Form	B	B
Internal cooling		

NEW

P	≤ 1000
M	•
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **1291** **4219**

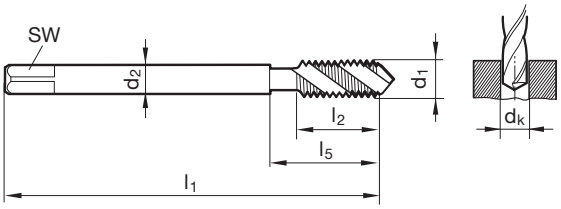
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	●	(S)
Type	VA R15	VA R15
Form	C	C
Internal cooling	✗	✗

P	
M	•
K	
N	
S	
H	

Cutting data page 230







DIN 2184-1 DIN 374 — Article no. **1874** **2897**

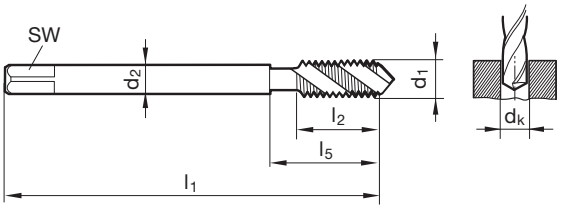
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M20 x 2	16.000	12.000	18.00	140.000	20.000	60.000	20.008
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	C	C
Type	N R15	N R15
Form	C	E
Internal cooling		

P	≤ 1000
M	○
K	○
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **4156** **4157**

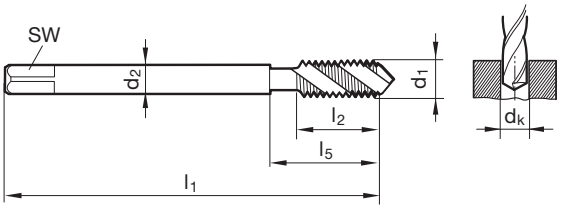
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007

Machine taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	
Type	VA R40
Form	C
Internal cooling	

P	
M	•
K	
N	
S	
H	

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DIN 2184-1 DIN 374 Article no. **2864**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	4.000	18.000	3.002
M 4 X0.5	2.800	2.100	3.50	63.000	5.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	5.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	5.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.5	6.000	4.900	7.50	80.000	8.000	30.000	8.003
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	16.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

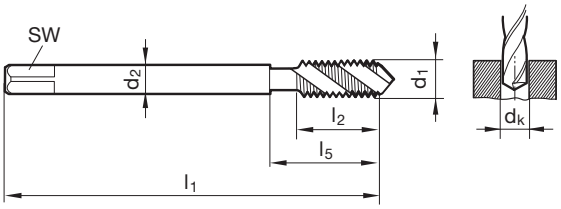
Machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 374 Article no. **394**

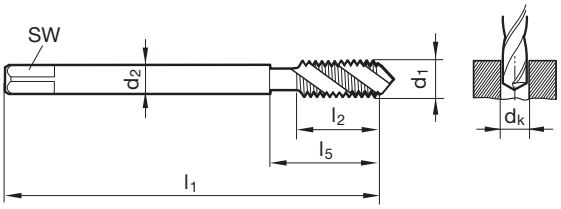
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.20	80.000	8.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	8.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	16.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	16.000	48.000	24.007

Machine taps for ISO metric fine threads

P	
M	•
K	
N	•
S	
H	

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Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	○	Ⓢ
Type	VA R40	VA R40
Form	C	C
Internal cooling	✕	✕







DIN 2184-1 DIN 374 — Article no. **936** **1004**

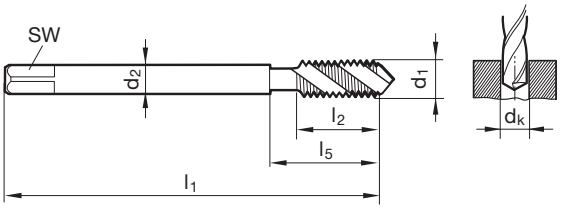
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		

P	•
M	•
K	○
N	○
S	○
H	

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DIN 2184-1 DIN 374 — Article no. **1100** **1294**

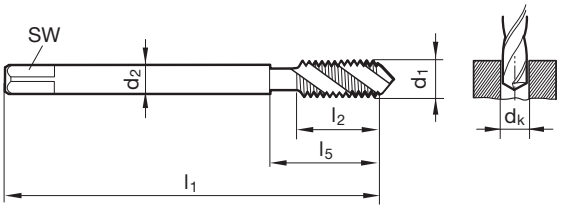
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

P	•	
M	•	
K	○	
N	•	
S	○	
H		

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Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	C
Type	VA R50	VA R50
Form	C	C
Internal cooling		







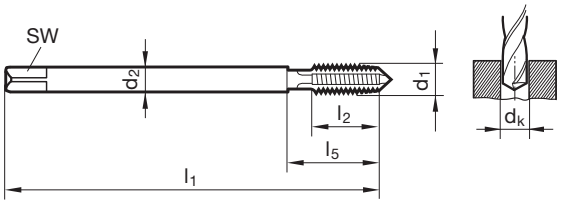
DIN 2184-1 DIN 374 — Article no. **764** **1144**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	5.000	44.000	8.005
M8 x 1	6.000	4.900	7.00	90.000	5.000	47.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	47.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	44.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	5.000	53.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	7.500	53.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	7.500	48.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	7.500	48.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	7.500	58.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	7.500	70.000	20.007

Machine taps for ISO metric fine threads

P	≤ 1000	Cutting data page 229
M	•	
K		
N	•	
S		
H		

Tool material	HSS-E-PM	HSS-E
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	◯	◯
Type	N	N
Form	B	B
Internal cooling	⊠	⊠







DIN 2184-1 DIN 374 Article no. **887** **1873**

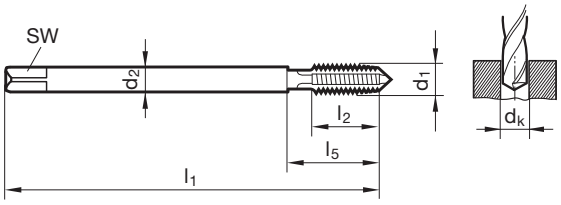
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	13.000	30.000	7.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008

Machine taps for ISO metric fine threads

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	
Type	N	N
Form	B	B
Internal cooling		

P	≤ 1000
M	•
K	
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **1001** **2871**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	2.200		2.65	56.000	7.000	18.000	3.002
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007

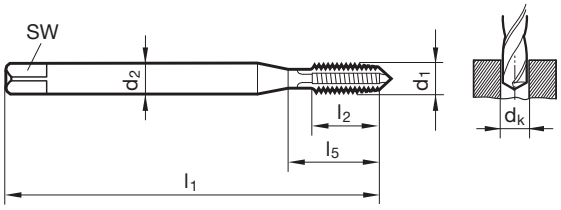
Machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N	VA
Form	B	B
Internal cooling	⊠	⊠

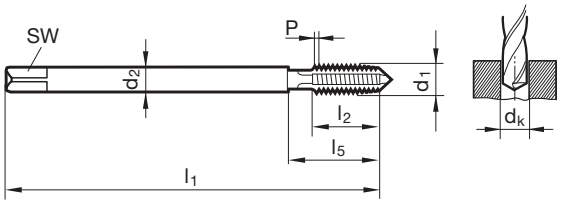
P	≤ 1000
M	•
K	
N	•
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **1980** **2872**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **1985** **2873**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400

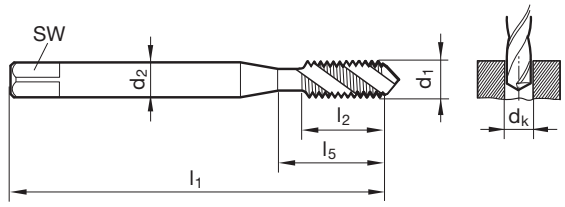
Machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	VA R40	VA R40
Form	C	C
Internal cooling	✕	✕

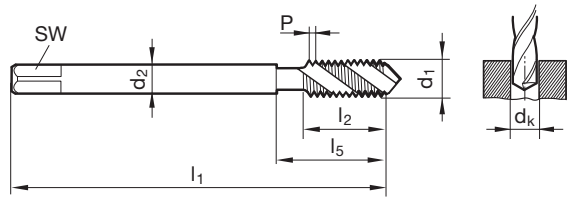
P	
M	•
K	
N	•
S	
H	

Cutting data page 231

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **1981** **2865**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

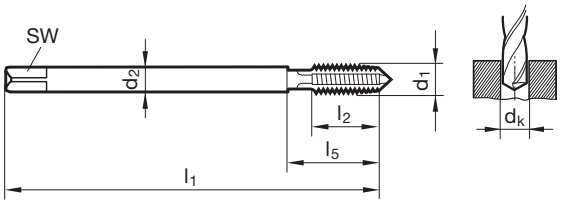
DIN 2184-1 ~DIN 376 — Article no. **1986** **2866**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225

Machine taps for UNF-threads

P	≤ 1000	Cutting data page 229
M	•	
K		
N	•	
S		
H		

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	N	VA
Form	B	B
Internal cooling	✕	✕







DIN 2184-1 ~DIN 374 — Article no. **1990** **2874**

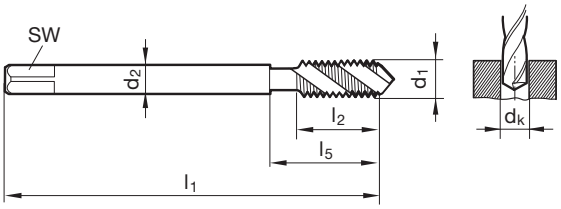
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	2.200		2.40	56.000	10.000	18.000	2.845
6 - 40	2.500	2.100	2.95	56.000	11.000	20.000	3.505
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400

Machine taps for UNF-threads

P		
M	•	
K		
N		
S		
H		

Cutting data page 230

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface		S
Type	VA R15	VA R15
Form	C	C
Internal cooling		







DIN 2184-1 ~DIN 374	Article no.	1991	2898

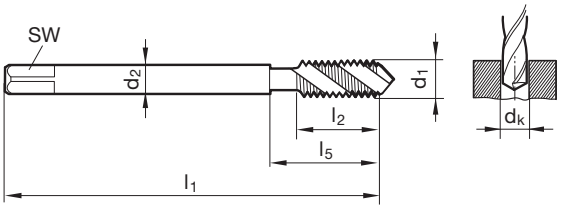
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
5 - 44	2.500	2.100	2.70	56.000	6.000	18.000	3.175
6 - 40	2.500	2.100	2.95	56.000	6.500	20.000	3.505
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for UNF-threads

Tool material	HSS-E	
Tolerance on Ø	2B	2B
Surface	○	●
Type	VA R40	VA R40
Form	C	C
Internal cooling	✕	✕

P	
M	•
K	
N	•
S	
H	

Cutting data page 231





DIN 2184-1 ~DIN 374 — Article no. **2867** **2868**

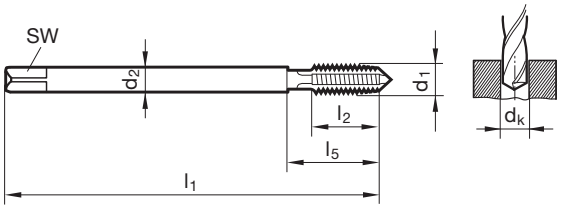
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	8.500	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	13.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	15.000	44.000	15.875
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for BSP-threads

Tool material	HSS-E	
Tolerance on Ø		
Surface	○	●
Type	N	VA
Form	B	B
Internal cooling	✕	✕

P	≤ 1000
M	•
K	
N	•
S	
H	

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DIN 2184-1 DIN 5156 — Article no. **967** **2875**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249

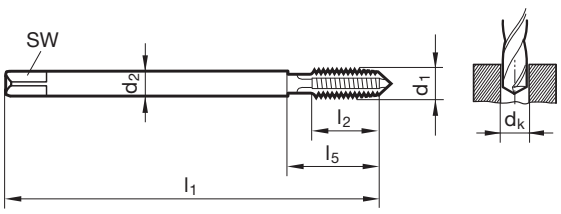
Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	B
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 229





DIN 2184-1 DIN 5156 Article no. **4220**

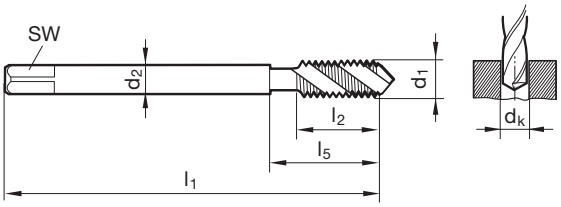
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	30.000	56.000	33.249

Machine taps for BSP-threads

P	
M	•
K	
N	•
S	
H	

Cutting data page 231

Tool material	HSS-E-PM	HSS-E
Tolerance on Ø		
Surface	○	●
Type	VA R40	VA R40
Form	C	C
Internal cooling	⊠	⊠







DIN 2184-1 DIN 5156 — Article no. **939** **968**

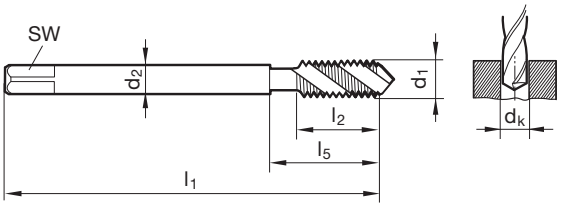
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249
G1 1/8	11.000	28.000	22.000	35.50	170.000	24.000	56.000	37.897
G1 1/4	11.000	32.000	24.000	39.50	170.000	25.000	57.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	180.000	27.000	60.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	190.000	27.000	60.000	47.803

Machine taps for BSP-threads

Tool material	HSS-E-PM
Tolerance on Ø	
Surface	S
Type	VA R50
Form	C
Internal cooling	

P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 231





DIN 2184-1 DIN 5156 Article no. **4159**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	4.500	47.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	4.500	47.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	6.700	48.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	6.700	48.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	9.100	70.000	20.955

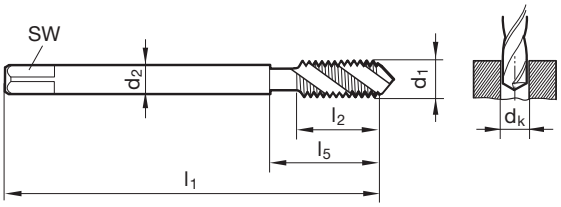
Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	X
Surface	A
Type	VA R45
Form	C
Internal cooling	

NEW

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 231





DIN 2184-1 DIN 5156 Article no. **395**

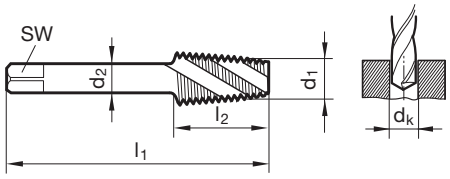
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955
G5/8	14.000	18.000	14.500	21.00	125.000	18.000	48.000	22.911
G3/4	14.000	20.000	16.000	24.50	140.000	20.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	22.000	53.000	30.201
G1	11.000	25.000	20.000	30.75	160.000	24.000	56.000	33.249

Machine taps for NPT-threads

Tool material	HSS-E	
Tolerance on Ø		
Surface	●	S
Type	N	N
Form	C	C
Internal cooling		

P	
M	•
K	○
N	○
S	
H	

Cutting data page 230







Company std.	Company std.	Article no.	1087	1088

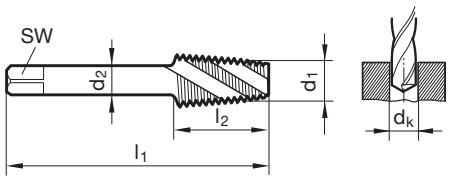
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27.000	8.000	6.200	6.25	90.000	14.000	27.000	8.190
1/8	27.000	11.000	9.000	8.50	90.000	15.000	29.000	10.620
1/4	18.000	14.000	11.000	11.20	100.000	21.000	40.000	14.140
3/8	18.000	16.000	12.000	14.40	110.000	21.000	35.000	17.570
1/2	14.000	18.000	14.500	18.00	125.000	27.000	44.000	21.900
3/4	14.000	22.000	18.000	23.40	140.000	27.000	52.000	27.230
1	11.500	25.000	20.000	29.10	170.000	32.000	53.000	34.180

Machine taps for NPTF-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	S
Type	N
Form	C
Internal cooling	

P	
M	•
K	○
N	○
S	
H	

Cutting data page 230





Company std. Company std. Article no. **4127**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
1/16	27.000	8.000	6.200	6.25	90.000	14.000	27.000	8.190
1/8	27.000	11.000	9.000	8.50	90.000	15.000	29.000	10.620
1/4	18.000	14.000	11.000	11.20	100.000	21.000	40.000	14.140
3/8	18.000	16.000	12.000	14.40	110.000	21.000	35.000	17.570
1/2	14.000	18.000	14.500	18.00	125.000	27.000	44.000	21.900
3/4	14.000	22.000	18.000	23.40	140.000	27.000	52.000	27.230
1	11.500	25.000	20.000	29.10	170.000	32.000	53.000	34.180



FLUTELESS TAPS

M

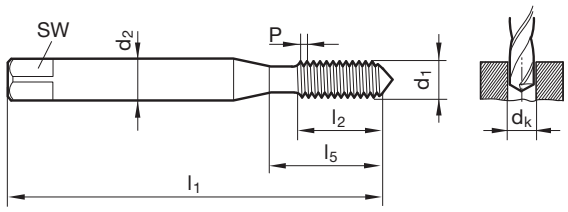
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM	HSS-E	HSS-E-PM
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	S
Type	N	N	N
Form	C	C	C
Internal cooling			

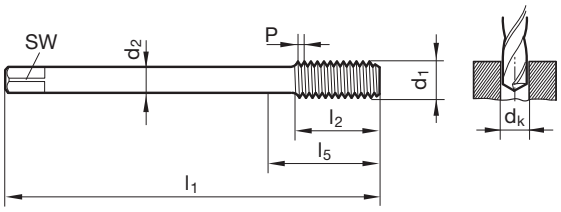
P	•
M	•
K	
N	○
S	
H	

Cutting data page 232

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **903** **921** **1255**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **952** **925** **1256**

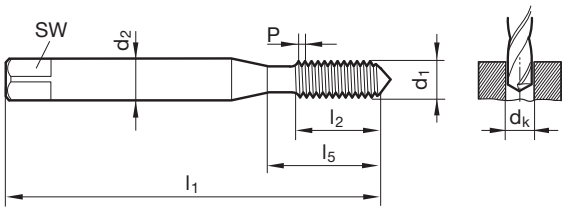
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Fluteless machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 371 Article no. **920**

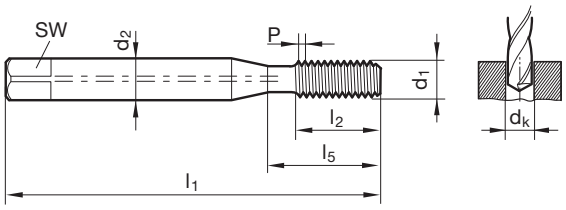
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 232





DIN 2174 ~DIN 371/~DIN 376 Article no. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

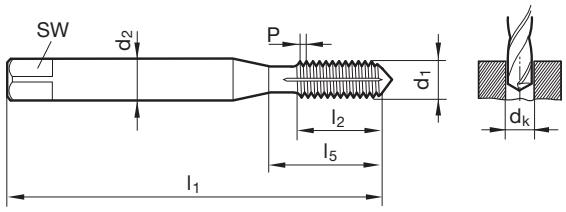
Fluteless machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

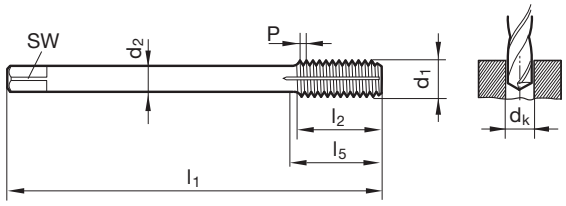
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **918** **919** **2012**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **922** **923** **2013**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000

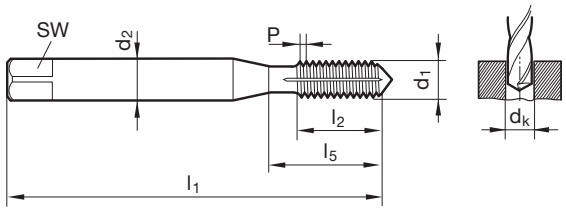
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

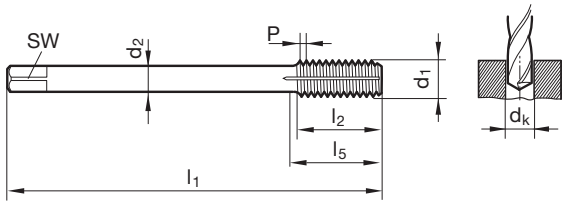
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

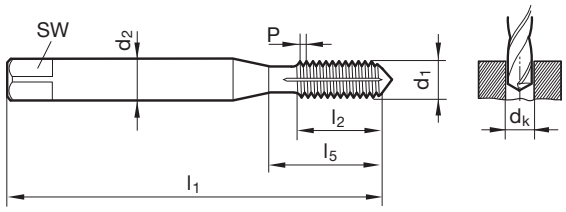
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

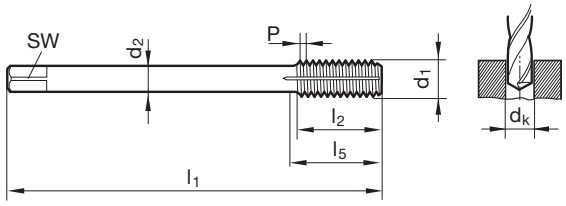
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 Article no. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

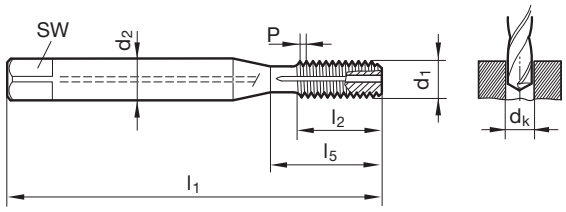
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	6HX	6GX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

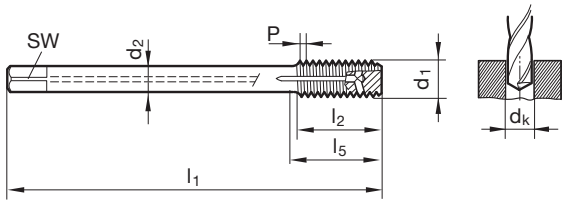
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 — Article no. **2444** **2445** **2448**

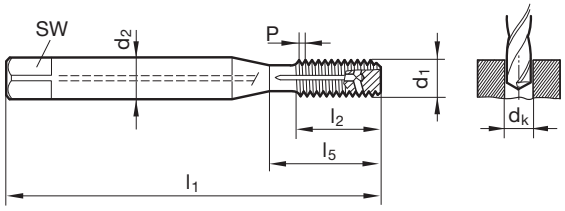
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 233





DIN 2174 ~DIN 371 Article no. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

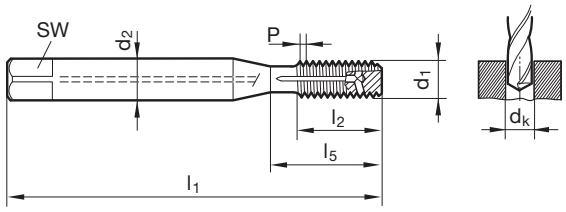
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

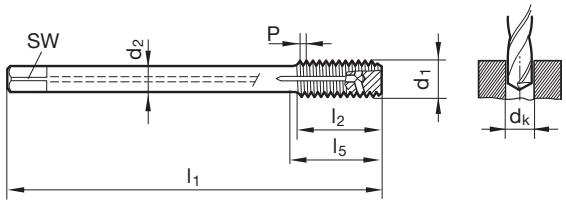
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

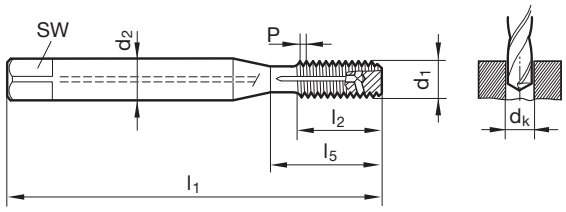
Oil feed fluteless taps f. ISO metric threads

P	•	
M	•	
K		
N	≥ 7	
S	•	
H		

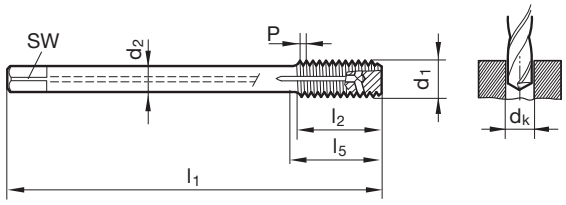
Cutting data page 233

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371	Article no.	1270	1717	1725

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376	Article no.	1271	1719	1727

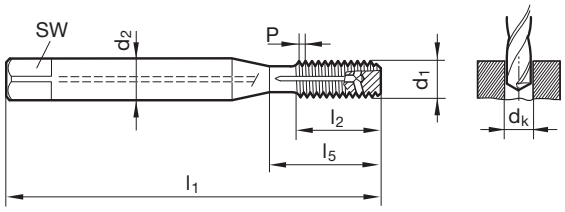
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 233





DIN 2174 ~DIN 371 Article no. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

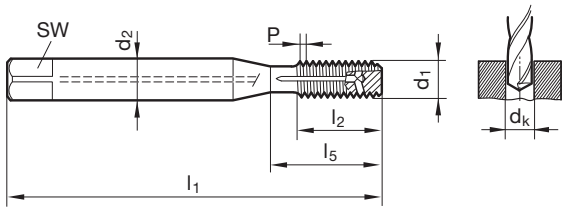
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	A	S
Type	N	N
Form	C	E
Internal cooling		

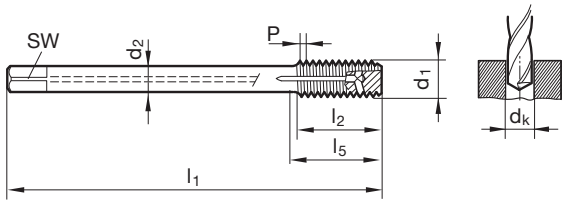
P	•
M	•
K	
N	
S	•
H	

Cutting data page 233

~ DIN 371



~ DIN 376







DIN 2174 ~DIN 371 — Article no. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1720** **1728**

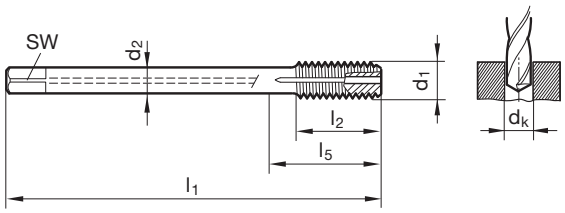
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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Company std. Company std. Article no. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

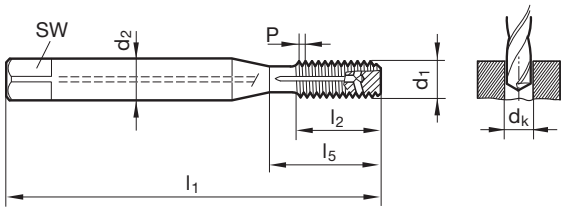
Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

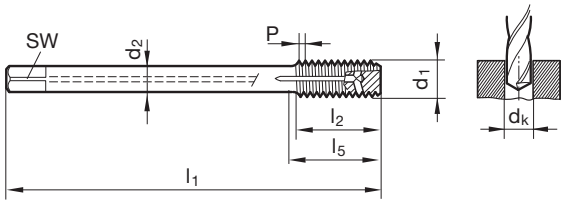
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 233

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **1931**

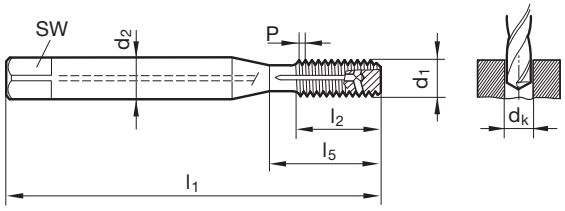
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 233





DIN 2174 ~DIN 371 Article no. **1927**

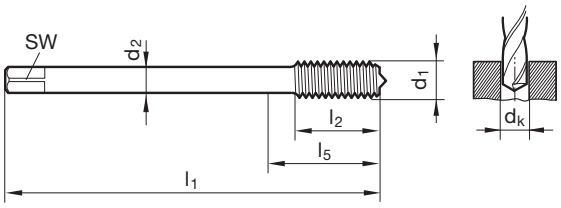
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Fluteless machine taps for ISO metric fine threads

P	•
M	•
K	
N	○
S	
H	

Cutting data page 232

Tool material	**HSS-E**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	





DIN 2174 ~DIN 374 Article no. **929**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

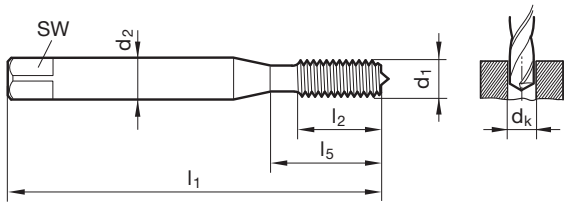
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

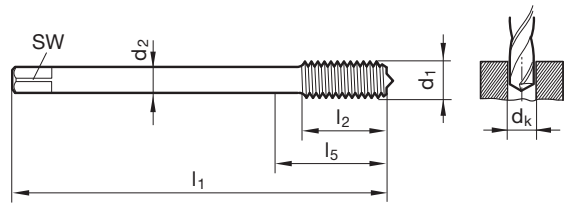
P	•
M	•
K	
N	○
S	
H	

Cutting data page 232

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1257**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1258**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

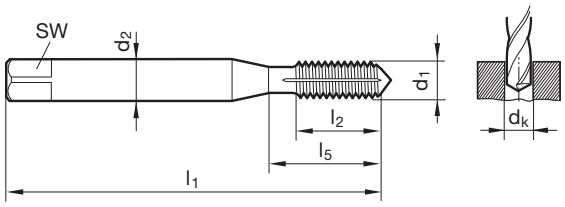
Fluteless machine taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

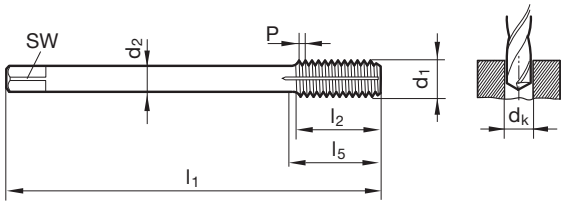
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1275**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 Article no. **927**

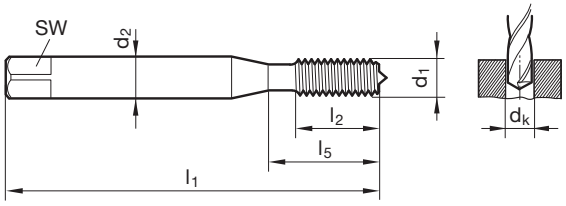
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 232





DIN 2174 ~DIN 371 Article no. **1740**

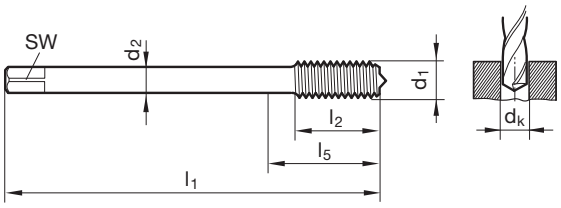
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 232





DIN 2174 ~DIN 374 Article no. **928**

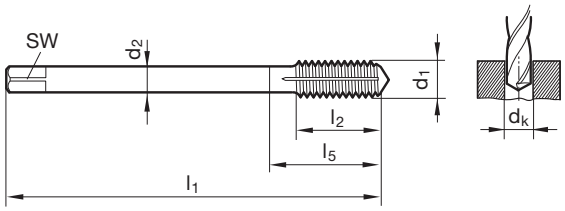
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007

Fluteless machine taps for ISO metric fine threads

Tool material	**HSS-E**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

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DIN 2174 ~DIN 374 Article no. **2008**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

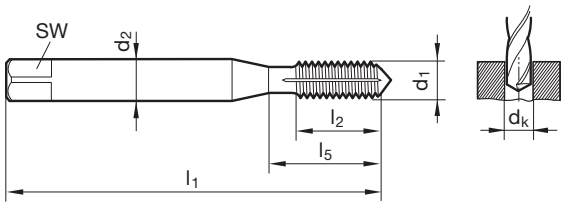
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

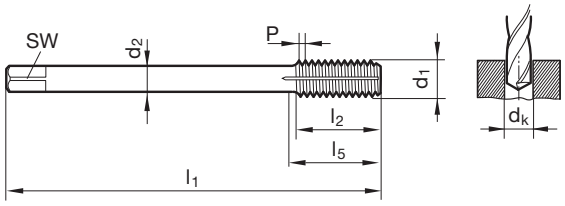
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1277**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **926**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

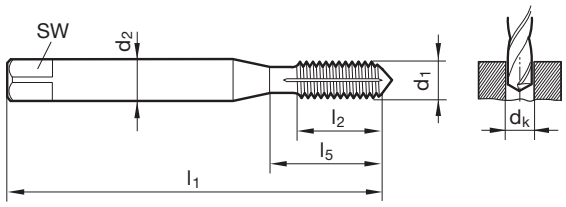
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

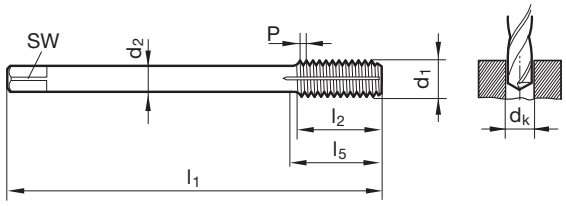
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1268**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1269**

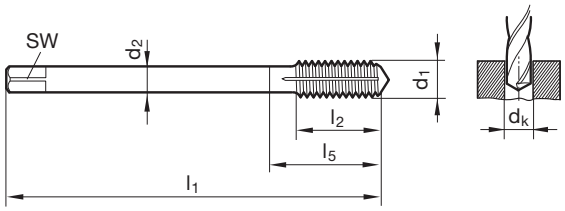
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233





DIN 2174 ~DIN 374 Article no. **333**

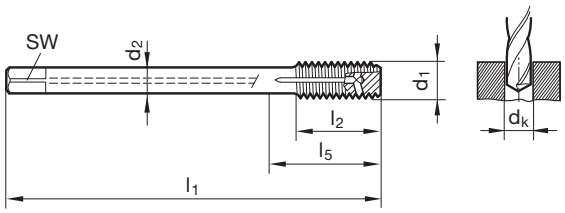
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233





DIN 2174 ~DIN 374 Article no. **338**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

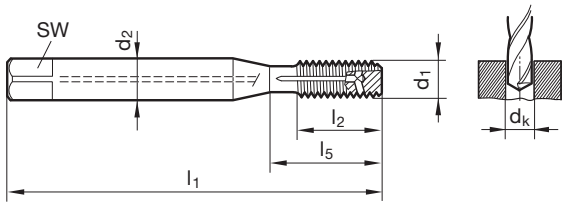
Oil feed fluteless taps f. ISO metric fine threads

P	•
M	•
K	
N	≥ 7
S	•
H	

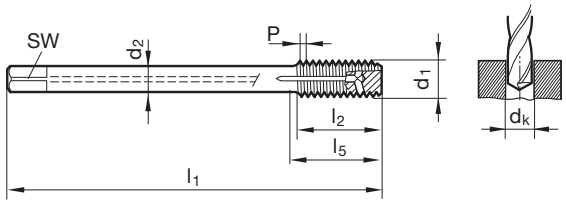
Cutting data page 233

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 — Article no. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1273** **1723** **1731**

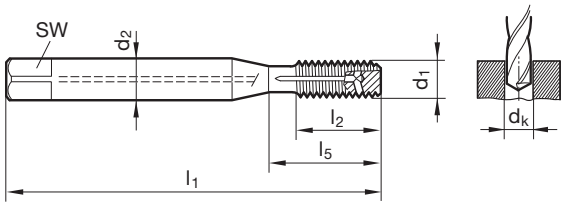
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

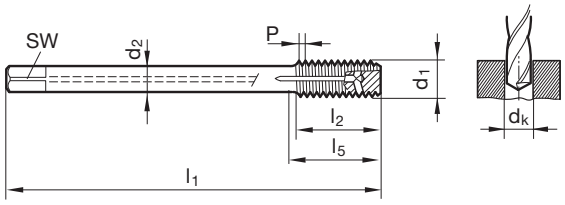
P	•	Cutting data page 233
M	•	
K		
N	≥ 7	
S	•	
H		

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1716** **1732**

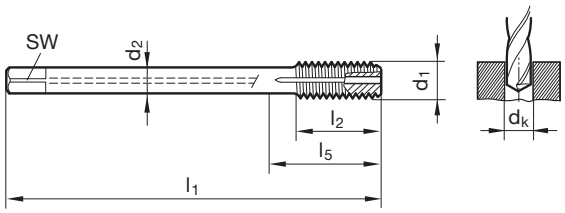
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 233





Company std. Company std. Article no. **4145**

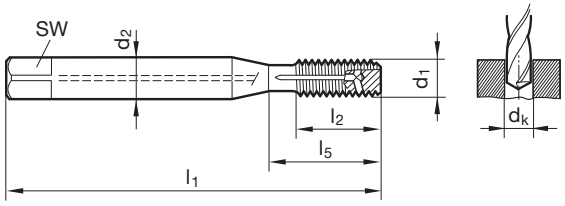
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 233





DIN 2174 ~DIN 371/~DIN 376 Article no. **1581**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

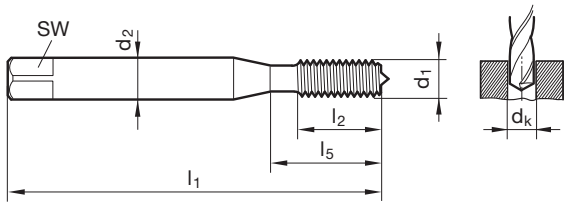
Fluteless machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

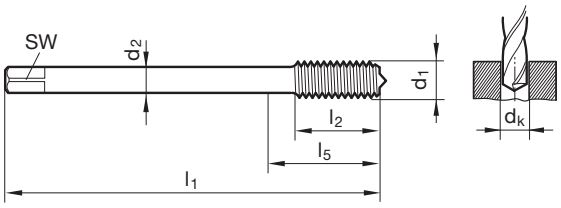
P	•
M	•
K	
N	○
S	
H	

Cutting data page 232/233

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225

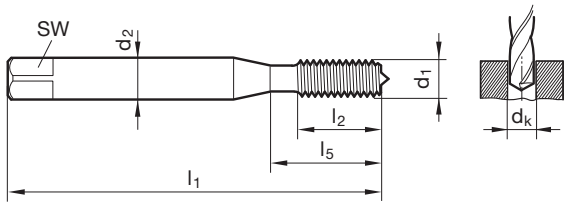
Fluteless machine taps for UNF-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

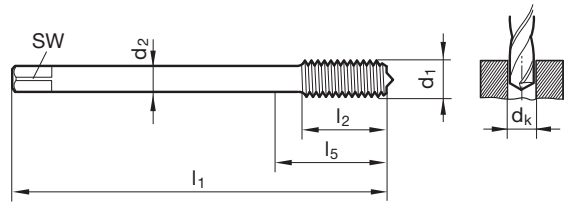
P	•
M	•
K	
N	○
S	
H	

Cutting data page 232/233

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374 — Article no. **2275** **1585**

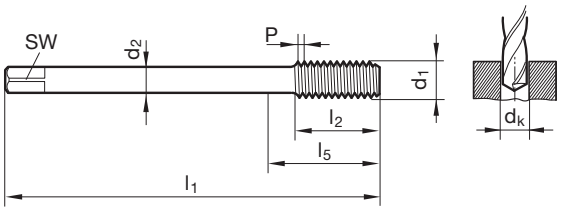
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.45	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	5.10	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.95	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	7.45	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	9.05	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	10.55	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	12.10	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	13.65	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	15.25	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	18.35	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	21.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	24.45	140.000	28.000	50.000	25.400

Fluteless machine taps for BSP-threads

Tool material	HSS-E	
Tolerance on Ø	X	X
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

P	•
M	•
K	
N	○
S	
H	

Cutting data page 232/233





DIN 2184-1 DIN 2189 — Article no. **966** **1586**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910



THREAD MILLING CUTTERS

M

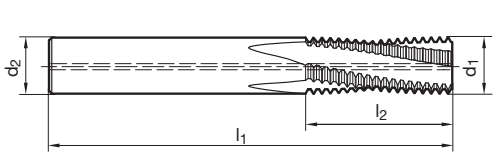
Thread milling cutters without chamfer for ISO metric threads

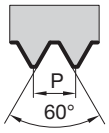
2xD

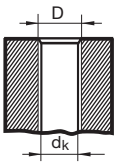
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 234

Tool material	Solid carbide			
Surface	C	C	C	C
Type	TM SP	TM SP	TM SP	TM SP
Internal cooling				
Shank form	HA	HB	HA	HB
		NEW		NEW









Company std.	Article no.	3737	3743	4132	4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007

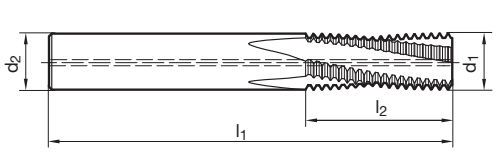
Thread milling cutters without chamfer for ISO metric threads

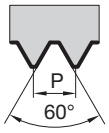
2,5xD

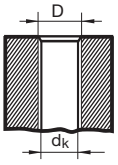
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3735	3740

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

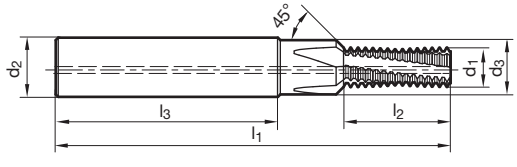
Thread milling cutters with chamfer for ISO metric threads

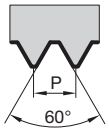
1,5xD

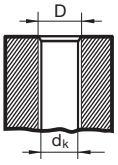
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3525** **3543**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

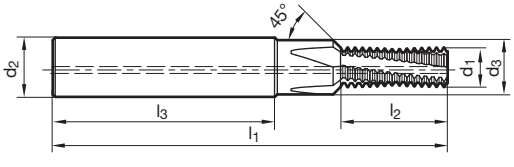
Thread milling cutters with chamfer for ISO metric threads

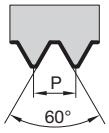
2xD

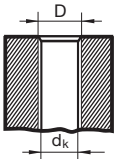
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3526** **3544**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

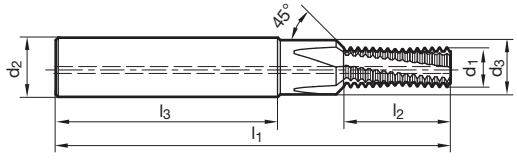
Thread milling cutters with chamfer for ISO metric threads

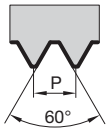
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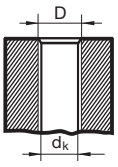
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3759	3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

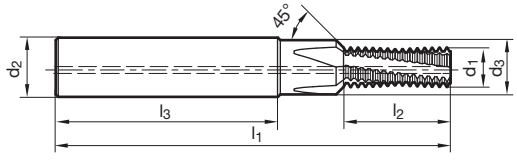
Thread milling cutters with chamfer for ISO metric fine threads

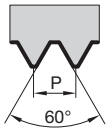
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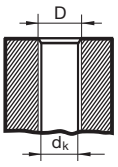
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3527** **3545**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

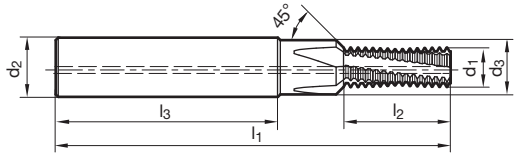
Thread milling cutters with chamfer for ISO metric fine threads

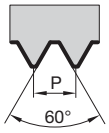
2xD

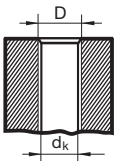
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3528** **3546**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

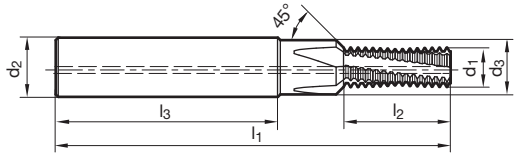
Thread milling cutters with chamfer for ISO metric fine threads

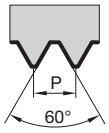
2,5xD

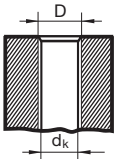
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

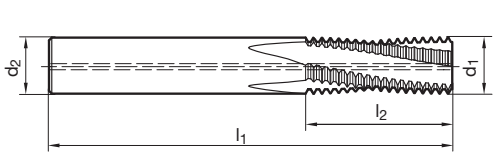
Thread milling cutters without chamfer for UNC-threads

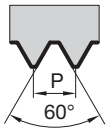
2xD

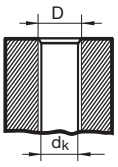
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4134** **4135**

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

Thread milling cutters with chamfer for UNC-threads

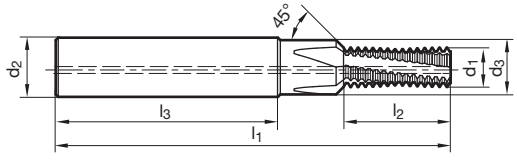
1,5xD

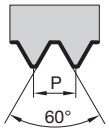
P	•
M	•
K	•
N	•
S	•
H	≤55

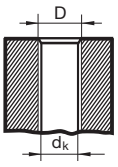
Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW











Company std. Article no. **3516** **3534**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

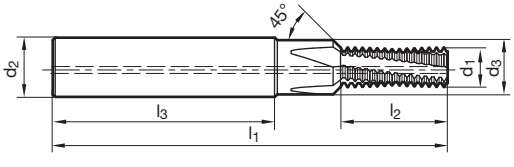
Thread milling cutters with chamfer for UNC-threads

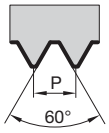
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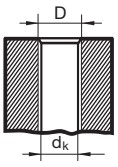
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

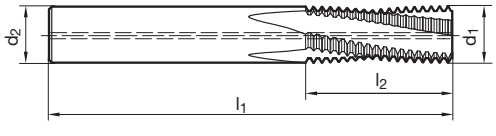
Thread milling cutters without chamfer for UNF-threads

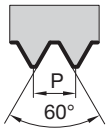
2xD

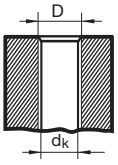
P	•
M	○
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4136** **4137**

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

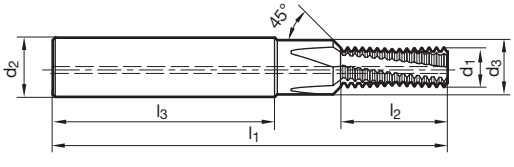
Thread milling cutters with chamfer for UNF-threads

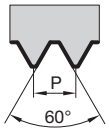
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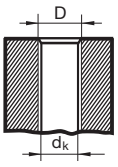
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3518** **3536**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

Thread milling cutters with chamfer for UNF-threads

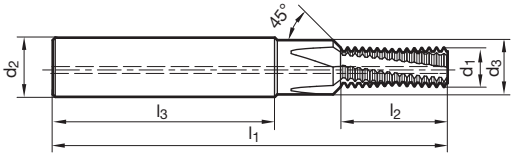
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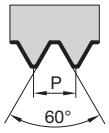
P	•
M	•
K	•
N	•
S	•
H	≤55

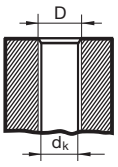
Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW











Company std. Article no. **3519** **3537**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

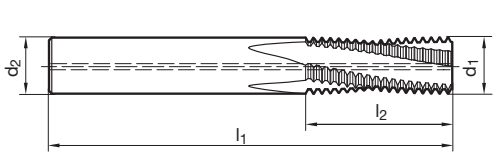
Thread milling cutters without chamfer for BSP-threads

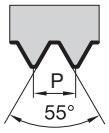
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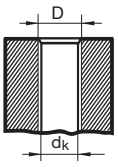
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

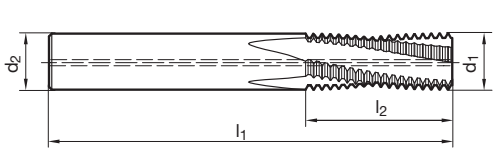
Thread milling cutters without chamfer for BSP-threads

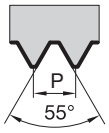
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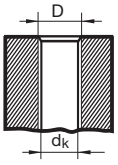
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3746** **3750**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

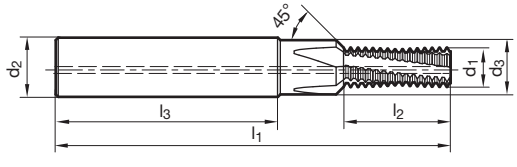
Thread milling cutters with chamfer for BSP-threads

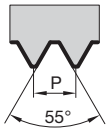
1,5xD

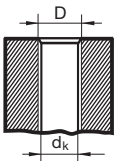
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3514** **3529**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

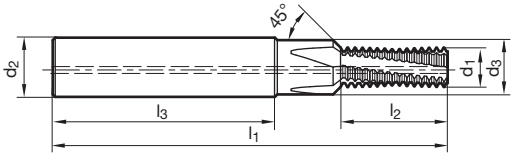
Thread milling cutters with chamfer for BSP-threads

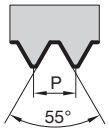
2xD

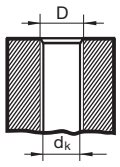
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

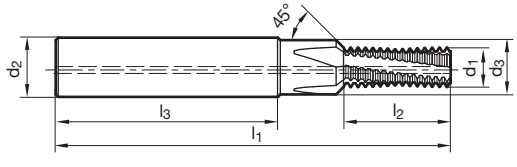
Thread milling cutters with chamfer for BSP-threads

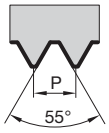
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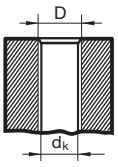
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3765	3766

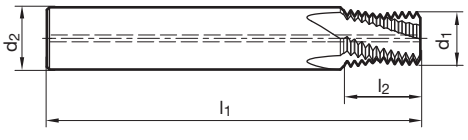
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

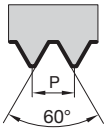
Thread milling cutters without chamfer for NPT-threads

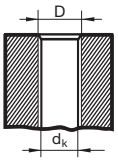
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3753	3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

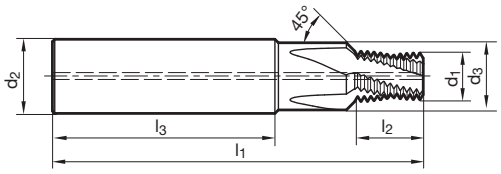
Thread milling cutters with chamfer for NPT-threads

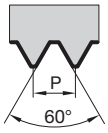
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

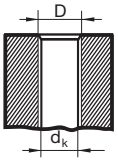
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234











Company std.	Article no.	3520	3538

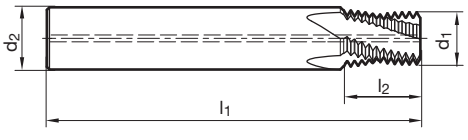
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

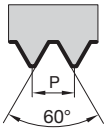
Thread milling cutters without chamfer for NPTF-threads

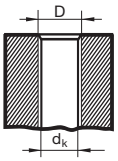
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3756	3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

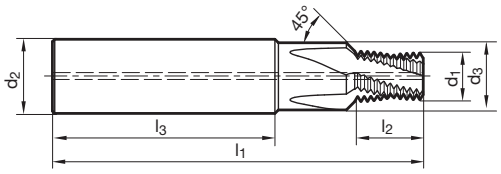
Thread milling cutters with chamfer for NPTF-threads

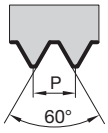
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

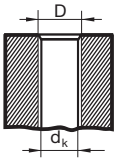
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 234











Company std.	Article no.	3521	3539

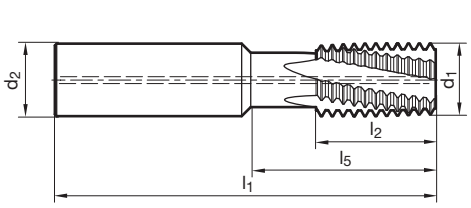
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

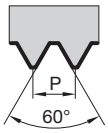
Universal thread milling cutters for ISO metric threads

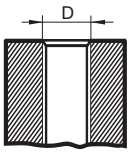
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235











Company std. Article no. **3541** **3556**

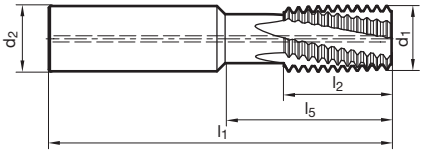
P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

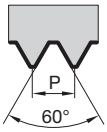
External thread milling cutters

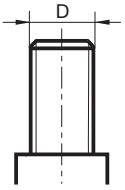
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

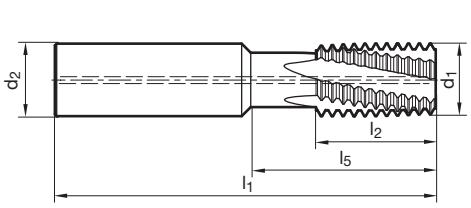
Universal thread milling cutters for UN-threads

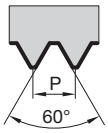
Tool material	Solid carbide	
Surface	C	C
Type	TMU UN	TMU UN
Internal cooling		
Shank form	HA	HB

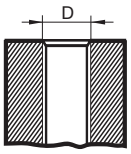
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235











Company std. Article no. **3595** **3596**

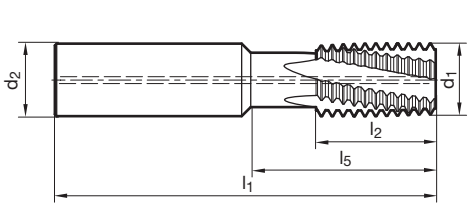
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

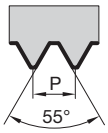
Universal thread milling cutters for BSP-threads

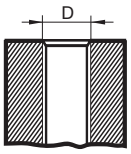
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235











Company std. Article no. **3542** **3557**

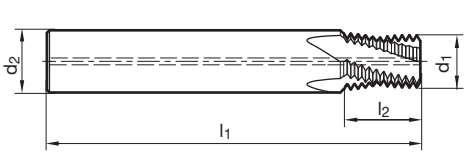
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

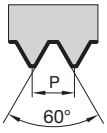
Universal thread milling cutters for NPT-threads

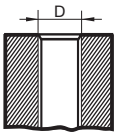
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235











Company std.	Article no.	3768	3769

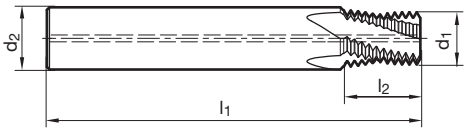
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

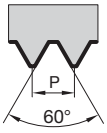
Universal thread milling cutters for NPTF-threads

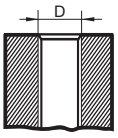
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 235

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3772	3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Micro-thread milling cutters

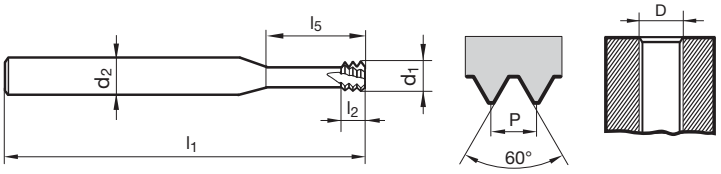
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 234

Tool material	**Solid carbide**
Surface	C
Type	SP M
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4226**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Micro-thread milling cutters

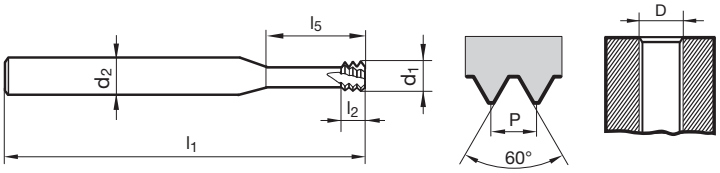
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 235

Tool material	**Solid carbide**
Surface	C
Type	SP G
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4228**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Micro-thread milling cutters

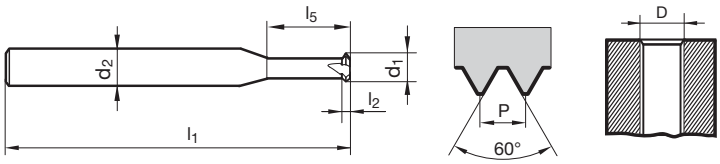
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 235

Tool material	**Solid carbide**
Surface	C
Type	SP M/MF
Threads	1,0
Shank form	HA

NEW

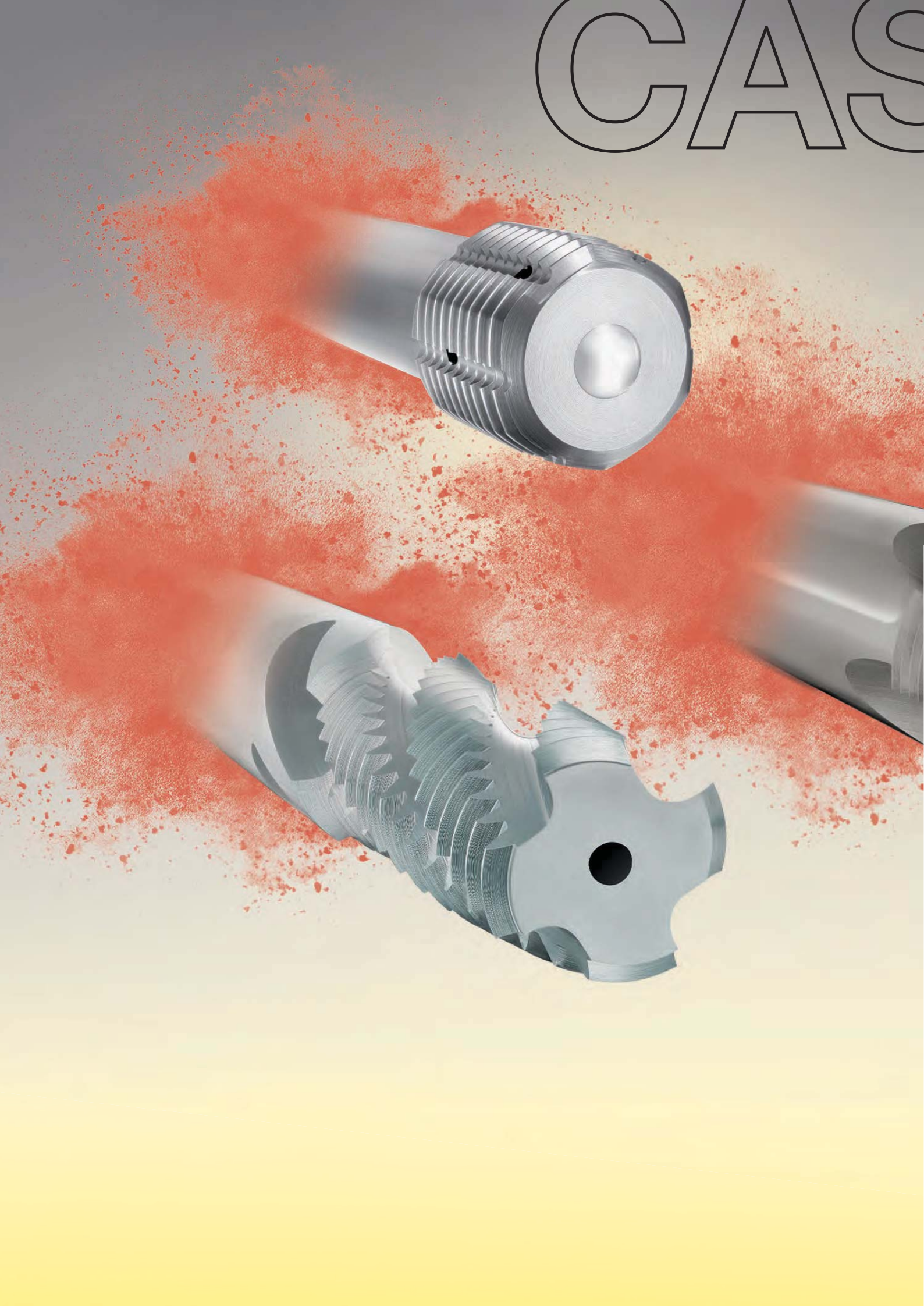




Company std. Article no. **4225**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

CAS



ST IRON

GREY CAST IRON/ SPHEROIDAL GRAPHITE IRON/ MALLEABLE CAST IRON



K

Cast iron such as grey cast iron (EN-GJL-250), spheroidal graphite iron, malleable cast iron and abrasive special cast alloys

CAST IRON

M

ISO 2/6H

No 1
M3 - M30
Art.-No. 1918/1919
from page 356

M3 - M30
Art.-No. 807/819
from page 356

ISO 3/6G

MF

ISO 2/6H

No 1
M4x0,5 - M30x1,5
Art.-No. 169
from page 365

M4x0,5 - M30x1,5
Art.-No. 831
from page 365

ISO 3/6G

without internal cooling

with internal cooling

No 1
M3 - M10
Art.-No. 2311
from page 364

M3 - M20
Art.-No. 1858/1859
from page 362

No 1
M5x0,5 - M20x1,5
Art.-No. 1861/1860
from page 368

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



THROUGH HOLE

Grey cast iron, spheroidal and malleable cast iron



HSS-E, TiAlN, form C

No 1
No. 2 - 3/4
Art.-No. 1979/1984
from page 370

No 1
No. 4 - 1
Art.-No. 1989
from page 372

No 1
G1/16 - G2
Art.-No. 961
from page 374



HSS-E, nitrided, form C

SOLID CARBIDE



Solid carbide, TiAlN, form C

SOLID CARBIDE



Solid carbide, bright, form C

CAST IRON

without internal cooling

M		MF	
ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
No 1 M3 - M30 Art.-No. 1918/1919 from page 356		No 1 M4x0,5 - M30x1,5 Art.-No. 169 from page 365	
M3 - M30 Art.-No. 807/819 from page 356		M4x0,5 - M30x1,5 Art.-No. 831 from page 365	

with internal cooling

No 1 M5 - M20 Art.-No. 318/319 from page 358		No 1 M8x1 - M24x1,5 Art.-No. 347 from page 366	
No 1 M5 - M10 Art.-No. 2506 from page 363			
M3 - M20 Art.-No. 969/1883 from page 362		No 1 M5x0,5 - M20x1,5 Art.-No. 972/974 from page 368	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



BLIND HOLE

Grey cast iron, spheroidal and malleable cast iron



HSS-E, TiAlN, form C

No 1
No. 2 - 3/4
Art.-No. 1979/1984
from page 370

No 1
No. 4 - 1
Art.-No. 1989
from page 372

G1/16 - G2
Art.-No. 961
from page 374



HSS-E, nitrided, form C

No 1
No. 10 - 7/8
Art.-No. 1085/1086
from page 371

No 1
No. 10 - 7/8
Art.-No. 1082
from page 373



HSS-E, TiAlN, form C

SOLID CARBIDE



Solid carbide, TiAlN, form C

SOLID CARBIDE



Solid carbide, bright, form C

CAST IRON

without lubrication

M		MF	
6HX	6GX	6HX	6GX
No 1 M1 - M20 Art.-No. 921/925 from page 376	No 1 M2 - M10 Art.-No. 920 from page 377	No 1 M8x1 - M20x1,5 Art.-No. 929 from page 391	No 1 M8x1 - M18x1,5 Art.-No. 928 from page 393

with lubrication

M3 - M39 Art.-No. 919/923 from page 379	No 1 M3 - M39 Art.-No. 918/922 from page 379	M6x0,75 - M24x1,5 Art.-No. 1275/927 from page 395	No 1 M8x1 - M20x1,5 Art.-No. 1277/926 from page 397
No 1 M3 - M39 Art.-No. 2012/2013 from page 379		No 1 M6x0,75 - M20x1,5 Art.-No. 2008 from page 396	

with internal cooling

No 1 M3 - M20 Art.-No. 1270/1271 from page 385	No 1 M5 - M10 Art.-No. 1713 from page 386	No 1 M8x1 - M24x1,5 Art.-No. 1272/1273 from page 401	No 1 M8x1 - M24x1,5 Art.-No. 1715/1716 from page 402
No 1 M3 - M20 Art.-No. 1725/1727 from page385	No 1 M3 - M20 Art.-No. 1726/1728 from page 387	No 1 M8x1 - M24x1,5 Art.-No. 1729/1731 from page 401	No 1 M8x1 - M24x1,5 Art.-No. 1730/1732 from page 402
No 1 M3 - M20 Art.-No. 1972/1931 from page 389		No 1 M10x1 - M24x1,5 Art.-No. 1581 from page 404	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



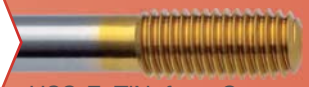
THROUGH HOLE
BLIND HOLE

Grey cast iron, spheroidal and malleable cast iron

No 1
Nr. 4 - 7/8
Art.-No. 2273/2274
from page 405

No 1
Nr. 4 - 1
Art.-No. 1283/2275
from page 406

No 1
G1/16 - G1 1/4
Art.-No. 966
from page 407

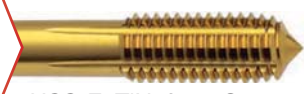


HSS-E, TiN, form C

No 1
Nr. 4 - 7/8
Art.-No. 1582/1583
from page 405

No 1
Nr. 4 - 1
Art.-No. 1584/1585
from page 406

No 1
G1/16 - G3/4
Art.-No. 1586
from page 408



HSS-E, TiN, form C



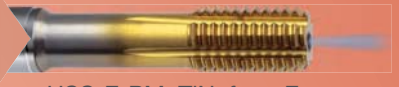
HSS-E, TiCN, form C

FORM C



HSS-E-PM, TiCN, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C

CAST IRON

	M UNIVERSAL	MF UNIVERSAL
1.5xD	No 1 M3 - M20 Art.-No. 3525 from page 413	No 1 M4x0,5 - M16x1,5 Art.-No. 3527 from page 416
2xD	No 1 M3 - M20 Art.-No. 3526 from page 414	No 1 M4x0,5 - M16x1,5 Art.-No. 3528 from page 417
2.5xD	No 1 M3 - M20 Art.-No. 3759 from page 415	No 1 M4x0,5 - M16x1,5 Art.-No. 3762 from page 418
3xD	No 1 M1,6 - M16 Art.-No. 4226 from page 440	
universal	No 1 Ø8xP0,5 - Ø20xP3,5 Art.-No. 3541 from page 434	No 1 Ø8xP0,5 - Ø20xP3,5 Art.-No. 3541 from page 434

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



THROUGH HOLE
BLIND HOLE

Grey cast iron, spheroidal and malleable cast iron

No 1
1/4 - 1/2
Art.-No. 3516
from page 420

No 1
1/4 - 1/2
Art.-No. 3518
from page 423

No 1
1/8 - 3/8
Art.-No. 3514
from page 429



Solid carbide, TiCN

No 1
1/4 - 1/2
Art.-No. 3517
from page 421

No 1
1/4 - 1/2
Art.-No. 3519
from page 424

No 1
1/8 - 3/8
Art.-No. 3515
from page 430



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

No 1
Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 436

No 1
Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 436

No 1
Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 437



Solid carbide, TiCN

CAST IRON

	M	MF
	UNIVERSAL	UNIVERSAL
1.5xD	No 1 M3 - M16 Art.-No. 3777 from page 443	No 1 M4x0,5 - M16x1,5 Art.-No. 3789 from page 446
1.5xD	M3 - M16 Art.-No. 3776 from page 443	M4x0,5 - M16x1,5 Art.-No. 3788 from page 446
2xD	No 1 M3 - M16 Art.-No. 3781 from page 444	No 1 M4x0,5 - M16x1,5 Art.-No. 3793 from page 447
2xD	M3 - M16 Art.-No. 3780 from page 444	M4x0,5 - M16x1,5 Art.-No. 3792 from page 447
2.5xD	No 1 M3 - M16 Art.-No. 3785 from page 445	
2.5xD	M3 - M16 Art.-No. 3784 from page 445	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



THROUGH HOLE
BLIND HOLE

Grey cast iron, spheroidal and malleable cast iron



Solid carbide, TiCN



Solid carbide, TiCN

No 1
1/4 - 5/8
Art.-No. 4139
from page 448

No 1
1/4 - 5/8
Art.-No. 4141
from page 449



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN


K
COMPASS

GREY CAST IRON, SPHEROIDAL/MALL. CAST IRON



THROUGH HOLES

Thread depth		≤3xD					
Tool material		HSS-E				Solid carbide	
Type/form		GG/C	GG/C	GGT/C	GG/C	H/C	H/C
Surface		●	Ⓢ	Ⓢ	Ⓐ	○	Ⓐ
Coolant delivery		☒	☒	☒	☒	radial	radial
Shank tolerance		h9	h9	h9	h9	h6	h6
							
Thread type	**Tolerance**	**Article no. / page**					
M	4H						
	6H			1875/1876 357			
	6HX	807/819 356	930/931 356		1918/1919 356	1858/1859 362	2311 364
	6G						
MF	6H						
	6HX	831 365	932 365		169 365	1861/1860 368	
	6G						
UNC	2B	1979/1984 370					
	2BX						
UNF	2B	1989 372					
	2BX						
G		961 374					
BSW							
NPT							
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
Suitable lubricant		●/○/△	●/○/△	●/○/△	●/○/△	●/○/△	●/○/△

= No 1

○ = Air
● = Neat oil
● = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
K	Cast Iron	300 HB	EN-GJL-150	0.6015	**15**	**20**	**20**	**25**	**45**	**45**
			EN-GJL-250	0.6025						
			EN-GJL-300	0.6030						
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040	**10**	**15**	**15**	**20**	**35**	**35**
			EN-GJS-600-3	0.7060						
			EN-GJS-700-2	0.7070						
	ADI GGV	1000 N/mm²	EN-GJS1000-5		8	**12**	**12**	**15**	30	**30**
		350 HB	EN-GJV250							
			EN-GJV400							

K

GREY CAST IRON, SPHEROIDAL/MALL. CAST IRON



BLIND HOLES

		Thread depth	≤3xD					
		Tool material	HSS-E					
		Type/form	GG/C	GG/C	GGT/C	GG/C	GG/C	GGT/C
		Surface	●	S	S	A	●	A
		Coolant delivery	☒	☒	☒	☒	axial	axial
		Shank tolerance	h9	h9	h9	h9	h9	h9
								
Thread type	**Tolerance**	**Article no. / page**						
M	4H							
	6H			1875/1876 357				
	6HX	807/819 356	930/931 356		1918/1919 356	1890/1897 358	318/319 358	
	6G							
MF	6H							
	6HX	831 365	932 365		169 365	1904 366	347 366	
	6G							
UNC	2B	1979/1984 370					1085/1086 371	
	2BX							
UNF	2B	1989 372					1082 373	
	2BX							
G		961 374						
BSW								
NPT								
NPTF								
EG M	6H Mod.							
MJ	4HX							
MJF	4HX							
UNJC	3BX							
UNJF	3BX							
PG								
	Suitable lubricant	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	●/●/△	

= No 1

○ = Air
● = Neat oil
● = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min					
K	Cast Iron	300 HB	EN-GJL-150	0.6015	**15**	**20**	**20**	**25**	**15**	**25**
			EN-GJL-250	0.6025						
			EN-GJL-300	0.6030						
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040	**10**	**15**	**15**	**20**	**10**	**20**
			EN-GJS-600-3	0.7060						
			EN-GJS-700-2	0.7070						
	ADI GGV	1000 N/mm² 350 HB	EN-GJS1000-5		8	**12**	**12**	**15**	8	**15**
			EN-GJV250							
			EN-GJV400							

≤3xD

HSS-E-PM					VHM	
H/C	H/C	H/C	H/E	H/C	H/C	H/E
C	C	C	C	○	A	○
axial	axial	axial	axial	axial	axial	axial
h9	h9	h9	h9	h6	h6	h6
						
Article no. / page						
778 360	779 361	302/297 359	1091/4165 359	969/1883 362	2506 363	1008 364
		1090 367	1007 367	972/974 368		1009 369
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△/□	○/●/△

Recommended cutting speed vc m/min						
25	25	30	30	45	45	45
20	20	20	20	35	35	35
15	15	15	15	30	30	30

K

GREY CAST IRON, SPHEROIDAL/MALL. CAST IRON



THROUGH HOLES AND **BLIND** HOLES

		Thread depth	≤1,5xD			≤3xD	
		Tool material	HSS-E	HSS-E-PM	VHM	HSS-E	
		Type/form	N/C	N/C	N/C	N/C	N/C
		Surface	S	S	S	S	C
		Coolant delivery	☒	☒	axial	☒	☒
		Shank tolerance	h9	h9	h6	h9	h9
							
Thread type	**Tolerance**		**Article no. / page**				
M	4H						
	6H						
	6HX		921/925 376	1255/1256 376	2518 378	919/923 379	2012/2013 379
	6GX		920 377	903/952 376		918/922 379	
MF	6H						
	6HX		929 391	1257/1258 394		1275/927 395	2008 396
	6GX		928 393	1740 392		1277/926 397	
UNC	2B						
	2BX		2273/2274 405			1582/1583 405	
UNF	2B						
	2BX		1283/2275 406			1584/1585 406	
G			966 407			1586 408	
BSW							
NPT							
NPTF							
EG M	6H Mod.						
MJ	4HX						
MJF	4HX						
UNJC	3BX						
UNJF	3BX						
PG							
		Suitable lubricant	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min				
K	Cast Iron	300 HB	EN-GJL-150	0.6015	-	-	-	-	-
			EN-GJL-250	0.6025					
			EN-GJL-300	0.6030					
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040	-	-	-	-	-
			EN-GJS-600-3	0.7060	**15**	**15**	**40**	**15**	**20**
			EN-GJS-700-2	0.7070					
	ADI GGV	1000 N/mm²	EN-GJS1000-5		**15**	**15**	**40**	**15**	**20**
		350 HB	EN-GJV250		-	-	-	-	-
			EN-GJV400						

≤3xD

HSS-E		HSS-E-PM							VHM	
N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/C	N/E	N/C	N/E
S	C	S	S	S	S	C	A	S	C	C
axial	radial	☒	☒	radial	axial	radial	radial	axial	radial	radial
h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
										
Article no. / page										
2442/2444 382	2446/2448 382	322/339 380	1266/1267 381	323/342 384	4143 388	1270/1271 385	1717/1719 385	1725/1727 385	1972/1931 389	1927 390
2443/2445 382	2447 383					1713 386	1718/1720 387	1726/1728 387		
		333 399	1268/1269 398	338 400	4145 403	1272/1273 401	1721/1723 401	1729/1731 401	1581 404	
						1715/1716 402		1730/1732 402		
●/●/△	●/●/△/□	●/●/△	●/●/△	●/●/△/□	●/●/△	●/●/△/□	●/●/△/□	●/●/△	●/●/△/□	●/●/△/□

Recommended cutting speed vc m/min										
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
15	20	15	15	15	15	25	25	15	40	40
15	20	15	15	15	15	20	20	15	40	40
-	-	-	-	-	-	-	-	-	-	-

Grey cast iron, spheroidal and malleable cast iron

GREY CAST IRON, SPHEROIDAL/MALL. CAST IRON



THROUGH HOLES AND **BLIND** HOLES

Thread depth	≤2xD				≤2,5xD		≤1,5xD	
Tool material	Solid carbide							
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
Surface	C	C	C	C	C	C	C	C
Coolant delivery	☒	☒	axial	axial	axial	axial	axial	axial
Shank form	HA	HB	HA	HB	HA	HB	HA	HA
Spiral	27°	27°	27°	27°	27°	27°	10°	10°



Thread type	Article no. / page							
M	4132 411	4133 411	3737 410	3743 410	3735 412	3740 412	3525 413	3543 413
MF			3737 410	3743 410			3527 416	3545 416
UNC			4134 419	4135 419			3516 420	3534 420
UNF			4136 422	4137 422			3518 423	3536 423
G			3745 427	3748 427	3746 428	3750 428	3514 429	3529 429
BSW								
NPT			3753 425	3754 425			3520 426	3538 426
NPTF			3756 432	3757 432			3521 433	3539 433
EG M	EG-threads can be produced with every thread milling cutter type and dimension							
MJ								
MJF								
UNJC								
UNJF								
PG								
Suitable lubricant	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Hardness	Material example	Material no.	Application recommendations							
K	Cast Iron	300 HB	EN-GJL-150	0.6015	++	++	++	++	++	++	++	++
			EN-GJL-250	0.6025								
			EN-GJL-300	0.6030								
	Spheroidal graphite iron and malleable cast iron	350 HB	EN-GJS-400-15	0.7040	++	++	++	++	++	++	++	++
			EN-GJS-600-3	0.7060								
			EN-GJS-700-2	0.7070								
	ADI GGV	1000 N/mm² 350 HB	EN-GJS1000-5		++	++	++	++	++	++	++	++
			EN-GJV250									
			EN-GJV400									

≤2xD		≤2,5xD		universal				≤3xD		≤1,5xD		≤2xD		≤2,5xD	
Solid carbide															
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP
C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
axial	axial	axial	axial	axial	axial	axial	axial	☒	☒	☒	radial	☒	radial	☒	radial
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA	HA	HA	HA	HA	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°	27°	27°	27°	27°	27°	27°
															
Article no. / page															
3526 414	3544 414	3759 415	3760 415	3541 434	3556 434	4162 435	4163 435	4226 440	4225 442	3776 443	3777 443	3780 444	3781 444	3784 445	3785 445
3528 417	3546 417	3762 418	3763 418	3541 434	3556 434	4162 435	4163 435		4225 442	3788 446	3789 446	3792 447	3793 447		
3517 421	3535 421			3595 436	3596 436								4139 448		
3519 424	3537 424			3595 436	3596 436								4141 449		
3515 430	3533 430	3765 431	3766 431	3542 437	3557 437	3542 437	3557 437	4228 441							
				3768 438	3769 438										
				3772 439	3773 439										
EG-threads can be produced with every thread milling cutter type and dimension															
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Application recommendations															
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++

Grey cast iron, spheroidal and malleable cast iron

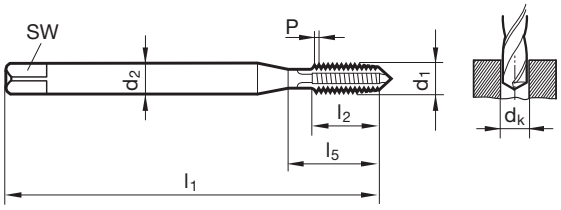
Machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	6HX	6HX	6HX
Surface	●	A	S
Type	GG	GG	GG
Form	C	C	C
Internal cooling			

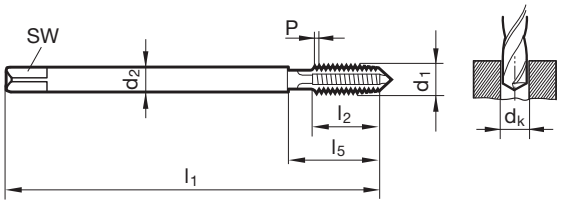
P
M
K •
N
S
H

Cutting data page 349/350

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **807** **1918** **930**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **819** **1919** **931**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

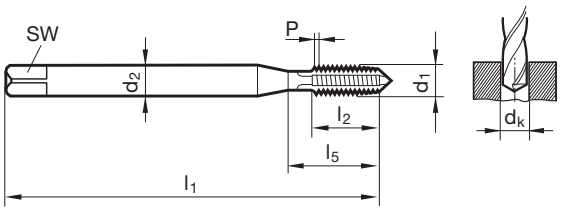
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	S
Type	GGT
Form	C
Internal cooling	

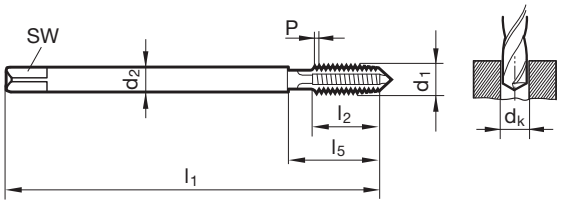
P	
M	
K	•
N	
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1875**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **1876**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

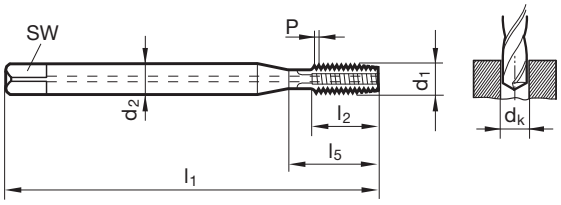
Oil feed taps for ISO metric threads

Tool material	HSS-E	
Tolerance on Ø	6HX	6HX
Surface	●	A
Type	GG	GG
Form	C	C
Internal cooling		

P	
M	
K	•
N	
S	
H	

Cutting data page 350

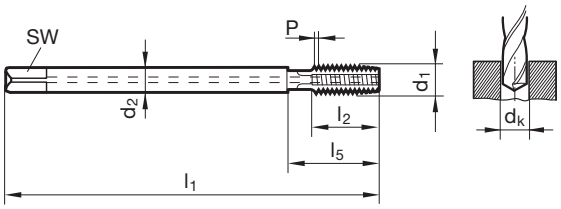
DIN 371







DIN 376



DIN 2184-1 DIN 371 — Article no. **1890** **318**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **1897** **319**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

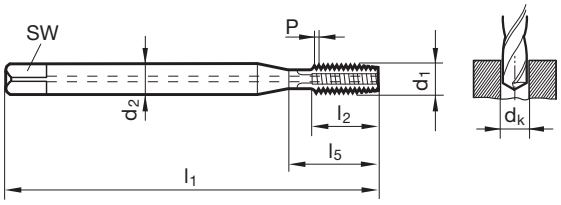
Oil feed taps for ISO metric threads

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

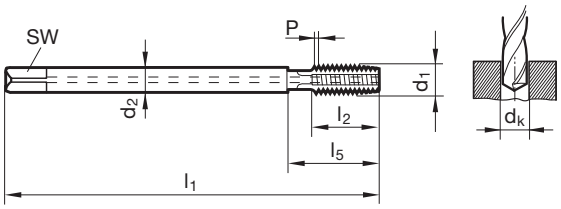
Cutting data page 351

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	C
Type	H	H
Form	C	E
Internal cooling		

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **302** **1091**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **297** **4165**

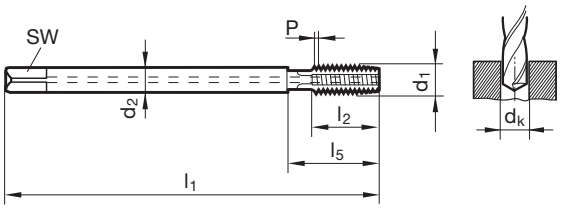
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

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DIN 2184-1 DIN 376 Article no. **778**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000

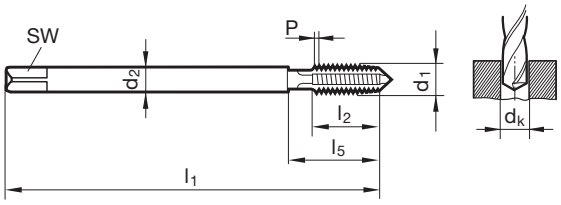
Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

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NEW





Company std. ~DIN 376 Article no. **779**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	160.000	26.000	100.000
M20	2.500	16.000	12.000	17.50	180.000	32.000	120.000
M24	3.000	18.000	14.500	21.00	200.000	36.000	120.000
M27	3.000	20.000	16.000	24.00	225.000	36.000	145.000
M30	3.500	22.000	18.000	26.50	250.000	40.000	160.000
M33	3.500	25.000	20.000	29.50	275.000	40.000	170.000
M36	4.000	28.000	22.000	32.00	300.000	50.000	180.000
M39	4.000	32.000	24.000	35.00	325.000	50.000	210.000

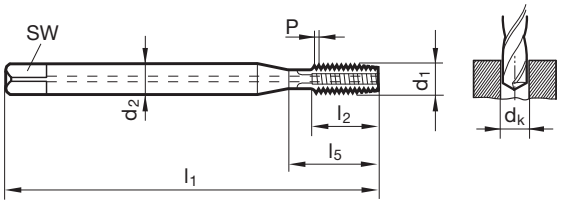
Oil feed taps for ISO metric threads

Tool material	Solid carbide	
Tolerance on Ø	6HX	6HX
Surface	◯	◯
Type	H	H
Form	C	C
Internal cooling		

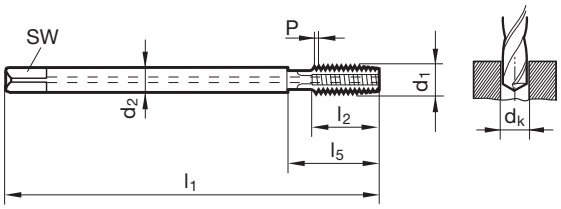
P	
M	
K	•
N	≥ 7
S	
H	

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DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **969** **1858**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

DIN 2184-1 DIN 376 — Article no. **1883** **1859**

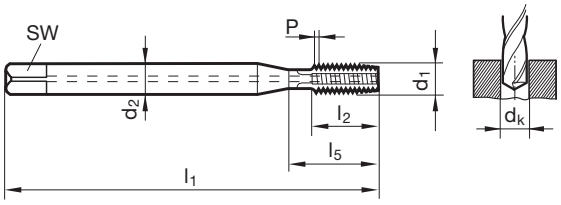
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	22.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	22.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	22.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	24.000	45.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	45.000

Oil feed taps for ISO metric threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	A
Type	H
Form	C
Internal cooling	

P	
M	
K	•
N	
S	
H	

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DIN 2184-1 DIN 371 Article no. **2506**

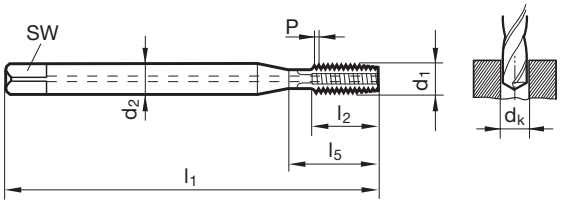
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

Oil feed taps for ISO metric threads

Tool material	Solid carbide		
Tolerance on Ø	6HX	6HX	6HX
Surface	A	○	A
Type	H	H	N R15
Form	C	E	C
Internal cooling			

P	
M	
K	•
N	
S	
H	

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DIN 2184-1 DIN 371	Article no.	2311	1008	2510

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

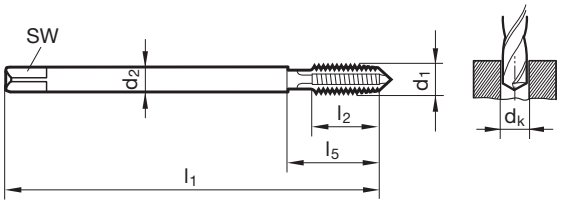
Machine taps for ISO metric fine threads



P	
M	
K	•
N	
S	
H	

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Tool material	HSS-E		
Tolerance on Ø	6HX	6HX	6HX
Surface	●	S	A
Type	GG	GG	GG
Form	C	C	C
Internal cooling			





DIN 2184-1 DIN 374	Article no.	831	932	169

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	2.800	2.100	3.50	63.000	8.000	21.000	4.003
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M30 X1.5	22.000	18.000	28.50	150.000	28.000	53.000	30.007

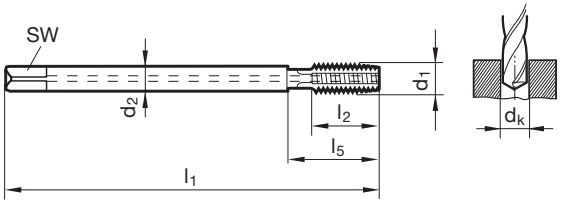
Oil feed taps for ISO metric fine threads



Tool material	HSS-E	
Tolerance on Ø	6HX	6HX
Surface	●	A
Type	GG	GG
Form	C	C
Internal cooling		

P	
M	
K	•
N	
S	
H	

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DIN 2184-1 DIN 374 — Article no. **1904** **347**

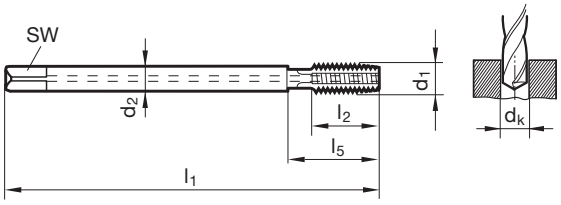
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	20.50	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007

Oil feed taps for ISO metric fine threads

P	≤ 1200	
M		
K	•	
N	≥ 7	
S		
H		

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Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	C
Type	H	H
Form	C	E
Internal cooling		







DIN 2184-1 DIN 374 — Article no. **1090** **1007**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

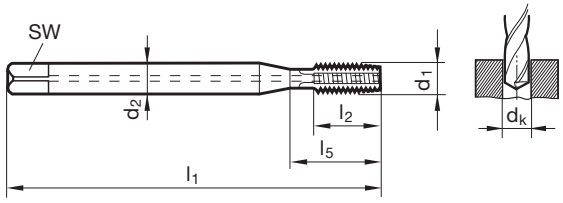
Oil feed taps for ISO metric fine threads

Tool material	Solid carbide	
Tolerance on Ø	6HX	6HX
Surface	◯	◯
Type	H	H
Form	C	C
Internal cooling		

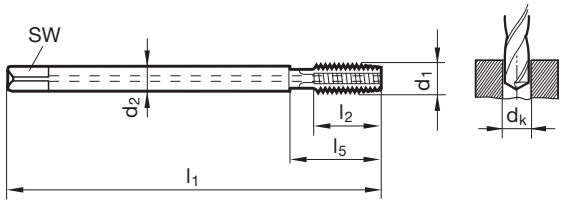
P	
M	
K	•
N	≥ 7
S	
H	

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DIN 371



DIN 374







DIN 2184-1 DIN 371 — Article no. **972** **1861**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374 — Article no. **974** **1860**

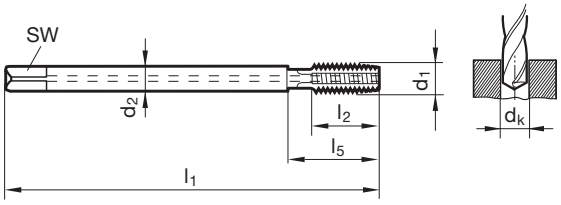
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	45.000	20.007

Oil feed taps for ISO metric fine threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	◯
Type	H
Form	E
Internal cooling	

P	
M	
K	•
N	≥ 7
S	
H	

Cutting data page 351





DIN 2184-1 ~DIN 371/~DIN 374 Article no. **1009**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	22.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

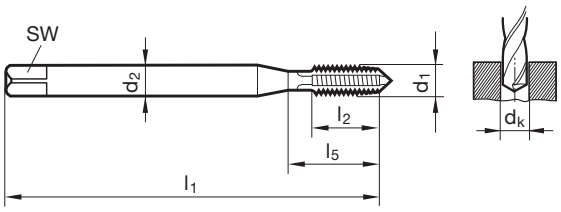
Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	●
Type	GG
Form	C
Internal cooling	

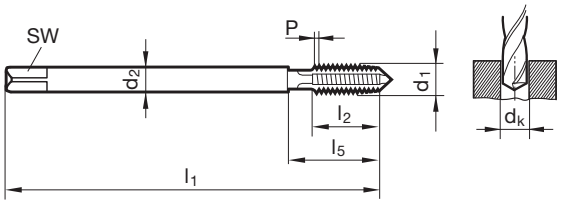
P	
M	
K	•
N	
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **1979**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	9.000	14.500	2.184
3 - 48	2.800	2.100	2.10	50.000	9.000	14.500	2.515
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **1984**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050

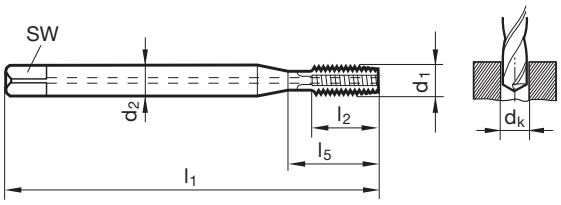
Oil feed taps for UNC threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	A
Type	GG
Form	C
Internal cooling	

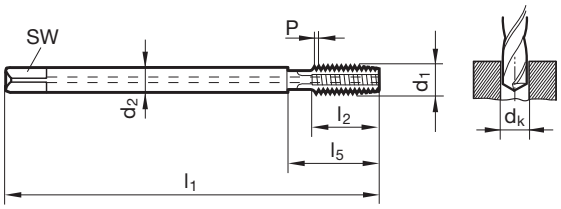
P	
M	
K	•
N	
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **1085**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **1086**

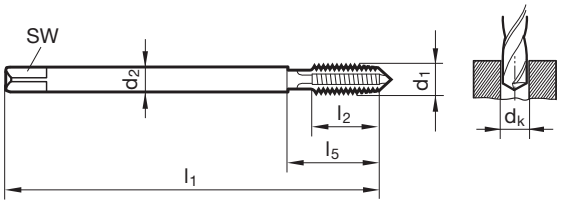
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225

Machine taps for UNF-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	●
Type	GG
Form	C
Internal cooling	

P	
M	
K	•
N	
S	
H	

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DIN 2184-1 ~DIN 374 Article no. **1989**

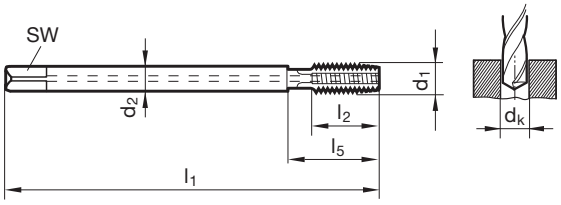
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	2.200		2.40	56.000	10.000	18.000	2.845
8 - 36	2.800	2.100	3.50	63.000	12.000	21.000	4.166
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	12.90	100.000	22.000	40.000	14.288
3/4 - 16	14.000	11.000	17.50	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	28.000	50.000	25.400

Oil feed taps for UNF threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	A
Type	GG
Form	C
Internal cooling	

P	
M	
K	•
N	
S	
H	

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DIN 2184-1 ~DIN 374 Article no. **1082**

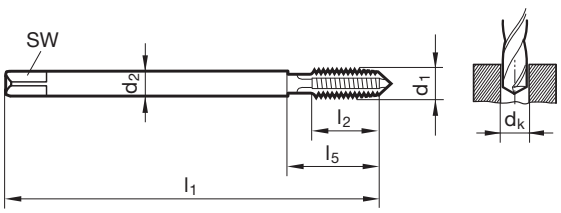
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	4.60	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	17.50	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	20.40	125.000	25.000	44.000	22.225

Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	●
Type	GG
Form	C
Internal cooling	

P	
M	
K	•
N	
S	
H	

Cutting data page 349/350





DIN 2184-1 DIN 5156 Article no. **961**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
G1/16	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G5/8	18.000	14.500	21.00	125.000	25.000	48.000	22.911
G3/4	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	22.000	18.000	28.25	150.000	28.000	53.000	30.201
G1	25.000	20.000	30.75	160.000	30.000	56.000	33.249
G1 1/8	28.000	22.000	35.50	170.000	30.000	56.000	37.897
G1 1/4	32.000	24.000	39.50	170.000	30.000	57.000	41.910
G1 3/8	36.000	29.000	41.75	180.000	32.000	60.000	44.323
G1 1/2	36.000	29.000	45.25	190.000	32.000	60.000	47.803
G1 3/4	40.000	32.000	51.00	190.000	40.000	93.000	53.746
G2	45.000	35.000	57.00	220.000	40.000	95.000	59.614



Grey cast iron, spheroidal and malleable cast iron

FLUTELESS TAPS

K

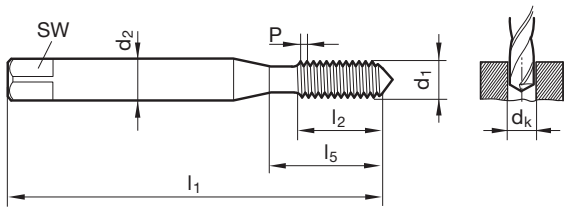
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM	HSS-E	HSS-E-PM
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	S
Type	N	N	N
Form	C	C	C
Internal cooling			

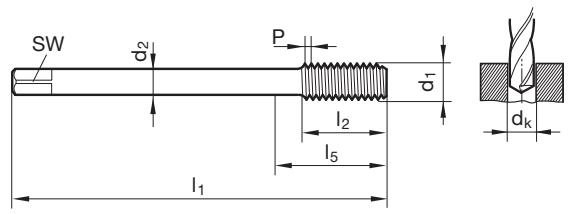
P	•
M	•
K	
N	○
S	
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **903** **921** **1255**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **952** **925** **1256**

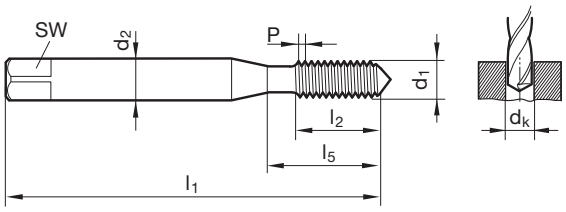
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Fluteless machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 371 Article no. **920**

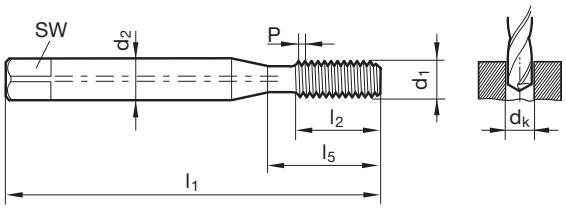
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 352





DIN 2174 ~DIN 371/~DIN 376 Article no. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

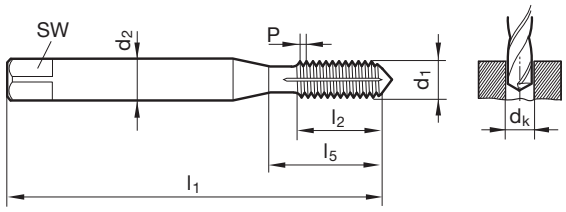
Fluteless machine taps for ISO metric threads

P	•
M	•
K	
N	○
S	○
H	

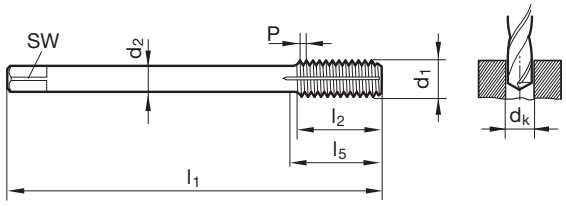
Cutting data page 352

Tool material	HSS-E		
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **918** **919** **2012**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **922** **923** **2013**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000

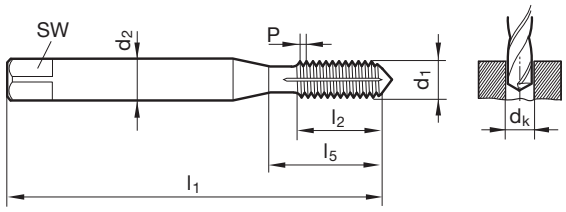
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

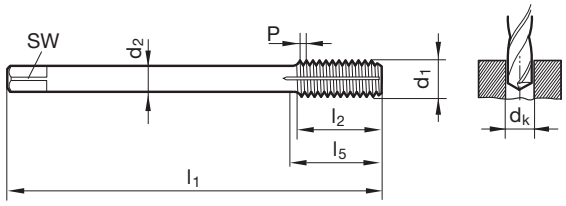
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

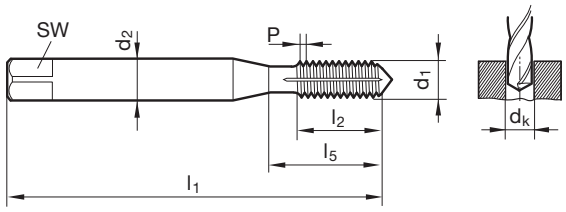
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

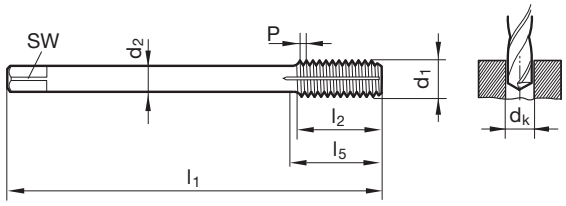
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 Article no. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

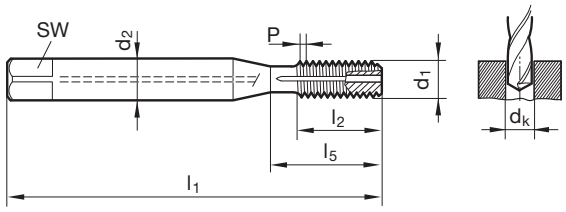
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	6HX	6GX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

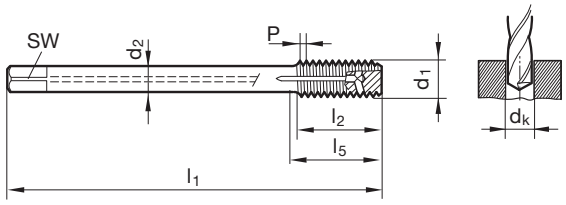
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 — Article no. **2444** **2445** **2448**

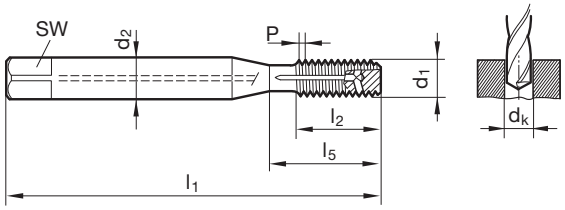
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 353





DIN 2174 ~DIN 371 Article no. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

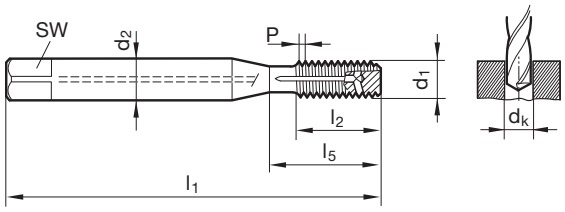
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

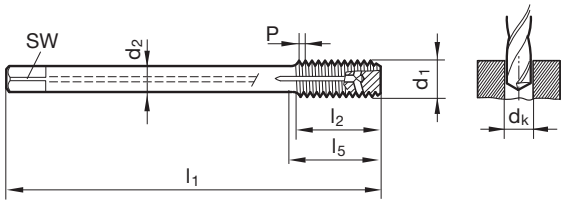
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **342**

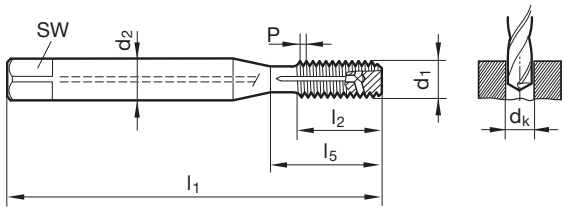
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads

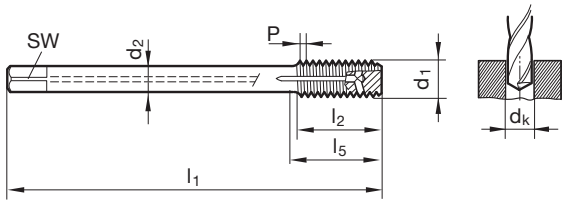
P	•	Cutting data page 353
M	•	
K		
N	≥ 7	
S	•	
H		

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **1270** **1717** **1725**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1271** **1719** **1727**

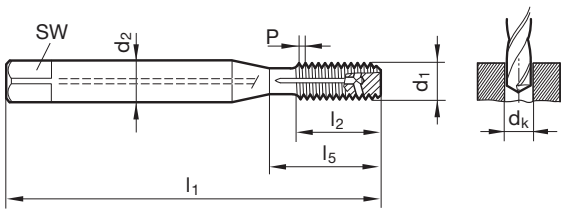
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

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DIN 2174 ~DIN 371 Article no. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

Oil feed fluteless taps f. ISO metric threads

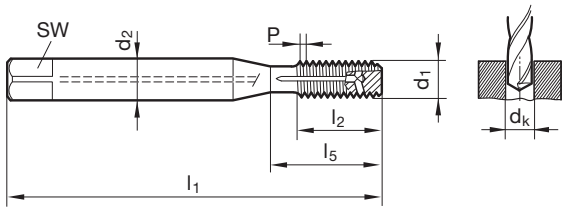


P	•
M	•
K	
N	
S	•
H	

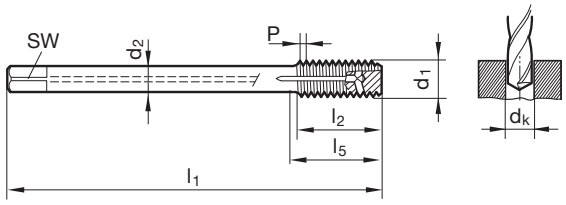
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Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	A	S
Type	N	N
Form	C	E
Internal cooling		

~ DIN 371



~ DIN 376







DIN 2174 ~DIN 371 — Article no. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1720** **1728**

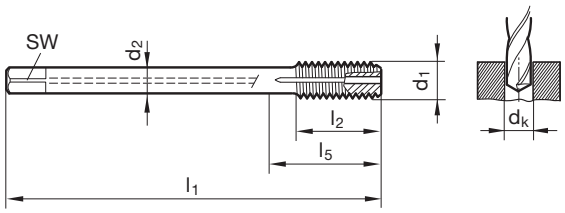
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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Company std. Company std. Article no. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

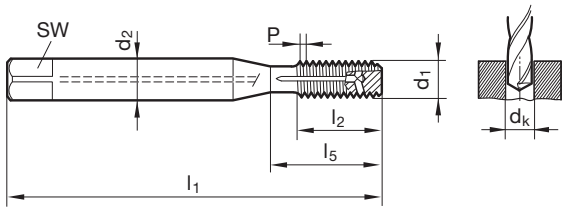
Oil feed fluteless taps f. ISO metric threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

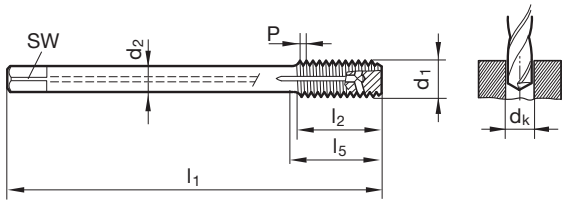
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **1931**

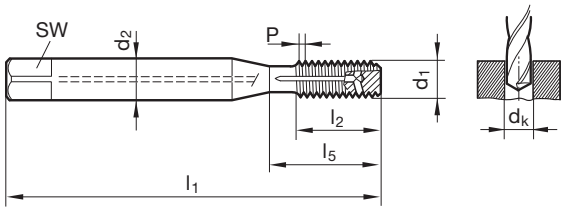
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353





DIN 2174 ~DIN 371 Article no. **1927**

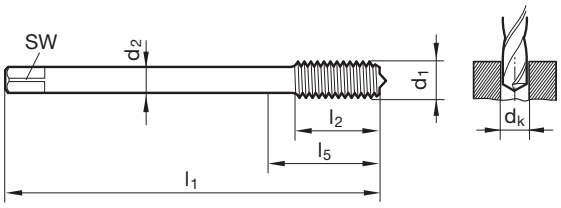
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Fluteless machine taps for ISO metric fine threads

P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

Tool material	**HSS-E**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	





DIN 2174 ~DIN 374 Article no. **929**

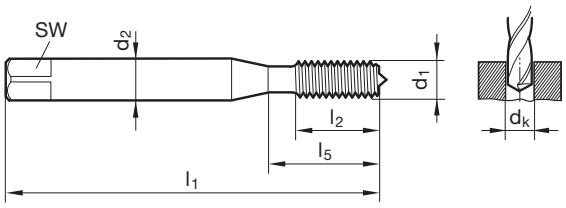
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 352





DIN 2174 ~DIN 371 Article no. **1740**

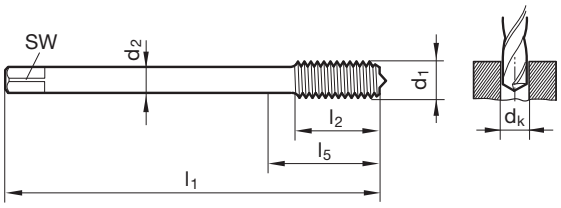
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

Fluteless machine taps for ISO metric fine threads

P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

Tool material	**HSS-E**
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	





DIN 2174 ~DIN 374 Article no. **928**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007

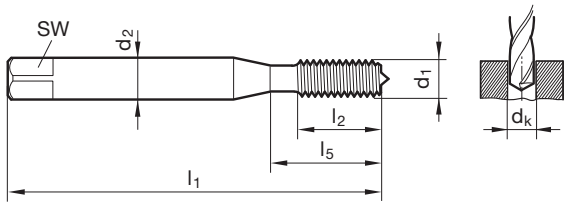
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

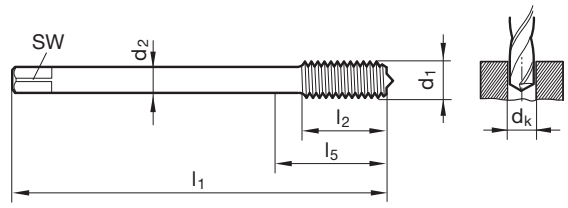
P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1257**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1258**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

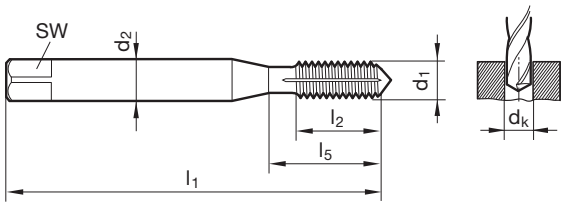
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

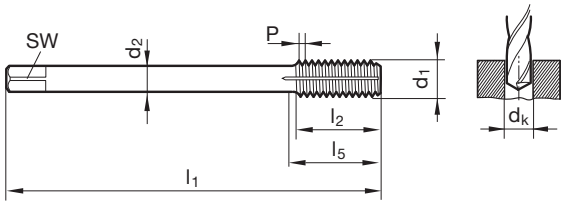
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 352

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1275**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 Article no. **927**

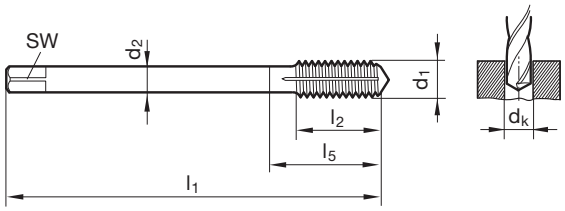
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 352





DIN 2174 ~DIN 374 Article no. **2008**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

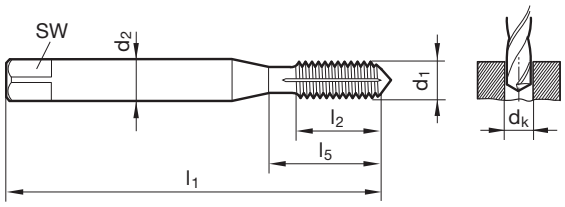
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

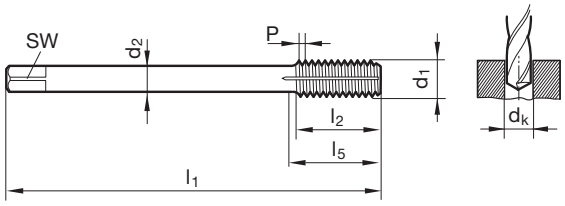
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 352

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1277**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **926**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

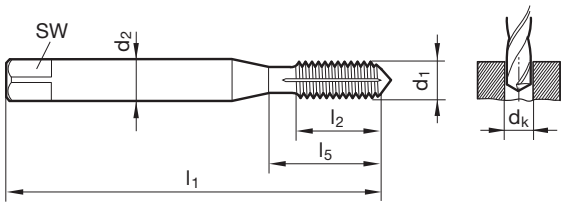
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

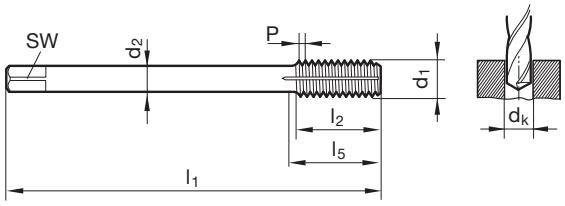
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1268**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1269**

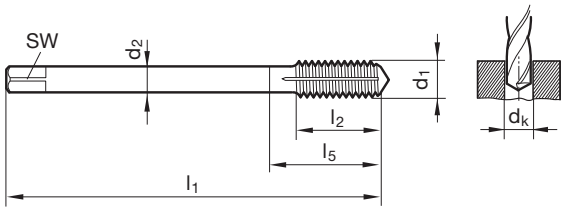
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	





DIN 2174 ~DIN 374 Article no. **333**

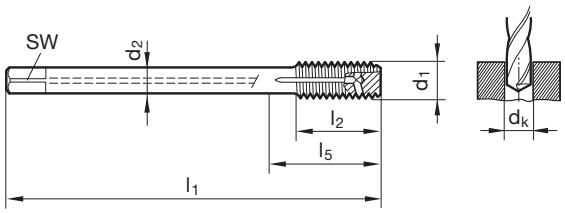
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353





DIN 2174 ~DIN 374 — Article no. **338**

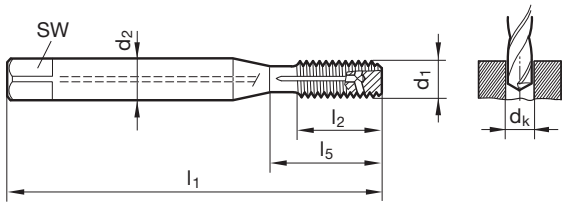
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Oil feed fluteless taps f. ISO metric fine threads

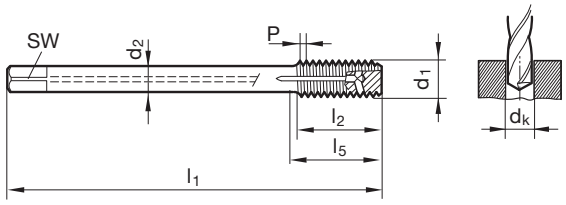
P	•	Cutting data page 353
M	•	
K		
N	≥ 7	
S	•	
H		

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 — Article no. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1273** **1723** **1731**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

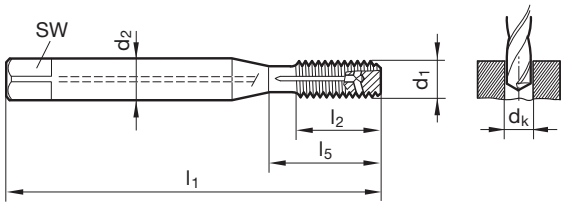
Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

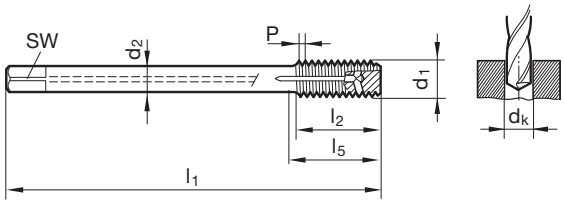
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353

~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1716** **1732**

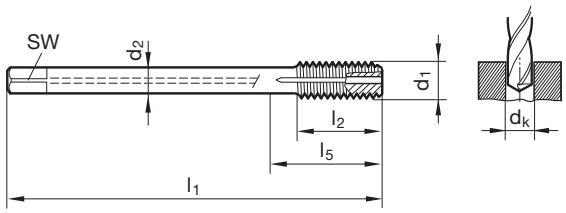
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 353





Company std. Company std. Article no. **4145**

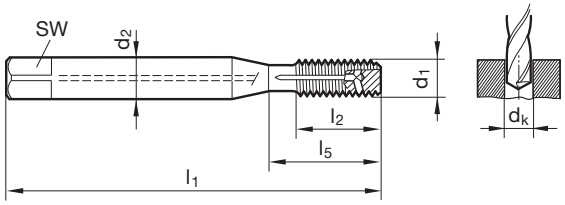
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 353





DIN 2174 ~DIN 371/~DIN 376 Article no. **1581**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

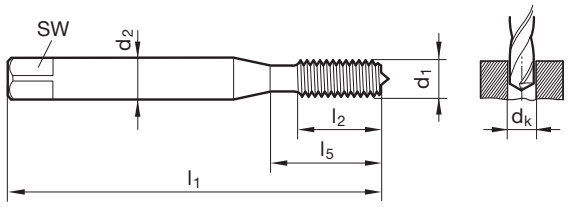
Fluteless machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

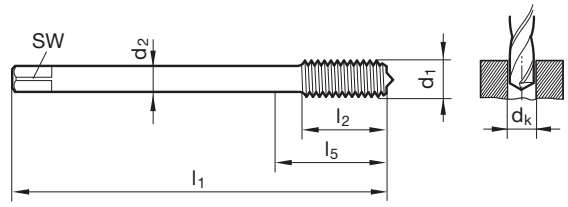
P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 — Article no. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225

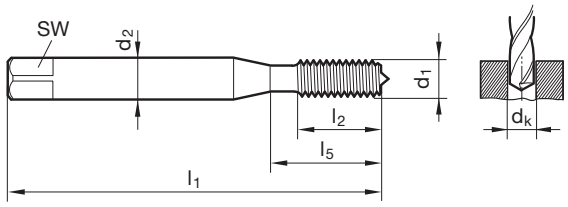
Fluteless machine taps for UNF-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

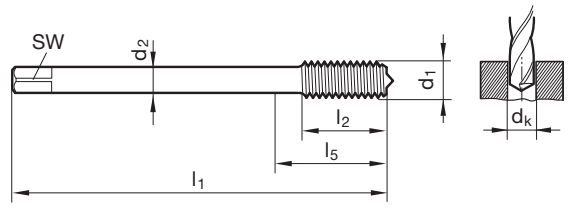
P	•
M	•
K	
N	○
S	
H	

Cutting data page 352

~ DIN 371



~ DIN 374





DIN 2184-1 ~DIN 371 Article no. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374 Article no. **2275** **1585**

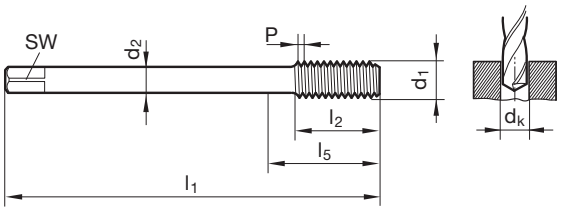
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
10 - 32	0.794	3.500	2.700	4.45	70.000	14.000	25.000
1/4 - 28	0.907	4.500	3.400	5.95	80.000	16.000	30.000
12 - 28	0.907	4.000	3.000	5.10	80.000	16.000	30.000
3/8 - 24	1.058	7.000	5.500	9.05	90.000	18.000	35.000
5/16 - 24	1.058	6.000	4.900	7.45	90.000	18.000	35.000
1/2 - 20	1.270	9.000	7.000	12.10	100.000	20.000	40.000
5/8 - 18	1.411	12.000	9.000	15.25	100.000	22.000	44.000
7/16 - 20	1.270	8.000	6.200	10.55	100.000	22.000	42.000
9/16 - 18	1.411	11.000	9.000	13.65	100.000	22.000	40.000
3/4 - 16	1.587	14.000	11.000	18.35	110.000	25.000	44.000
7/8 - 14	1.814	18.000	14.500	21.40	125.000	25.000	44.000
1 - 12	2.117	18.000	14.500	24.45	140.000	28.000	50.000

Fluteless machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 352





DIN 2184-1 DIN 2189 Article no. **966**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910

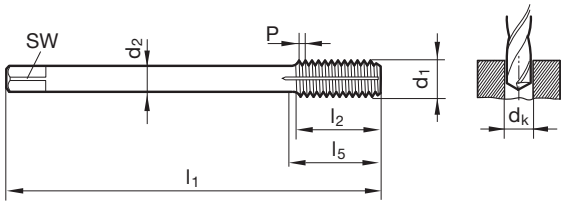
Fluteless machine taps for BSP-threads



P	•
M	•
K	
N	○
S	○
H	

Cutting data page 352

Tool material	HSS-E
Tolerance on Ø	X
Surface	S
Type	N
Form	C
Internal cooling	





DIN 2184-1 DIN 2189 Article no. **1586**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441



Grey cast iron, spheroidal and malleable cast iron

THREAD MILLING CUTTERS

K

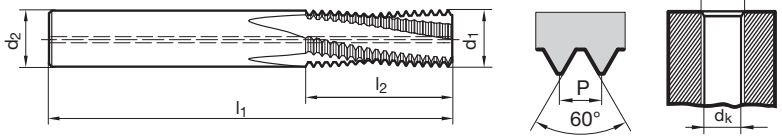
Thread milling cutters without chamfer for ISO metric threads

2xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide		
Surface	C	C	◯
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	





Company std. Article no. **3737** **3743** **3734**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007

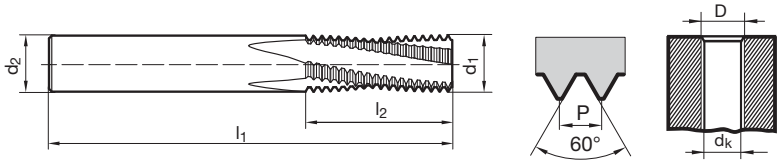
Thread milling cutters without chamfer for ISO metric threads

2xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW





Company std. Article no. **4132** **4133**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000

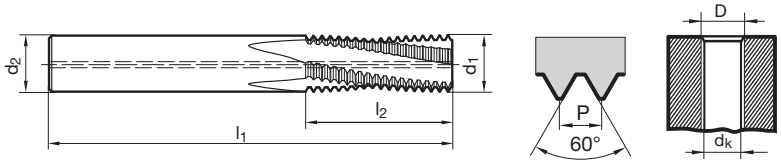
Thread milling cutters without chamfer for ISO metric threads

2,5xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW





Company std. Article no. **3735** **3740**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

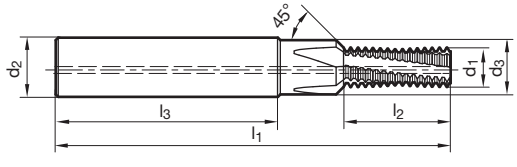
Thread milling cutters with chamfer for ISO metric threads

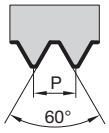
1,5xD

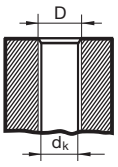
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std. Article no. **3525** **3543** **3510**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

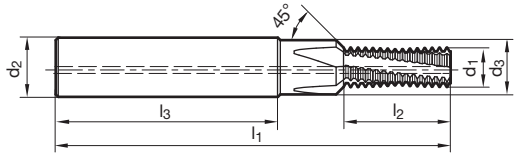
Thread milling cutters with chamfer for ISO metric threads

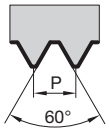
2xD

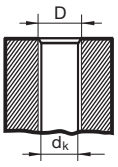
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3526	3544	3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

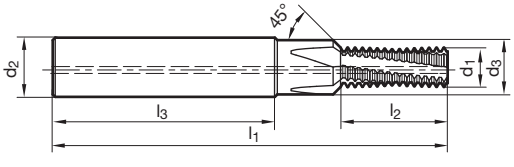
Thread milling cutters with chamfer for ISO metric threads

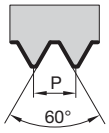
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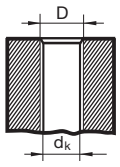
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3759** **3760**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

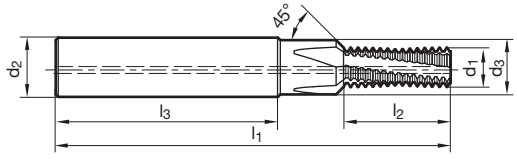
Thread milling cutters with chamfer for ISO metric fine threads

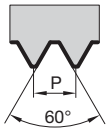
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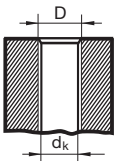
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std. Article no. **3527** **3545** **3512**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

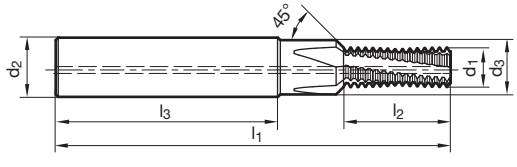
Thread milling cutters with chamfer for ISO metric fine threads

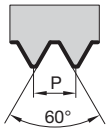
2xD

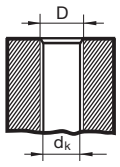
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std. Article no. **3528** **3546** **3513**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

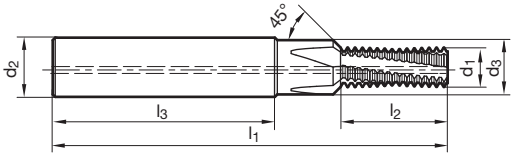
Thread milling cutters with chamfer for ISO metric fine threads

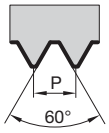
2,5xD

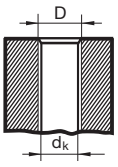
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

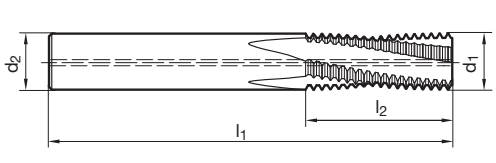
Thread milling cutters without chamfer for UNC-threads

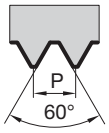
2xD

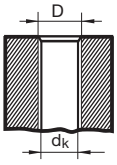
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	4134	4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

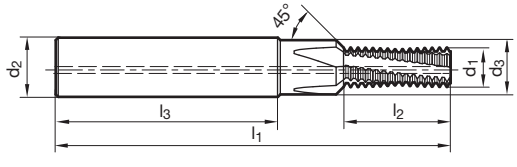
Thread milling cutters with chamfer for UNC-threads

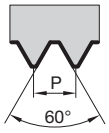
1,5xD

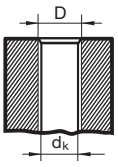
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

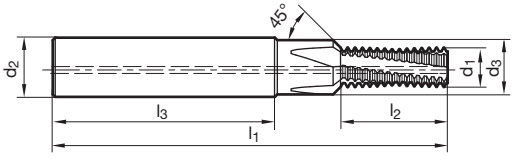
Thread milling cutters with chamfer for UNC-threads

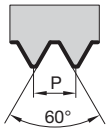
2xD

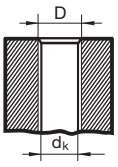
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

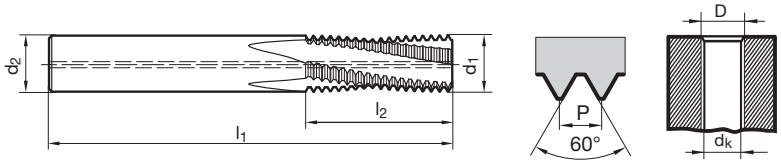
Thread milling cutters without chamfer for UNF-threads

2xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW





Company std.	Article no.	4136	4137

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

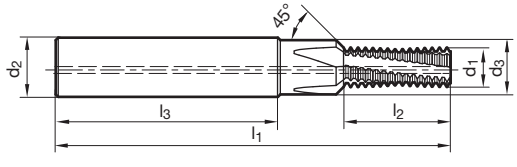
Thread milling cutters with chamfer for UNF-threads

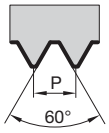
1,5xD

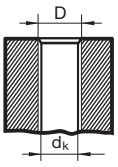
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3518	3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

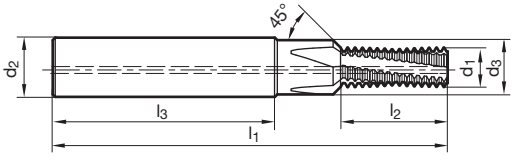
Thread milling cutters with chamfer for UNF-threads

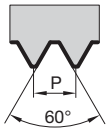
2xD

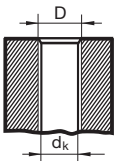
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3519	3537

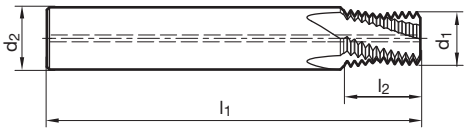
D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

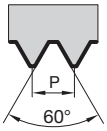
Thread milling cutters without chamfer for NPT-threads

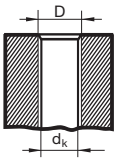
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3753	3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

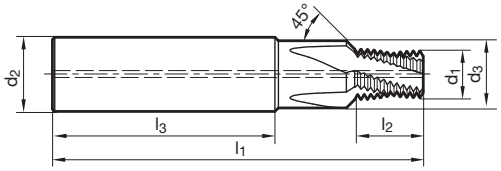
Thread milling cutters with chamfer for NPT-threads

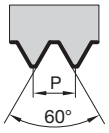
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

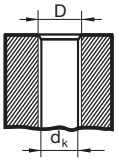
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354











Company std.	Article no.	3520	3538

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

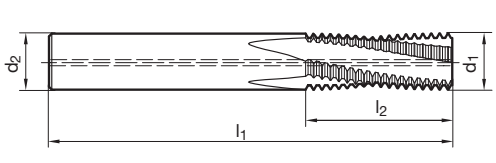
Thread milling cutters without chamfer for BSP-threads

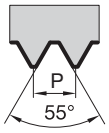
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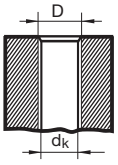
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

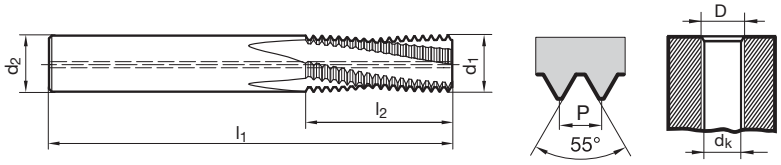
Thread milling cutters without chamfer for BSP-threads

2,5xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW





Company std.	Article no.	3746	3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

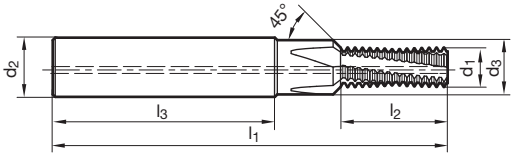
Thread milling cutters with chamfer for BSP-threads

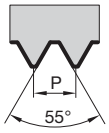
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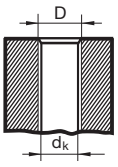
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

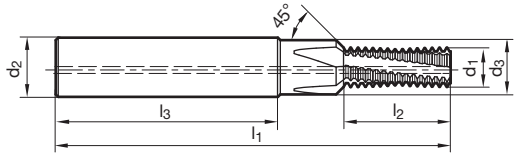
Thread milling cutters with chamfer for BSP-threads

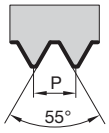
2xD

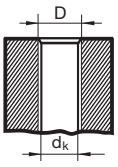
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

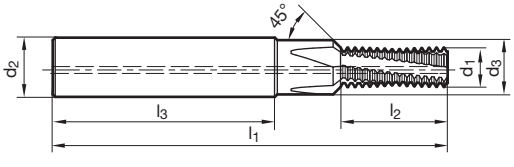
Thread milling cutters with chamfer for BSP-threads

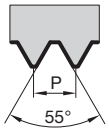
2,5xD

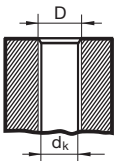
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3765	3766

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

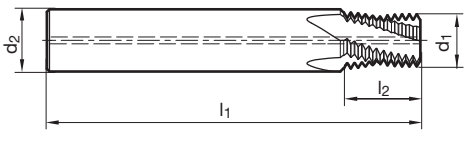
Thread milling cutters without chamfer for NPTF-threads



P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW







Company std.	Article no.	3756	3757

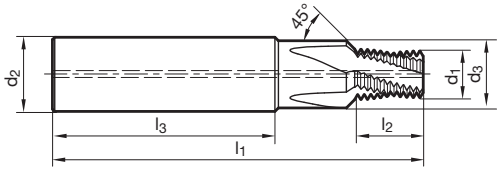
D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

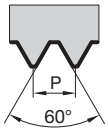
Thread milling cutters with chamfer for NPTF-threads

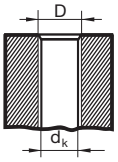
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 354

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3521	3539

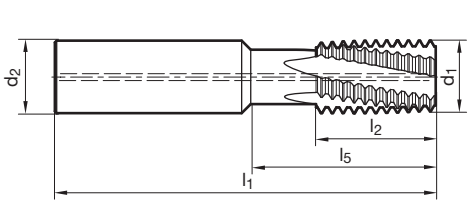
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

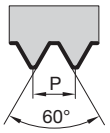
Universal thread milling cutters for ISO metric threads

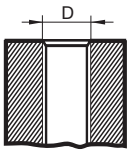
Tool material	Solid carbide		
Surface	C	C	○
Type	TMU SP	TMU SP	TMU SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355









Company std.	Article no.	3541	3556	3523

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

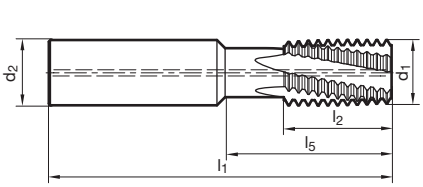
External thread milling cutters

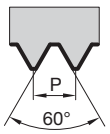
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB

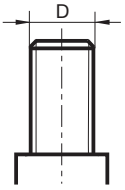
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355











Company std.	Article no.	4162	4163

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

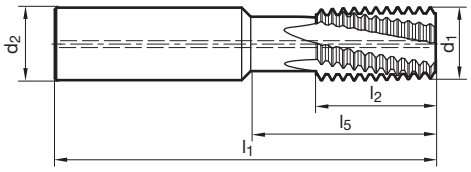
Universal thread milling cutters for UN-threads

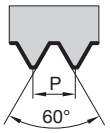
Tool material	Solid carbide	
Surface	C	C
Type	TMU UN	TMU UN
Internal cooling		
Shank form	HA	HB

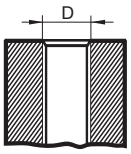
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355











Company std.	Article no.	3595	3596

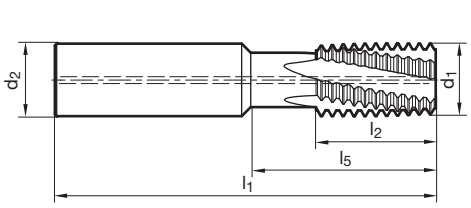
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

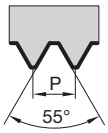
Universal thread milling cutters for BSP-threads

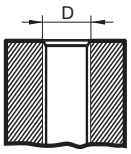
Tool material	Solid carbide		
Surface	C	C	○
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355













Company std.	Article no.	3542	3557	3524

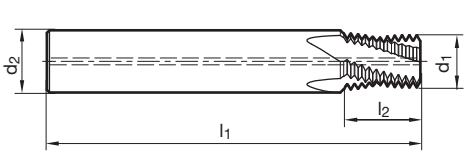
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

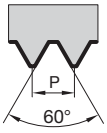
Universal thread milling cutters for NPT-threads

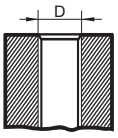
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355











Company std.	Article no.	3768	3769

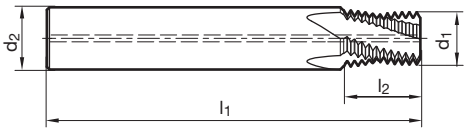
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

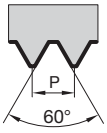
Universal thread milling cutters for NPTF-threads

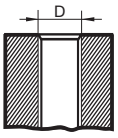
Tool material		Solid carbide	
Surface		C	C
Type		TM SP	TM SP
Internal cooling			
Shank form		HA	HB
			NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 355











Company std.	Article no.	3772	3773

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Micro-thread milling cutters

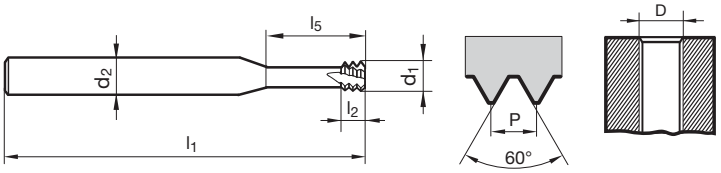
3xD

Tool material	Solid carbide
Surface	C
Type	SP M
Threads	3,0
Shank form	HA

NEW

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 355





Company std. Article no. **4226**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Micro-thread milling cutters

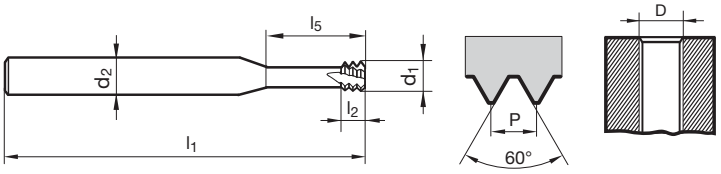
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 355

Tool material	**Solid carbide**
Surface	C
Type	SP G
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4228**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Micro-thread milling cutters

3xD

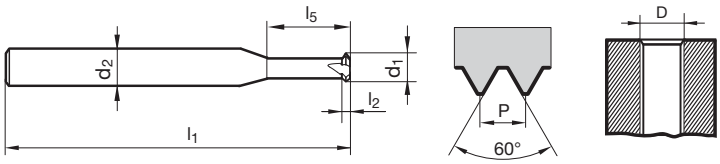
P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 355

Tool material	**Solid carbide**
Surface	C
Type	SP M/MF
Threads	1,0
Shank form	HA

NEW





Company std. Article no. **4225**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

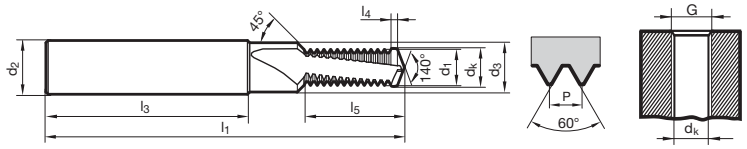
Drill thread milling cutters for ISO metric threads

1,5xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	◯	◯	Ⓒ	Ⓒ
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕		✕	
Shank form	HA	HA	HA	HA





Company std.	Article no.	3774	3775	3776	3777

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	5.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	6.900	2	4.000
M4	0.700	3.200	6.000	4.500	4.000	48.000	36.000	0.700	6.900	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	8.800	2	5.000
M5	0.800	4.000	6.000	5.500	5.000	54.000	36.000	0.800	8.800	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	10.900	2	6.000
M6	1.000	4.750	8.000	6.600	6.000	62.000	36.000	1.000	10.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	13.700	2	8.000
M8	1.250	6.350	10.000	9.000	8.000	74.000	40.000	1.250	13.700	2	8.000
M10	1.500	7.950	12.000	11.000	10.000	80.000	45.000	1.500	18.000	2	10.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	18.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	20.900	2	12.000
M12	1.750	9.950	14.000	13.500	12.000	90.000	45.000	1.500	20.900	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	23.700	2	14.000
M14	2.000	11.200	16.000	15.500	14.000	102.000	48.000	1.500	23.700	2	14.000
M16	2.000	13.200	18.000	17.500	16.000	102.000	48.000	1.500	26.000	2	16.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	26.000	2	16.000

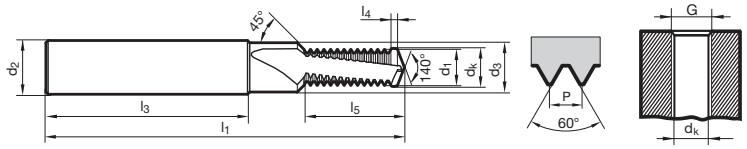
Drill thread milling cutters for ISO metric threads

2xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	◯	◯	Ⓒ	Ⓒ
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕	≡	✕	≡
Shank form	HA	HA	HA	HA





Company std.	Article no.	3778	3779	3780	3781

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	7.000	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	9.000	2	4.000
M4	0.700	3.200	6.000	4.500	4.000	48.000	36.000	0.700	9.000	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	11.200	2	5.000
M5	0.800	4.000	6.000	5.500	5.000	54.000	36.000	0.800	11.200	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	13.900	2	6.000
M6	1.000	4.750	8.000	6.600	6.000	62.000	36.000	1.000	13.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	18.700	2	8.000
M8	1.250	6.350	10.000	9.000	8.000	74.000	40.000	1.250	18.700	2	8.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	22.500	2	10.000
M10	1.500	7.950	12.000	11.000	10.000	80.000	45.000	1.500	22.500	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	26.100	2	12.000
M12	1.750	9.950	14.000	13.500	12.000	90.000	45.000	1.500	26.100	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	31.700	2	14.000
M14	2.000	11.200	16.000	15.500	14.000	102.000	48.000	1.500	31.700	2	14.000
M16	2.000	13.200	18.000	17.500	16.000	102.000	48.000	1.500	36.000	2	16.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	36.000	2	16.000

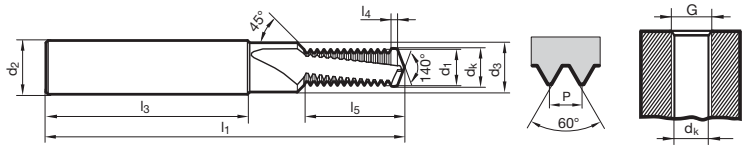
Drill thread milling cutters for ISO metric threads

2,5xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	◯	◯	C	C
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕		✕	
Shank form	HA	HA	HA	HA





Company std.	Article no.	3782	3783	3784	3785

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	8.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	11.100	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	13.600	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	16.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	22.500	2	8.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	27.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	31.400	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	39.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	46.000	2	16.000

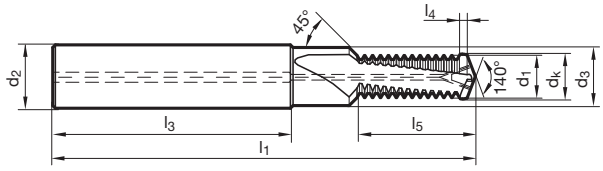
Drill thread milling cutters for ISO metric fine threads

1,5xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 355

Tool material	Solid carbide		
Surface	◯	C	C
Type	DTMC SP	DTMC SP	DTMC SP
Internal cooling			
Shank form	HA	HA	HA





Company std.	Article no.	3787	3788	3789

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	6.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	8.300	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	9.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	14.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	14.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	16.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	16.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	20.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	21.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	23.300	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	26.600	2	16.007

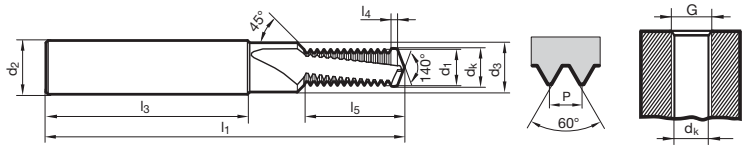
Drill thread milling cutters for ISO metric fine threads

2xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 355

Tool material	Solid carbide			
Surface	◯	◯	Ⓒ	Ⓒ
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕		✕	
Shank form	HA	HA	HA	HA





Company std.	Article no.	3790	3791	3792	3793

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	8.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	10.800	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	12.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	17.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	17.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	21.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	21.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	26.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	27.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	30.800	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	34.100	2	16.007

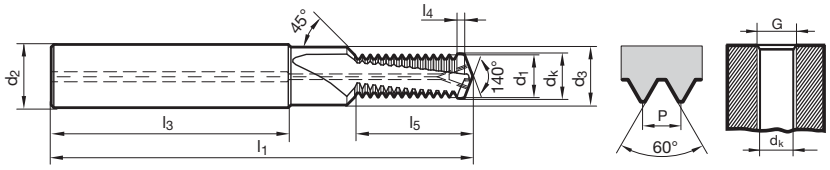
Drill thread milling cutters for UNC-threads

2xD

Tool material	Solid carbide	
Surface	◯	C
Type	DTMC SP	DTMC SP
Internal cooling	✕	
Shank form	HA	HA

P	
M	
K	•
N	•
S	
H	

Cutting data page 355





Company std. Article no. **4138** **4139**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	1.270	5.000	8.000	6.600	5.100	62.000	36.000	1.300	14.900	2	6.350
5/16 - 18	1.411	6.250	10.000	9.000	6.600	74.000	40.000	1.500	18.100	2	7.938
3/8 - 16	1.587	7.500	12.000	11.000	8.000	80.000	45.000	1.500	22.100	2	9.525
7/16 - 14	1.814	8.800	12.000	11.000	9.400	80.000	45.000	1.500	25.000	2	11.113
1/2 - 13	1.954	10.200	14.000	13.500	10.800	90.000	45.000	1.500	26.900	2	12.700
9/16 - 12	2.117	11.600	16.000	15.500	12.200	102.000	48.000	1.500	31.200	2	14.288
5/8 - 11	2.309	13.000	18.000	17.500	13.500	102.000	48.000	1.500	36.300	2	15.875

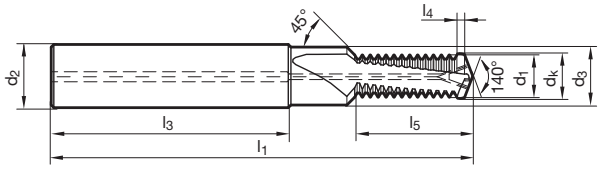
Drill thread milling cutters for UNF-threads

2xD

P	
M	
K	•
N	•
S	
H	

Cutting data page 355

Tool material	Solid carbide	
Surface	○	C
Type	DTMC SP	DTMC SP
Internal cooling	✕	
Shank form	HA	HA



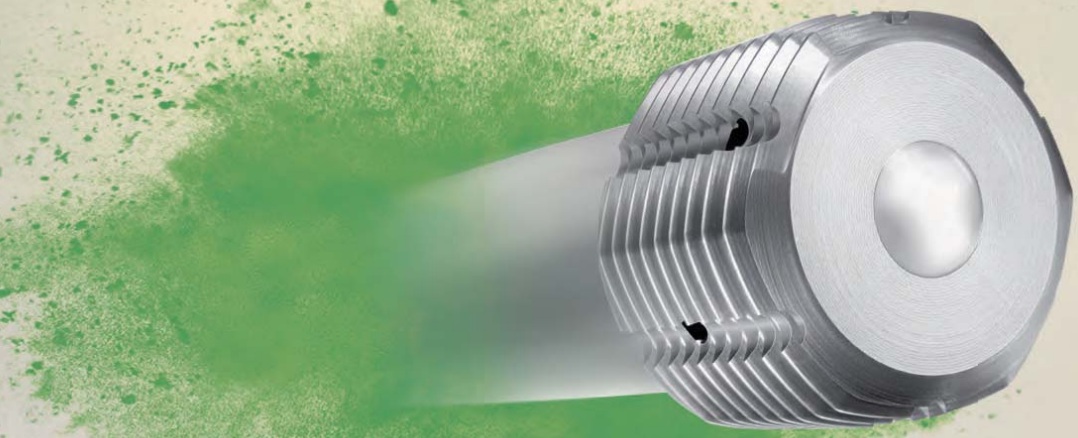


Company std.	Article no.	4140	4141

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	0.907	5.000	8.000	6.600	5.500	62.000	36.000	1.000	12.800	2	6.350
5/16 - 24	1.058	6.250	10.000	9.000	6.900	74.000	40.000	1.100	18.200	2	7.938
3/8 - 24	1.058	7.950	12.000	11.000	8.500	80.000	45.000	1.100	20.600	2	9.525
7/16 - 20	1.270	9.500	12.000	11.000	9.900	80.000	45.000	1.300	24.700	2	11.113
1/2 - 20	1.270	10.200	14.000	13.500	11.500	90.000	45.000	1.300	27.500	2	12.700
9/16 - 18	1.411	11.600	16.000	15.500	12.900	102.000	48.000	1.500	30.600	2	14.288
5/8 - 18	1.411	13.000	18.000	17.500	14.500	102.000	48.000	1.500	33.700	2	15.875

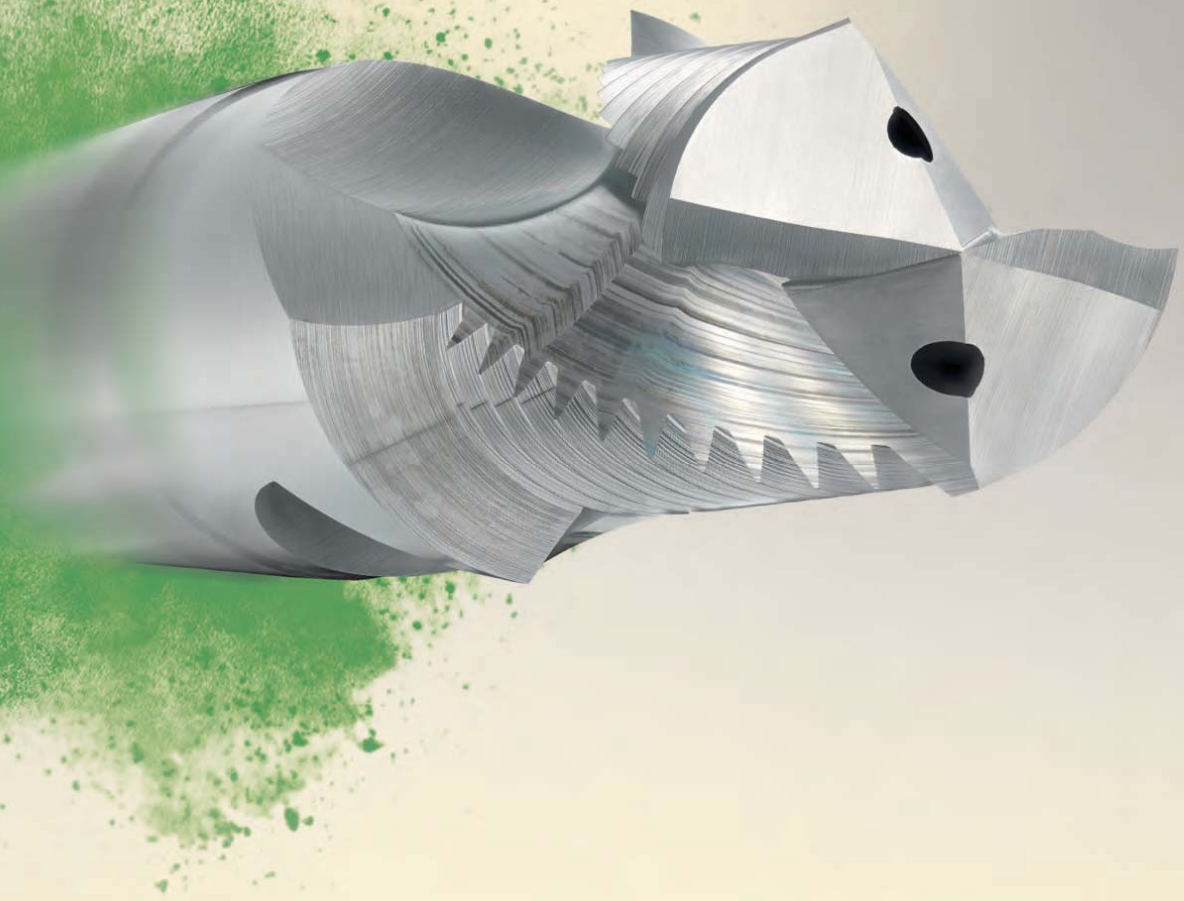
N

Aluminium, wrought and cast alloys,
high-strength aluminium, copper alloys
and non-ferrous metals





ALU MINIUM



Aluminum, non-ferrous metals and plastics

NON-FERROUS METALS PLASTICS

N ALUMINIUM, NE, PLASTICS

	M		MF	
	ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
Aluminium ≤ 6% Si	No 1 M2 - M24 Art.-No. 805/817 from page 472	M2 - M30 Art.-No. 1870/1872 from page 473	No 1 M5x0,5 - M24x2 Art.-No. 1873 from page 487	
Aluminium ≥ 6% Si	No 1 M3 - M20 Art.-No. 1858/1859 from page 476		No 1 M5x0,5 - M20x1,5 Art.-No. 1861/1860 from page 491	
short chipping NE-metals	No 1 M3 - M10 Art.-No. 800 from page 482 No 1 M3 - M10 Art.-No. 1084 from page 482			
	No 1 M3 - M20 Art.-No. 1858/1859 from page 476		No 1 M5x0,5 - M20x1,5 Art.-No. 1861/1860 from page 491	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



THROUGH HOLE



HSS-E, bright, form B

No 1
Nr. 4 - 1
Art.-No. 1980/1985
from page 498

No 1
Nr. 10 - 3/8
Art.-No. 1990
from page 500

No 1
G1/16 - G7/8
Art.-No. 967
from page 502



Form B, bright

Aluminum, non-ferrous metals and plastics

SOLID CARBIDE



Solid carbide, bright, form C



HSS-E, bright, form E

SOLID CARBIDE



Solid carbide, bright, form C

N ALUMINIUM, NE, PLASTICS

	M		MF	
	ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
Aluminium ≤ 6% Si	No 1 M1,6 - M24 Art.-No. 812/824 from page 474			
	M3 - M30 Art.-No. 814/825 from page 475			
Aluminium ≥ 6% Si	No 1 M5 - M20 Art.-No. 302/297 from page 479		No 1 M5x0,5 - M16x1,5 Art.-No. 1090 from page 496	
	No 1 M3 - M20 Art.-No. 969/1883 from page 476		No 1 M5x0,5 - M20x1,5 Art.-No. 972/974 from page 491	
short chipping NE-metals	No 1 M3 - M10 Art.-No. 800 from page 482	No 1 M3 - M10 Art.-No. 1084 from page 482		
	No 1 M3 - M20 Art.-No. 969/1883 from page 476		No 1 M5x0,5 - M20x1,5 Art.-No. 972/974 from page 491	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



BLIND HOLE



HSS-E, bright, form C

No 1
Nr. 2 - 7/8
Art.-No. 1981/1986
from page 499

No 1
Nr. 1/4 - 1
Art.-No. 2867
from page 501



HSS-E, bright, form C

Aluminum, non-ferrous metals and plastics



HSS-E-PM, TiCN, form C

SOLID CARBIDE



Solid carbide, bright, form C



HSS-E, bright, form E

SOLID CARBIDE



Solid carbide, bright, form C

N ALUMINIUM, NE, PLASTICS

M

ISO 2/6HX

without lubrication

No 1
M1 - M20
Art.-No. 1347/1566
from page 506

M1 - M20
Art.-No. 921/925
from page 506

with lubrication

M3 - M39
Art.-No. 919/923
from page 510

No 1
M3 - M39
Art.-No. 2012/2013
from page 510

with internal cooling

No 1
M5 - M20
Art.-No. 2515
from page 517

No 1
M3 - M20
Art.-No. 1725/1727
from page 516

No 1
M3 - M20
Art.-No. 1972/1931
from page 522

ISO 3/6GX

without lubrication

No 1
M2 - M20
Art.-No. 1565/1567
from page 508

M2 - M10
Art.-No. 920
from page 507

with lubrication

No 1
M3 - M39
Art.-No. 918/922
from page 510

with internal cooling

No 1
M5 - M20
Art.-No. 4146
from page 520

No 1
M3 - M20
Art.-No. 1726/1728
from page 519

MF

ISO 2/6HX

without lubrication

No 1
M8x1 - M10x1
Art.-No. 1568
from page 526

M8x1 - M20x1,5
Art.-No. 929
from page 524

with lubrication

M6x0,75 - M24x1,5
Art.-No. 1275/927
from page 530

No 1
M6x0,75 - M20x1,5
Art.-No. 2008
from page 531

with internal cooling

No 1
M8x1 - M16x1,5
Art.-No. 4147
from page 537

No 1
M8x1 - M24x1,5
Art.-No. 1729/1731
from page 536

No 1
M10x1 - M24x1,5
Art.-No. 1581
from page 541

ISO 3/6GX

without lubrication

No 1
M8x1 - M24x1,5
Art.-No. 1569/1580
from page 529

M8x1 - M18x1,5
Art.-No. 928
from page 528

with lubrication

No 1
M8x1 - M20x1,5
Art.-No. 1277/926
from page 532

with internal cooling

No 1
M8x1 - M16x1,5
Art.-No. 4151
from page 539

No 1
M8x1 - M24x1,5
Art.-No. 1730/1732
from page 538

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



THROUGH HOLE
BLIND HOLE



HSS-E-PM, Carbo, form C

No 1
Nr. 4 - 7/8
Art.-No. 2273/2274
from page 542

No 1
Nr. 4 - 1
Art.-No. 1283/2275
from page 543

No 1
G1/16 - G1 1/4
Art.-No. 966
from page 544



HSS-E, TiN, form C

No 1
Nr. 4 - 7/8
Art.-No. 1582/1583
from page 542

No 1
Nr. 4 - 1
Art.-No. 1584/1585
from page 543

No 1
G1/16 - G3/4
Art.-No. 1586
from page 545



HSS-E, TiN, form C



HSS-E, TiCN, form C

FORM C

No 1
G1/16 - G1
Art.-No. 4152
from page 546



HSS-E, Carbo, form C

FORM E



HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiAlN, form C

Aluminum, non-ferrous metals and plastics

N ALUMINIUM, NE, PLASTICS

	M UNIVERSAL	MF UNIVERSAL
1.5xD	No 1 M3 - M20 Art.-No. 3510 from page 551	No 1 M4x0,5 - M16x1,5 Art.-No. 3512 from page 554
2xD	No 1 M3 - M20 Art.-No. 3511 from page 552	No 1 M4x0,5 - M16x1,5 Art.-No. 3513 from page 555
2.5xD	No 1 M3 - M20 Art.-No. 3759 from page 553	No 1 M4x0,5 - M16x1,5 Art.-No. 3762 from page 556
3xD	No 1 M1,6 - M16 Art.-No. 4226 from page 578	
universal	No 1 Ø8xP0,5 - Ø20xP3,5 Art.-No. 3523 from page 572	No 1 Ø8xP0,5 - Ø20xP3,5 Art.-No. 3523 from page 572

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



THROUGH HOLE
BLIND HOLE

Aluminum, non-ferrous metals and plastics

Solid carbide, bright

No 1
1/4 - 1/2
Art.-No. 3516
from page 558

No 1
1/4 - 1/2
Art.-No. 3518
from page 561

No 1
1/8 - 3/8
Art.-No. 3514
from page 565



Solid carbide, bright

No 1
1/4 - 1/2
Art.-No. 3517
from page 559

No 1
1/4 - 1/2
Art.-No. 3519
from page 562

No 1
1/8 - 3/8
Art.-No. 3515
from page 566



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, bright

No 1
Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 574

No 1
Ø10xUN24 - Ø20xUN7
Art.-No. 3595
from page 574

No 1
Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 575



N ALUMINIUM, NE, PLASTICS

	M UNIVERSAL	MF UNIVERSAL
1.5xD	No 1 M3 - M16 Art.-No. 3775 from page 581	No 1 M4x0,5 - M16x1,5 Art.-No. 3787 from page 584
	M3 - M16 Art.-No. 3774 from page 581	
2xD	No 1 M3 - M16 Art.-No. 3779 from page 582	No 1 M4x0,5 - M16x1,5 Art.-No. 3791 from page 585
	M3 - M16 Art.-No. 3778 from page 582	M4x0,5 - M16x1,5 Art.-No. 3790 from page 585
2.5xD	No 1 M3 - M16 Art.-No. 3783 from page 583	
	M3 - M16 Art.-No. 3782 from page 583	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



THROUGH HOLE
BLIND HOLE



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



Solid carbide, bright



N

COMPASS



N	Thread depth	≤3xD				
ALUMINIUM, NONFERROUS METALS, PLASTICS	Tool material	HSS-E			Solid carbide	
	Type/form	Al / B	VA / B	MS / E	H /C	NL15 /D
	Surface	◯	◯	◯	◯	◯
	Coolant delivery	☒	☒	☒	radial	radial
	Shank tolerance	h9	h9	h9	h9	h9
THROUGH HOLES						

Thread type	Tolerance	Article no. / page				
M	4H					
	6H	805/817 472	1870/1872 473	800 482		
	6HX				1858/1859 476	
	6G			1084 482		
MF	6H		1873 487			
	6HX				1861/1860 491	975/976 495
	6G					
UNC	2B		1980/1985 498			
	2BX					
UNF	2B		1990 500			
	2BX					
G			967 502			
BSW						
NPT						
NPTF						
EG M	6H Mod.					
MJ	4HX					
MJF	4HX					
UNJC	3BX					
UNJF	3BX					
PG						
Suitable lubricant		◯/●/△	◯/●/△	◯/●/△	◯/●/△	◯/●/△

= No 1

◯ = Air
● = Neat oil
◯ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min				
N	Aluminium and wrought alloys	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	**15**	**15**	-	-	-
	Al cast alloys	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	-	-	-	**50**	**50**
	Magnesium alloys	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	-	-	-	**50**	**50**
	Copper and copper alloys	long-chip-ping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	**15**	**15**	-	-	-
		short-chip-ping	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	**20**	**50**	**50**
	Copper special alloys	≤1400 N/mm²	Ampco		-	-	2	-	-

N

ALUMINIUM, NONFERROUS METALS, PLASTICS



BLIND HOLES

Thread depth		≤3xD			
Tool material		HSS-E			
Type/form		Al R45 / C	NR40 / C	MS / E	NAZ / E
Surface		○	○	○	A+M
Coolant delivery		☒	☒	☒	axial
Shank tolerance		h9	h9	h9	h9
					
Thread type	**Tolerance**	**Article no. / page**			
M	4H				
	6H	812/824 474	814/825 475	800 482	2899 484
	6HX				
	6G			1084 482	
MF	6H		936 488		
	6HX				
	6G				
UNC	2B		1981/1986 499		
	2BX				
UNF	2B		2867 501		
	2BX				
G			939 503		
BSW					
NPT					
NPTF					
EG M	6H Mod.				
MJ	4HX				
MJF	4HX				
UNJC	3BX				
UNJF	3BX				
PG					
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min			
N	Aluminium and wrought alloys	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	**15**	**15**	-	-
	Al cast alloys	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	-	-	-	-
	Magnesium alloys	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	-	-	-	**20**
	Copper and copper alloys	long-chip-ping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	**15**	**15**	-	-
		short-chip-ping	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	**20**	-
	Copper special alloys	≤1400 N/mm²	Ampco		-	-	2	-

≤3xD

HSS-E		HSS-E-PM						Solid carbide		
H / C	H / C	H / C	H / E	NR50 / C	NR50 / C	VA R50/C	VA R50/C	H / C	H / E	HR 15 / C
C	C	C	C	S	C	S	C	○	○	○
axial	axial	axial	axial	☒	axial	☒	axial	axial	axial	axial
h9	h9	h9	h9	h9	h9	h6	h6	h6	h6	h6
	 extra length					 synchro taps	 synchro taps			
Article no. / page										
				767/1098 485	1152/1293 485					
778 480	779 481	302/297 479	1091/4165 479			761/763 486	1139/1142 486	969/1883 476	1008 477	971 478
				1100 489	1294 489					
		1090 496	1007 497			764 490	1144 490	972/974 491	1009 492	977/978 493
						4159 504				
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△

Recommended cutting speed vc m/min										
-	-	-	-	-	-	-	-	-	-	-
25	**25**	**30**	**30**	**20**	**25**	**25**	**25**	**50**	**50**	**50**
-	-	-	-	-	-	-	-	**50**	**50**	**50**
-	-	-	-	**20**	**25**	**25**	**25**	-	-	-
-	-	-	-	-	-	-	-	**50**	**50**	**50**
-	-	-	-	-	-	-	-	-	-	-

N

ALUMINIUM, NONFERROUS METALS, PLASTICS



THROUGH HOLES AND **BLIND** HOLES

Thread depth		1.5xD			
Tool material		HSS-E	HSS-E-PM		Solid carbide
Type/form		N / C	N / C	N / C	N / C
Surface		S	S	Cb	S
Coolant delivery		☒	☒	☒	axial
Shank tolerance		h9	h9	h9	h6
					
Thread type	**Tolerance**	**Article no. / page**			
M	4H				
	6H				
	6HX	921/925 506	1255/1256 506	1347/1556 506	2518 509
	6GX	920 507	903/952 508	1565/1567 508	
MF	6H				
	6HX	929 524	1257/1258 525	1568 526	
	6GX	928 528	1740 527	1569/1580 529	
UNC	2B				
	2BX	2273/2274 542			
UNF	2B				
	2BX	1283/2275 543			
G		966 544			
BSW					
NPT					
NPTF					
EG M	6H Mod.				
MJ	4HX				
MJF	4HX				
UNJC	3BX				
UNJF	3BX				
PG					
Suitable lubricant		○/●/△	○/●/△	○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min			
N	Aluminium and wrought alloys	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	20	20	**30**	**45**
	Al cast alloys	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	**20**	**20**	**30**	**45**
	Magnesium alloys	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	-	-	-	-
	Copper and copper alloys	long-chip-ping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	20	20	**30**	**45**
		short-chip-ping	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	-	-	-	-
	Copper special alloys	≤1400 N/mm²	Ampco		-	-	-	-

≤3xD

HSS-E					HSS-E-PM						Solid carbide	
N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / C	N / E	N / C	N / E
S	C	S+	C	Cb	S	S	S	S	C	S	C	C
☒	☒	axial	radial	axial	☒	☒	radial	axial	radial	axial	radial	radial
h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h9	h6	h6
												
Article no. / page												
919/923 510	2012/2013 510	2442/2444 513	2446/2448 513	2515 517	322/339 511	1266/1267 512	323/342 515	4143 521	1270/1271 516	1725/1727 516	1972/1931 522	1927 523
918/922 510		2443/2445 513	2447 514	4146 520					1713 518	1726/1728 519		
1275/927 530	2008 531			4147 537	333 533	1268/1269 534	338 535	4145 540	1272/1273 536	1729/1731 536	1581 541	
1277/926 532				4151 539					1715/1716 538	1730/1732 538		
1582/1583 542												
1584/1585 543												
1586 545				4152 546								
○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△	○/●/△
Recommended cutting speed vc m/min												
20	**25**	20	**25**	**30**	20	20	20	20	**20**	20	**45**	**45**
20	**25**	**20**	**25**	**30**	**20**	**20**	**20**	**20**	**25**	**20**	**45**	**45**
-	-	-	-	-	-	-	-	-	-	-	-	-
20	25	20	25	30	20	20	20	20	20	20	**45**	**45**
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-

Aluminum, non-ferrous metals and plastics

N

ALUMINIUM, NONFERROUS METALS, PLASTICS



THROUGH HOLES AND **BLIND** HOLES

Thread depth	≤2xD					≤2,5xD	
Tool material	Solid carbide						
Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP
Surface	C	C	○	C	C	C	C
Coolant delivery	☒	☒	axial	axial	axial	axial	axial
Shank form	HA	HB	HA	HA	HB	HA	HB
Spiral	27°	27°	27°	27°	27°	27°	27°



Thread type	Article no. / page						
M	4132 549	4133 549	3734 548	3737 548	3743 548	3735 550	3740 550
MF			3734 548	3737 548	3743 548		
UNC				4134 557	4135 557		
UNF				4136 560	4137 560		
G				3745 563	3748 563	3746 564	3750 564
BSW							
NPT				3753 568	3754 568		
NPTF				3756 570	3757 570		
EG M	EG-threads can be produced with every thread milling cutter type and dimension						
MJ							
MJF							
UNJC							
UNJF							
PG							
Suitable lubricant	◐/●	◐/●	◐/●	◐/●	◐/●	◐/●	◐/●

= No 1

○ = Air
● = Neat oil
◐ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Application recommendations						
N	Aluminium and wrought alloys	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	+	+	++	+	+	+	+
	Al cast alloys	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	+ + ++ ++	+ + ++ ++	++ + + ++	+ + ++ ++	+ + ++ ++	+ + ++ ++	+ + ++ ++
	Magnesium alloys	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	++	++	+	++	++	++	++
	Copper and copper alloys	long-chipping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	+	+	++	+	+	+	+
		short-chipping	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	+	+	++	+	+	+	+
	Copper special alloys	≤1400 N/mm²	Ampco		+	+	+	+	+	+	+

≤1,5xD			≤2xD			≤2,5xD	
Solid carbide							
TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP	TMC SP
○	C	C	○	C	C	C	C
axial	axial	axial	axial	axial	axial	axial	axial
HA	HA	HB	HA	HA	HB	HA	HB
10°	10°	10°	10°	10°	10°	27°	27°
							
Article no. / page							
3510 551	3525 551	3543 551	3511 552	3526 552	3544 552	3759 553	3760 553
3512 554	3527 554	3545 554	3513 555	3528 555	3546 555	3762 556	3763 556
	3516 558	3534 558		3517 559	3535 559		
	3518 561	3536 561		3519 562	3537 562		
	3514 565	3529 565		3515 566	3533 566	3765 567	3766 567
	3520 569	3538 569					
	3521 571	3539 571					
EG-threads can be produced with every thread milling cutter type and dimension							
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Application recommendations							
++	+	+	++	+	+	+	+
++	+	+	++	+	+	+	+
+	++	++	+	++	++	++	++
+	++	++	+	++	++	++	++
++	+	+	++	+	+	+	+
++	+	+	++	+	+	+	+
+	+	+	+	+	+	+	+

N

ALUMINIUM, NONFERROUS METALS, PLASTICS



THROUGH HOLES AND **BLIND** HOLES

Thread depth	universal					≤3xD	
Tool material	Solid carbide						
Type	TMU SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
Surface	○	C	C	C	C	C	C
Coolant delivery	axial	axial	axial	axial	axial	☒	☒
Shank form	HA	HA	HB	HA	HB	HA	HA
Spiral	15°	15°	15°	15°	15°	15°	15°



Thread type	Article no. / page						
M	3523 572	3541 572	3556 572	4162 573	4163 573	4226 578	4225 580
MF	3523 572	3541 572	3556 572	4162 573	4163 573		4225 580
UNC		3595 574	3596 574				
UNF		3595 574	3596 574				
G	3524 575	3542 575	3557 575	3542 575	3557 575	4228 579	
BSW							
NPT		3769 576	3768 576				
NPTF		3772 577	3773 577				
EG M	EG-threads can be produced with every thread milling cutter type and dimension						
MJ							
MJF							
UNJC							
UNJF							
PG							
Suitable lubricant	○/●	○/●	○/●	○/●	○/●	○/●	○/●

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Application recommendations						
N	Aluminium and wrought alloys	≤450 N/mm²	Al99,5H AlMgSi1 AlZn4,5Mg	3.0250 32315 3.4335	++	+	+	+	+	++	++
	Al cast alloys	≤600 N/mm²	GD-AlSi5Cu1Mg GD-AlSi8Cu3 G-AlSi9Mg G-AlSi12	3.2134 3.2162 3.2373 3.2581	++ +	+ ++	+ ++	+ ++	+ ++	++ ++	++ ++
	Magnesium alloys	≤500 N/mm²	GDMgAl8Zn1	3.5812.08	+	++	++	++	++	++	++
	Copper and copper alloys	long-chipping	CuZn20 CuZn37Pb0,5	2.0250 2.0332	++	+	+	+	+	++	++
		short-chipping	CuZn39Pb2 CuZn43Pb2	2.0380 2.0410	++	+	+	+	+	++	++
	Copper special alloys	≤1400 N/mm²	Ampco		+	+	+	+	+	++	++

≤1,5xD				≤2xD				≤2,5xD			
Solid carbide											
DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP	DTMC SP
○	○	C	C	○	○	C	C	○	○	C	C
☒	radial	☒	radial	☒	radial	☒	radial	☒	radial	☒	radial
HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA	HA
27°	27°	27°	27°	27°	27°	27°	27°	27°	27°	27°	27°
											
Article no. / page											
3774 581	3775 581	3776 581	3777 581	3778 582	3779 582	3780 582	3781 582	3782 583	3783 583	3784 583	3785 583
	3787 584	3788 584	3789 584	3790 585	3791 585	3792 585	3793 585				
				4138 586			4139 586				
				4140 587			4141 587				
EG-threads can be produced with every thread milling cutter type and dimension											
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

Aluminum, non-ferrous metals and plastics

Application recommendations											
++	++	+	+	++	++	+	+	++	++	+	+
++	++	+	+	++	++	+	+	++	++	+	+
+	+	++	++	+	+	++	++	+	+	++	++
+	+	++	++	+	+	++	++	+	+	++	++
++	++	+	+	++	++	+	+	++	++	+	+
++	++	+	+	++	++	+	+	++	++	+	+
+	+	+	+	+	+	+	+	+	+	+	+

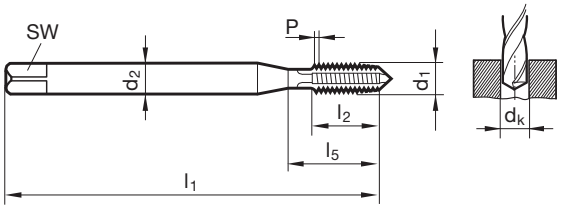
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	Al
Form	B
Internal cooling	

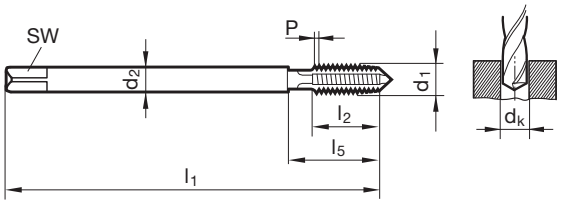
P	
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Cutting data page 463

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **805**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **817**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000

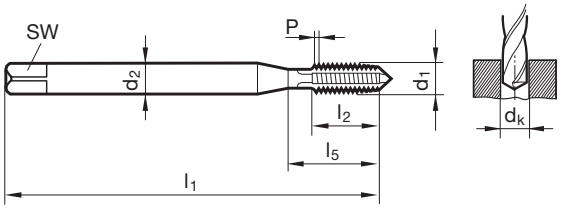
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	B
Internal cooling	

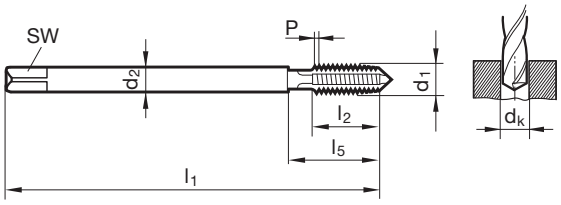
P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 463

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **1870**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 Article no. **1872**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	10.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	12.000	21.000
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	30.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000

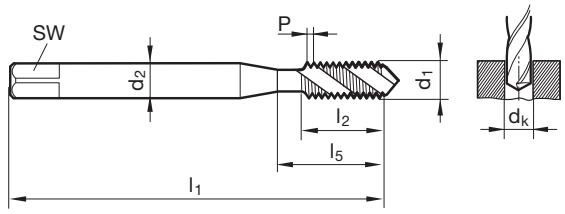
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	Al R45
Form	C
Internal cooling	

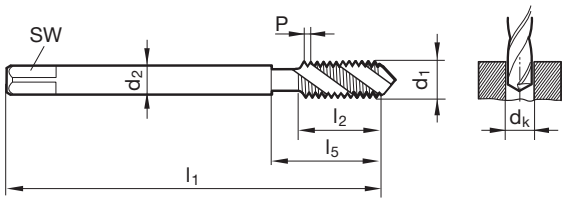
P	
M	
K	
N	•
S	
H	

Cutting data page 464

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **812**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M 1.6	0.350	2.500	2.100	1.25	40.000	4.500	
M2	0.400	2.800	2.100	1.60	45.000	4.500	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	5.000	14.500
M 2.3	0.400	2.800	2.100	1.90	45.000	4.500	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	5.000	14.500
M 2.6	0.450	2.800	2.100	2.15	50.000	5.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	7.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **824**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	2.200		2.50	56.000	6.000	18.000
M4	0.700	2.800	2.100	3.30	63.000	7.500	21.000
M5	0.800	3.500	2.700	4.20	70.000	8.500	25.000
M6	1.000	4.500	3.400	5.00	80.000	11.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	14.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	16.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000

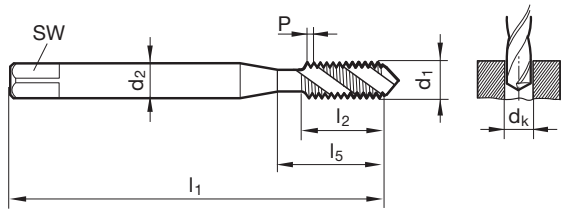
Machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	○
Type	VA R40
Form	C
Internal cooling	

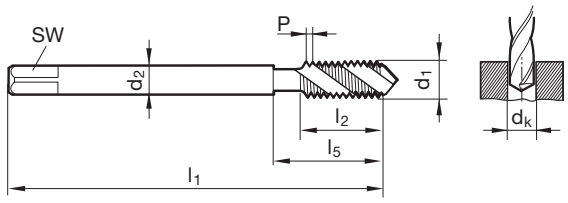
P	
M	•
K	
N	•
S	
H	

Cutting data page 464

DIN 371



DIN 376





DIN 2184-1 DIN 371 Article no. **814**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 Article no. **825**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	25.000	62.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000
M22	2.500	18.000	14.500	19.50	140.000	27.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	30.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	35.000	85.000

Oil feed taps for ISO metric threads

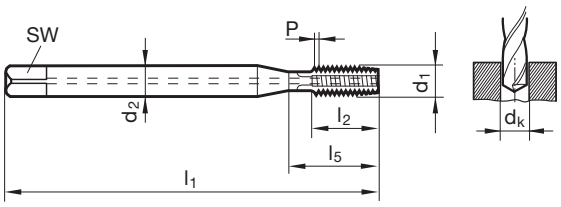


P	
M	
K	•
N	≥ 7
S	
H	

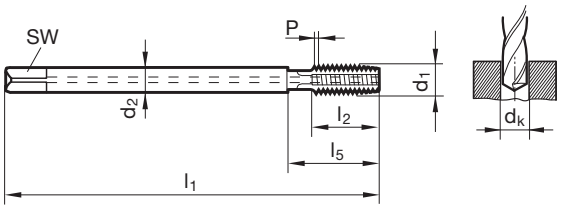
Cutting data page 463/465

Tool material	Solid carbide	
Tolerance on Ø	6HX	6HX
Surface	◯	◯
Type	H	H
Form	C	C
Internal cooling		

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **969** **1858**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

DIN 2184-1 DIN 376 — Article no. **1883** **1859**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	22.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	22.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	22.000	54.000
M18	2.500	14.000	11.000	15.50	125.000	24.000	45.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	45.000

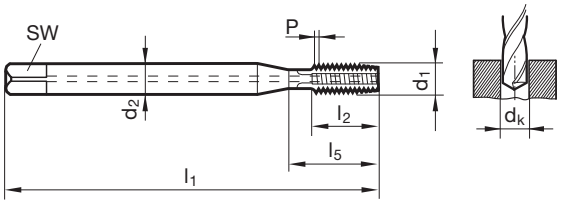
Oil feed taps for ISO metric threads



P	
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	◯
Type	H
Form	E
Internal cooling	





DIN 2184-1 DIN 371 Article no. **1008**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

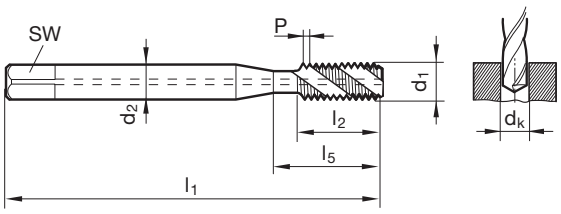
Oil feed taps for ISO metric threads

h6

P	
M	
K	○
N	≥ 7
S	
H	

Cutting data page 465

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	◯
Type	N R15
Form	C
Internal cooling	





DIN 2184-1 DIN 371 Article no. **971**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	8.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	10.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	10.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	12.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	16.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	18.000	39.000

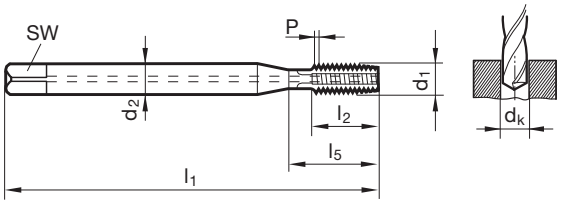
Oil feed taps for ISO metric threads

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

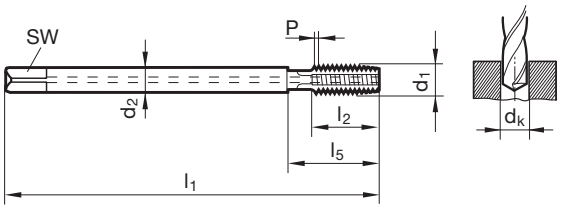
Cutting data page 465

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	C
Type	H	H
Form	C	E
Internal cooling		

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **302** **1091**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

DIN 2184-1 DIN 376 — Article no. **297** **4165**

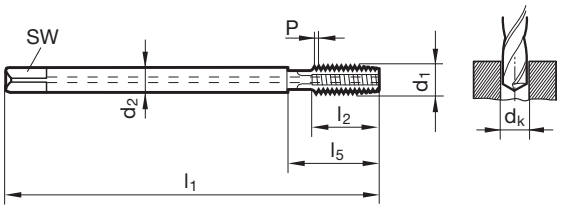
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	12.00	110.000	26.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000

Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465





DIN 2184-1 DIN 376 Article no. **778**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	32.000	62.000
M24	3.000	18.000	14.500	21.00	160.000	36.000	73.000
M27	3.000	20.000	16.000	24.00	160.000	36.000	73.000
M30	3.500	22.000	18.000	26.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	29.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	32.00	200.000	50.000	102.000
M39	4.000	32.000	24.000	35.00	200.000	50.000	107.000

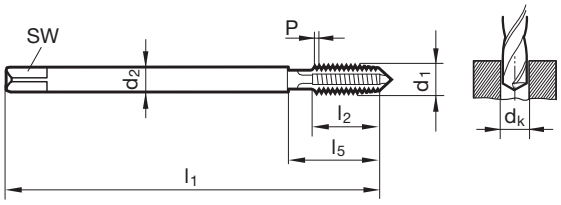
Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465

NEW





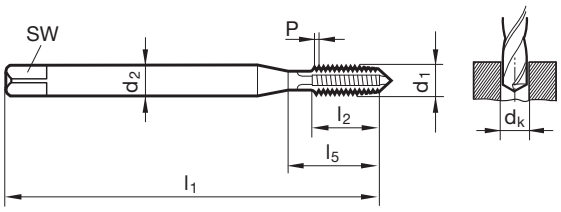
Company std. Article no. **779**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M16	2.000	12.000	9.000	14.00	160.000	26.000	100.000
M20	2.500	16.000	12.000	17.50	180.000	32.000	120.000
M24	3.000	18.000	14.500	21.00	200.000	36.000	120.000
M27	3.000	20.000	16.000	24.00	225.000	36.000	145.000
M30	3.500	22.000	18.000	26.50	250.000	40.000	160.000
M33	3.500	25.000	20.000	29.50	275.000	40.000	170.000
M36	4.000	28.000	22.000	32.00	300.000	50.000	180.000
M39	4.000	32.000	24.000	35.00	325.000	50.000	210.000

Machine taps for ISO metric threads

P		Cutting data page 463/464	
M			
K	○		
N	≥ 7		
S			
H			

Tool material	HSS-E	
Tolerance on Ø	ISO2/6H	ISO3/6G
Surface	◯	◯
Type	Ms	Ms
Form	E	E
Internal cooling		







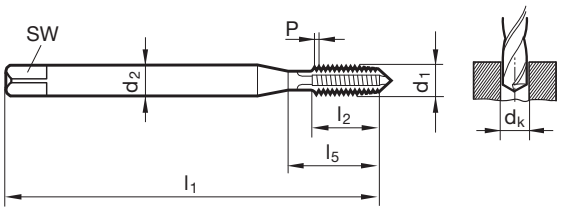
DIN 2184-1 DIN 371 Article no. **800** **1084**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Machine taps for ISO metric threads

Tool material	**HSS-E**
Tolerance on Ø	ISO2/6H
Surface	●
Type	H AZ
Form	C
Internal cooling	

P	
M	
K	
N	○
S	
H	





DIN 2184-1 DIN 371 Article no. **788**

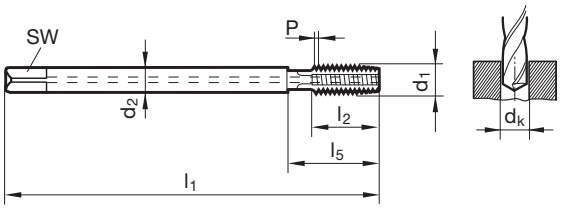
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	45.000	8.000	13.500
M 2.2	0.450	2.800	2.100	1.75	45.000	9.000	14.500
M 2.5	0.450	2.800	2.100	2.05	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	2.90	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000

Oil feed taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	A+M
Type	N AZ
Form	E
Internal cooling	

P
M
K
N ○
S
H

Cutting data page 464





DIN 2184-1 DIN 376 Article no. **2899**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	3.500	2.700	4.20	70.000	14.000	25.000
M6	1.000	4.500	3.400	5.00	80.000	16.000	30.000
M8	1.250	6.000	4.900	6.80	90.000	17.000	35.000
M10	1.500	7.000	5.500	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000

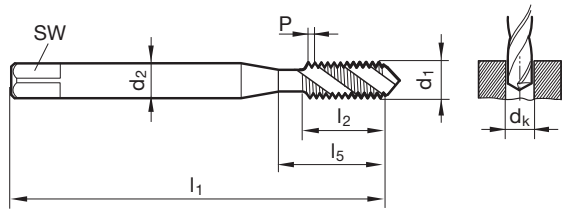
Machine taps for ISO metric threads

P	•	
M	•	
K	○	
N	•	
S	○	
H		

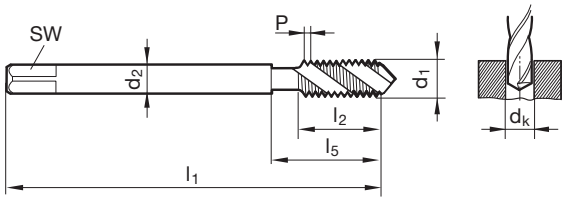
Cutting data page 465

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		

DIN 371



DIN 376







DIN 2184-1 DIN 371 — Article no. **767** **1152**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.00	80.000	11.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	14.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	16.000	39.000

DIN 2184-1 DIN 376 — Article no. **1098** **1293**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	12.00	110.000	20.000	53.000
M16	2.000	12.000	9.000	14.00	110.000	20.000	54.000
M20	2.500	16.000	12.000	17.50	140.000	25.000	62.000

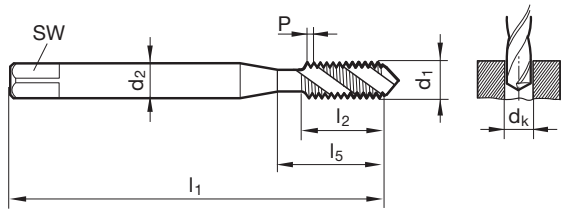
Machine taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	C
Type	VA R50	VA R50
Form	C	C
Internal cooling		

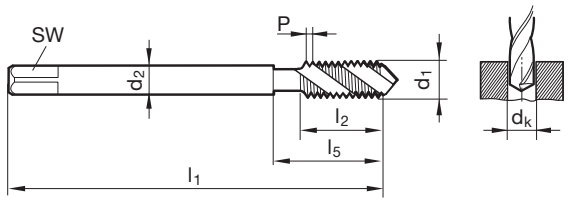
P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 465

DIN 371



DIN 376





DIN 2184-1 DIN 371 — Article no. **761** **1139**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	2.500	18.000
M4	0.700	4.500	3.400	3.30	63.000	3.500	21.000
M5	0.800	6.000	4.900	4.20	70.000	4.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	5.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	6.300	35.000
M10	1.500	10.000	8.000	8.50	100.000	7.500	39.000

DIN 2184-1 DIN 376 — Article no. **763** **1142**

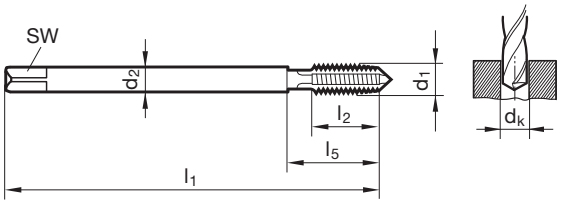
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	10.20	110.000	8.800	63.000
M14	2.000	11.000	9.000	12.00	110.000	10.000	58.000
M16	2.000	12.000	9.000	14.00	110.000	10.000	58.000
M20	2.500	16.000	12.000	17.50	140.000	12.500	85.000

Machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	ISO2/6H
Surface	◯
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	•
K	
N	•
S	
H	

Cutting data page 463





DIN 2184-1 DIN 374 Article no. **1873**

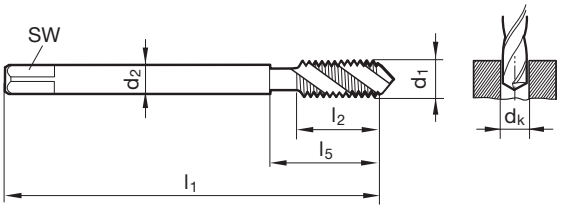
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 7 X0.75	5.500	4.300	6.20	80.000	13.000	30.000	7.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	22.50	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	22.00	140.000	28.000	48.000	24.008

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	ISO2/6H
Surface	◯
Type	VA R40
Form	C
Internal cooling	

P	
M	•
K	
N	•
S	
H	

Cutting data page 464





DIN 2184-1 DIN 374 Article no. **936**

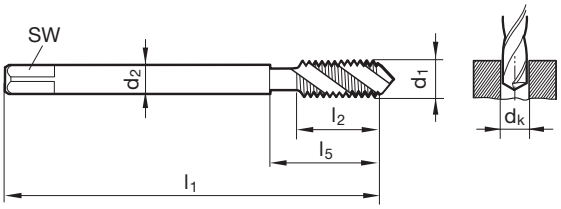
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	ISO2/6H	ISO2/6H
Surface	S	C
Type	N R50	N R50
Form	C	C
Internal cooling		

P	•
M	•
K	○
N	○
S	○
H	

Cutting data page 465





DIN 2184-1 DIN 374 — Article no. **1100** **1294**

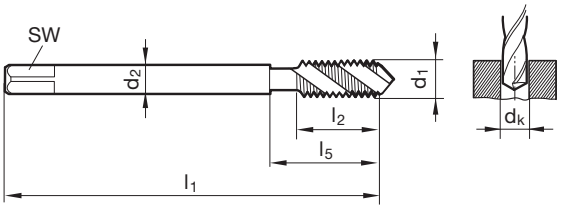
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	16.000	44.000	20.007

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	S	C
Type	VA R50	VA R50
Form	C	C
Internal cooling		

P	•
M	•
K	○
N	•
S	○
H	

Cutting data page 465







DIN 2184-1 DIN 374 — Article no. **764** **1144**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	5.000	44.000	8.005
M8 x 1	6.000	4.900	7.00	90.000	5.000	47.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	47.000	10.005
M10 x 1	7.000	5.500	9.00	90.000	5.000	44.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	5.000	53.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	7.500	53.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	7.500	48.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	7.500	48.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	7.500	58.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	7.500	70.000	20.007

Oil feed taps for ISO metric fine threads

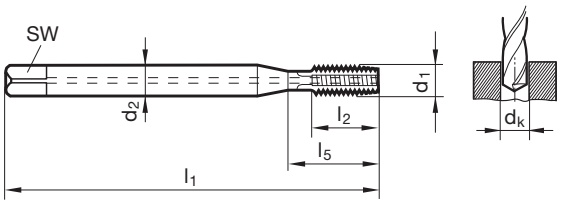


P	
M	
K	•
N	≥ 7
S	
H	

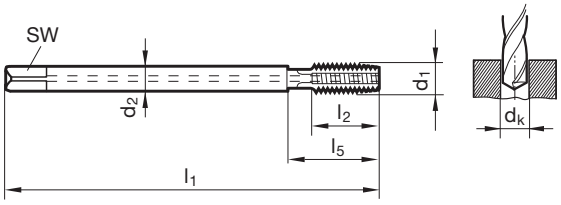
Cutting data page 463/465

Tool material	Solid carbide	
Tolerance on Ø	6HX	6HX
Surface	◯	◯
Type	H	H
Form	C	C
Internal cooling		

DIN 371



DIN 374







DIN 2184-1 DIN 371 — Article no. **972** **1861**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374 — Article no. **974** **1860**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	45.000	20.007

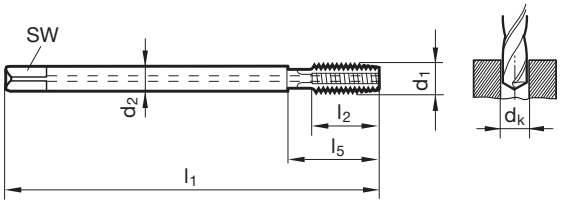
Oil feed taps for ISO metric fine threads



P	
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	◯
Type	H
Form	E
Internal cooling	





DIN 2184-1 ~DIN 371/~DIN 374 Article no. **1009**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005
M12 x 1	9.000	7.000	11.00	100.000	22.000	40.000	12.005
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

Oil feed taps for ISO metric fine threads

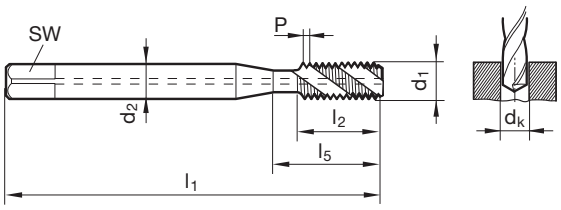
h6

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	◯
Type	N R15
Form	C
Internal cooling	

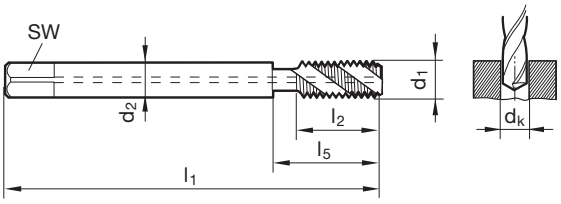
P	
M	
K	○
N	≥ 7
S	
H	

Cutting data page 465

~ DIN 371



DIN 374





DIN 2184-1 DIN 371 Article no. **977**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	4.500	3.400	3.50	63.000	10.000	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	12.000	30.000	6.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374 Article no. **978**

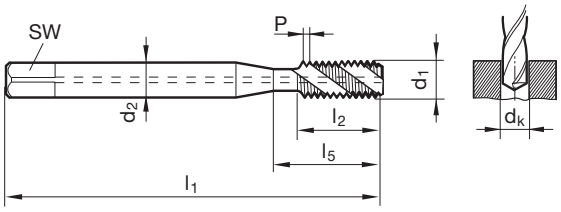
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007
M20 X1.5	16.000	12.000	18.50	125.000	25.000	45.000	20.007

Oil feed taps for ISO metric threads

h6

P	
M	
K	
N	≥ 7
S	
H	

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	M
Type	N R15
Form	C
Internal cooling	





DIN 2184-1 DIN 371 Article no. **2516**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M5	6.000	4.900	4.20	70.000	10.000	25.000	5.000
M6	6.000	4.900	5.00	80.000	12.000	30.000	6.000
M8	8.000	6.200	6.80	90.000	16.000	35.000	8.000
M10	10.000	8.000	8.50	100.000	18.000	39.000	10.000

Oil feed taps for ISO metric fine threads

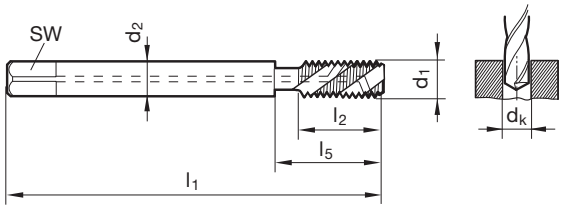
h6

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	◯
Type	N L15
Form	D
Internal cooling	

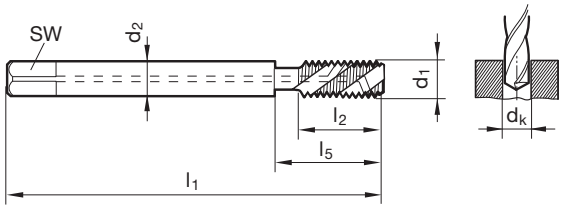
P	
M	
K	
N	≥ 7
S	
H	

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~ DIN 371



DIN 374





DIN 2184-1 DIN 371 Article no. **975**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 4 X0.5	4.500	3.400	3.50	63.000	10.000	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	12.000	30.000	6.003
M8 x 1	8.000	6.200	7.00	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	18.000	35.000	10.005

DIN 2184-1 DIN 374 Article no. **976**

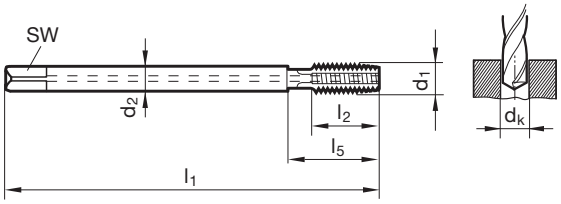
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.5	9.000	7.000	10.50	100.000	22.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	22.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	16.50	110.000	24.000	45.000	18.007

Oil feed taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	C
Type	H
Form	C
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

Cutting data page 465





DIN 2184-1 DIN 374 Article no. **1090**

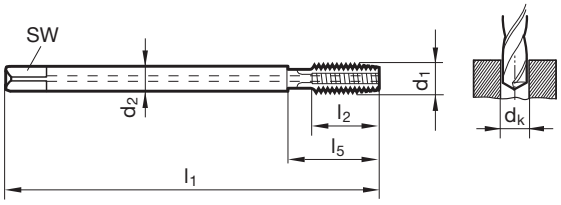
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 5 X0.5	3.500	2.700	4.50	70.000	10.000	25.000	5.003
M 6 X0.5	4.500	3.400	5.50	80.000	13.000	30.000	6.003
M 6 X0.75	4.500	3.400	5.20	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.20	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

Oil feed taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	C
Type	H
Form	E
Internal cooling	

P	≤ 1200
M	
K	•
N	≥ 7
S	
H	

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DIN 2184-1 DIN 374 Article no. **1007**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.00	90.000	16.000	35.000	8.005
M9 x 1	7.000	5.500	8.00	90.000	16.000	35.000	9.005
M10 x 1	7.000	5.500	9.00	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	8.80	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.00	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	10.80	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	10.50	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.00	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	12.80	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	12.50	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.00	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	14.50	100.000	22.000	44.000	16.007

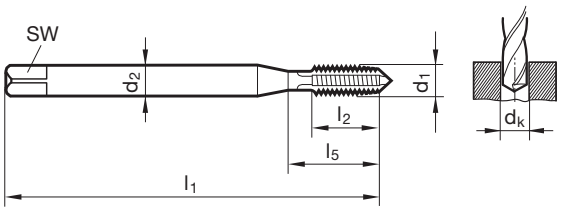
Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	◯
Type	N
Form	B
Internal cooling	⊠

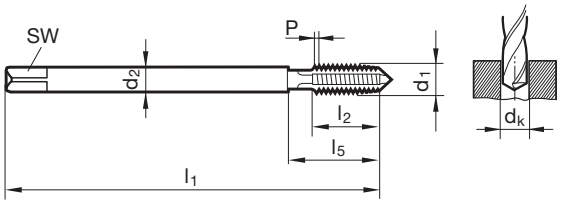
P	≤ 1000
M	•
K	
N	•
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **1980**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **1985**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	35.000	62.000	22.225
1 - 8	18.000	14.500	22.25	160.000	38.000	73.000	25.400

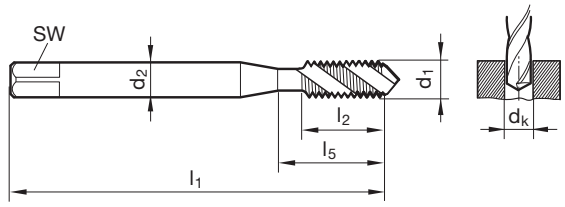
Machine taps for UNC-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	◯
Type	VA R40
Form	C
Internal cooling	

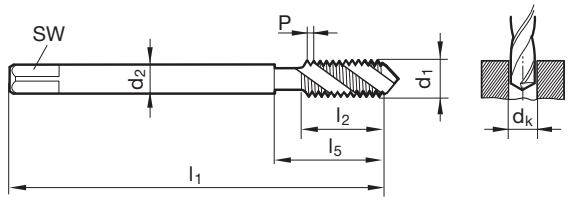
P	
M	•
K	
N	•
S	
H	

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~ DIN 371



~ DIN 376





DIN 2184-1 ~DIN 371 Article no. **1981**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
2 - 56	2.800	2.100	1.85	45.000	5.000	14.500	2.184
4 - 40	3.500	2.700	2.35	56.000	7.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	7.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	8.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	8.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	11.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	11.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	13.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	14.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	16.000	39.000	9.525

DIN 2184-1 ~DIN 376 Article no. **1986**

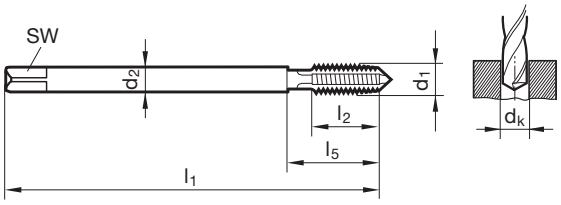
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	9.40	100.000	18.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	20.000	49.000	12.700
9/16 - 12	11.000	9.000	12.20	110.000	21.000	53.000	14.288
5/8 - 11	12.000	9.000	13.50	110.000	24.000	53.000	15.875
3/4 - 10	14.000	11.000	16.50	125.000	25.000	62.000	19.050
7/8 - 9	18.000	14.500	19.50	140.000	28.000	62.000	22.225

Machine taps for UNF-threads

Tool material	HSS-E
Tolerance on Ø	2B
Surface	◯
Type	N
Form	B
Internal cooling	✕

P	≤ 1000
M	•
K	
N	•
S	
H	

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DIN 2184-1 ~DIN 374 Article no. **1990**

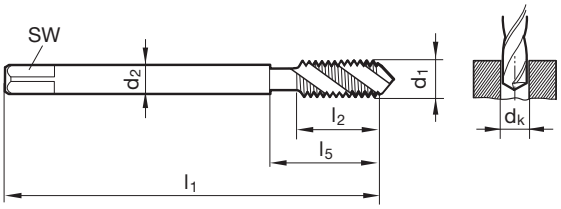
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.10	70.000	14.000	25.000	4.826
1/4 - 28	4.500	3.400	5.50	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	18.000	35.000	9.525

Machine taps for UNF-threads

Tool material	**HSS-E**
Tolerance on Ø	2B
Surface	◯
Type	VA R40
Form	C
Internal cooling	

P	
M	•
K	
N	•
S	
H	

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DIN 2184-1 ~DIN 374 Article no. **2867**

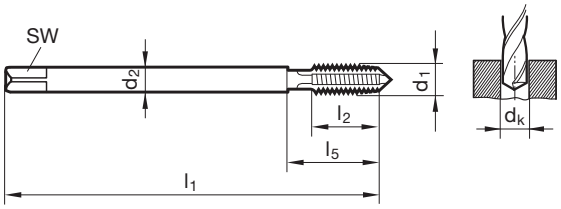
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
1/4 - 28	4.500	3.400	5.50	80.000	9.000	30.000	6.350
5/16 - 24	6.000	4.900	6.90	90.000	11.000	35.000	7.938
3/8 - 24	7.000	5.500	8.50	90.000	11.000	35.000	9.525
1/2 - 20	9.000	7.000	11.50	100.000	13.000	40.000	12.700
7/8 - 14	18.000	14.500	20.40	125.000	19.000	44.000	22.225
1 - 12	18.000	14.500	23.25	140.000	22.000	50.000	25.400

Machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	◯
Type	N
Form	B
Internal cooling	

P	≤ 1000
M	•
K	
N	•
S	
H	

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DIN 2184-1 DIN 5156 Article no. **967**

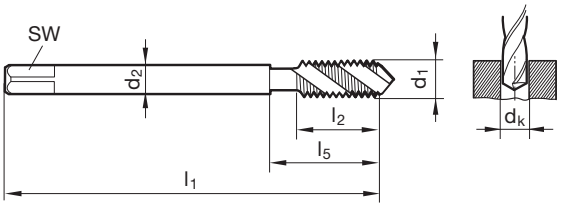
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	24.50	140.000	28.000	53.000	26.441
G7/8	14.000	22.000	18.000	28.25	150.000	28.000	53.000	30.201

Machine taps for BSP-threads

Tool material	HSS-E-PM
Tolerance on Ø	
Surface	◯
Type	VA R40
Form	C
Internal cooling	

P	
M	•
K	
N	•
S	
H	

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DIN 2184-1 DIN 5156 Article no. **939**

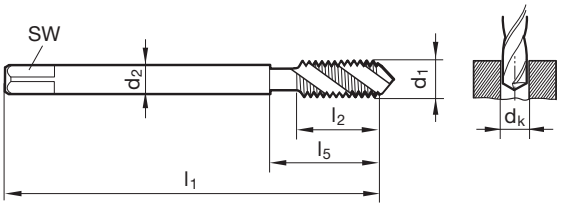
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	18.000	44.000	20.955

Machine taps for BSP-threads

Tool material	HSS-E-PM
Tolerance on Ø	
Surface	S
Type	VA R50
Form	C
Internal cooling	

P	•
M	•
K	○
N	•
S	○
H	

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DIN 2184-1 DIN 5156 Article no. **4159**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	6.80	90.000	4.500	47.000	7.723
G1/8	28.000	7.000	5.500	8.80	90.000	4.500	47.000	9.728
G1/4	19.000	11.000	9.000	11.80	100.000	6.700	48.000	13.157
G3/8	19.000	12.000	9.000	15.25	100.000	6.700	48.000	16.662
G1/2	14.000	16.000	12.000	19.00	125.000	9.100	70.000	20.955



Aluminum, non-ferrous metals and plastics

FLUTELESS TAPS

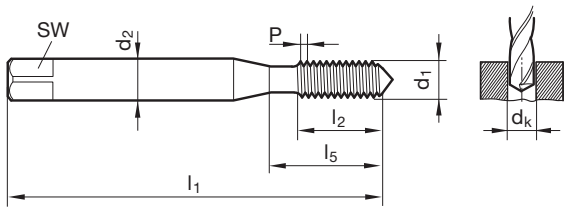
N

Fluteless machine taps for ISO metric threads

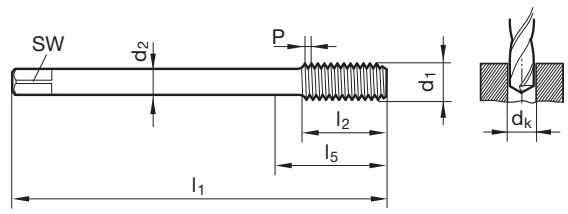
P	•	Cutting data page 466
M	•	
K		
N	○	
S		
H		

Tool material	HSS-E	HSS-E-PM	
Tolerance on Ø	6HX	6HX	6HX
Surface	S	S	Cb
Type	N	N	N
Form	C	C	C
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **921** **1255** **1347**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.90	40.000	4.000	
M 1.2	0.250	2.500	2.100	1.10	40.000	4.800	
M 1.4	0.300	2.500	2.100	1.25	40.000	5.600	
M 1.6	0.350	2.500	2.100	1.45	40.000	6.400	
M 1.7	0.350	2.500	2.100	1.55	40.000	6.800	
M 1.8	0.350	2.500	2.100	1.65	40.000	7.300	
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **925** **1256** **1566**

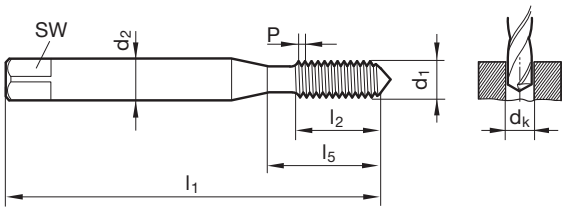
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Fluteless machine taps for ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 371 Article no. **920**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

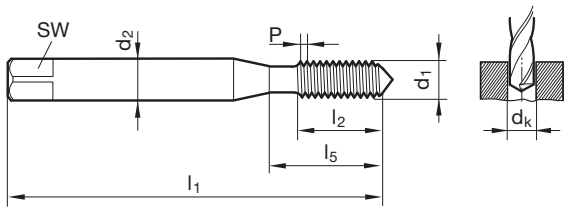
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	S	Cb
Type	N	N
Form	C	C
Internal cooling		

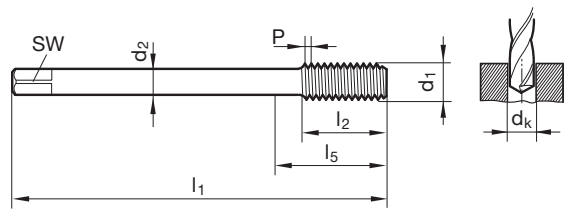
P	•
M	•
K	
N	○
S	
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **903** **1565**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.85	45.000	8.000	13.500
M 2.5	0.450	2.800	2.100	2.30	50.000	9.000	14.500
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 Article no. **952** **1567**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

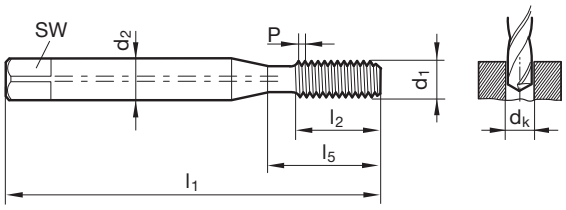
Oil feed fluteless taps f. ISO metric threads



P	•
M	•
K	
N	≥ 7
S	○
H	

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Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	





DIN 2174 ~DIN 371/~DIN 376 Article no. **2518**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

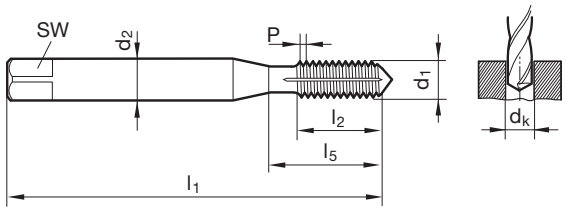
Fluteless machine taps for ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	6GX	6HX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

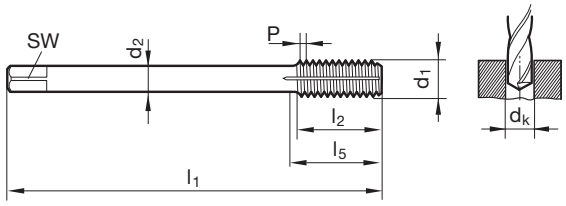
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **918** **919** **2012**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M 3.5	0.600	4.000	3.000	3.25	56.000	12.000	20.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **922** **923** **2013**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M6	1.000	4.500	3.400	5.55	80.000	16.000	30.000
M8	1.250	6.000	4.900	7.40	90.000	17.000	35.000
M10	1.500	7.000	5.500	9.30	100.000	20.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000
M22	2.500	18.000	14.500	20.90	140.000	32.000	62.000
M24	3.000	18.000	14.500	22.70	160.000	36.000	73.000
M27	3.000	20.000	16.000	25.70	160.000	36.000	73.000
M30	3.500	22.000	18.000	28.50	180.000	40.000	85.000
M33	3.500	25.000	20.000	31.50	180.000	40.000	91.000
M36	4.000	28.000	22.000	34.30	200.000	50.000	102.000
M39	4.000	32.000	24.000	37.30	200.000	50.000	107.000

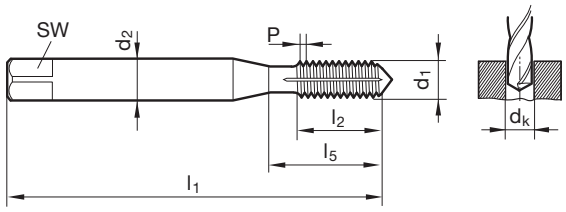
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

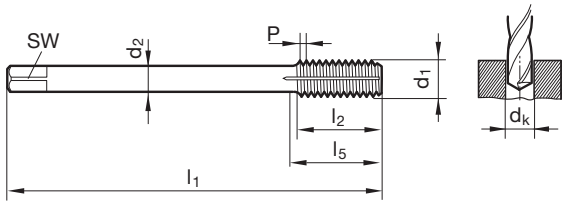
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

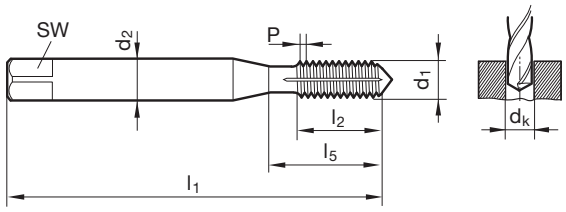
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

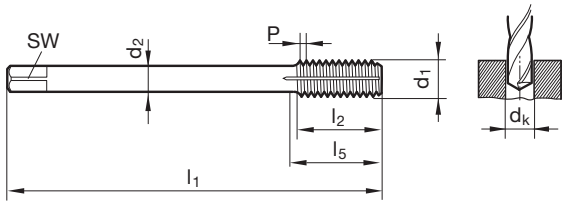
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 467

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 Article no. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

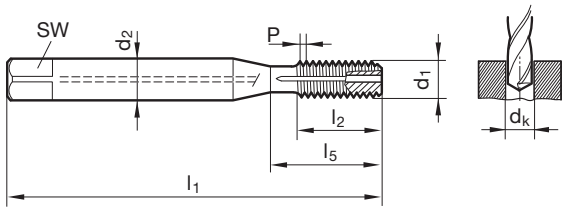
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E		
Tolerance on Ø	6HX	6GX	6HX
Surface	S	S	C
Type	N	N	N
Form	C	C	C
Internal cooling			

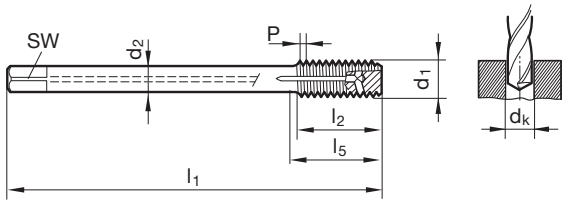
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **2442** **2443** **2446**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 — Article no. **2444** **2445** **2448**

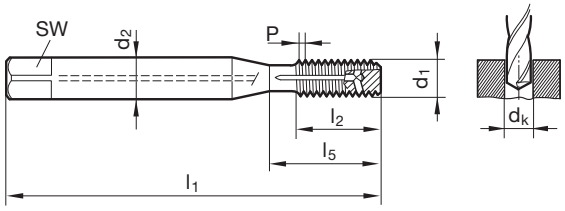
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

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DIN 2174 ~DIN 371 Article no. **2447**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

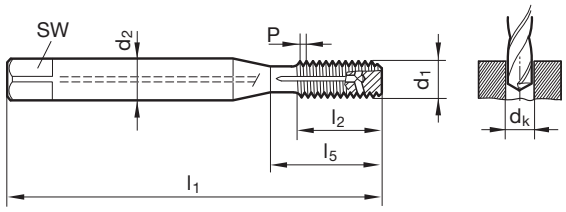
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

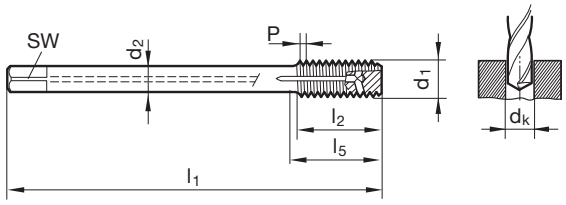
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **342**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

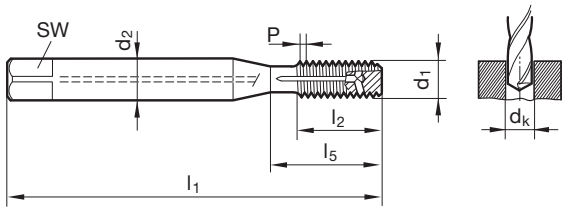
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

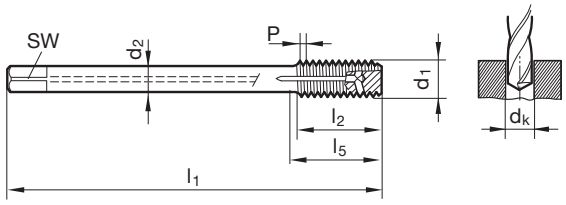
P	•
M	•
K	
N	≥ 7
S	•
H	

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~ DIN 371



~ DIN 376







DIN 2174 ~DIN 371 — Article no. **1270** **1725**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1271** **1727**

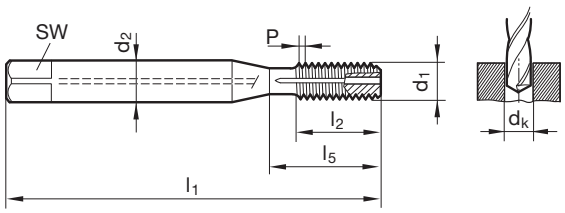
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	Cb
Type	N
Form	C
Internal cooling	

P	
M	
K	
N	•
S	
H	

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DIN 2174 ~DIN 371/~DIN 376 Article no. **2515**

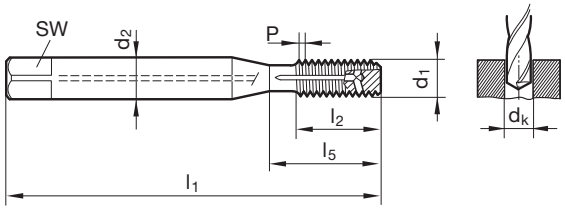
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

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DIN 2174 ~DIN 371 Article no. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

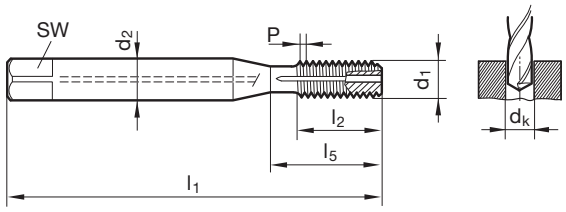
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	S
Type	N
Form	E
Internal cooling	

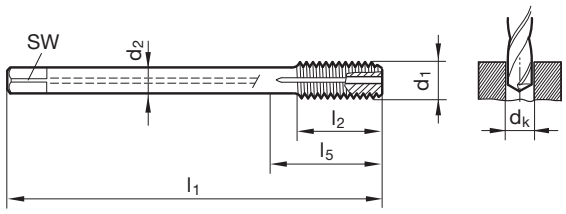
P	•
M	•
K	
N	○
S	•
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 Article no. **1728**

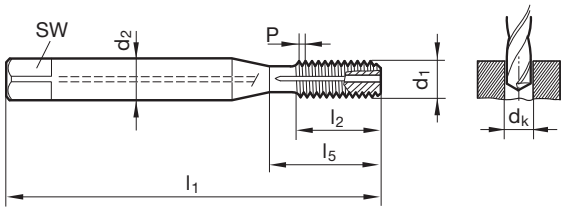
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	Cb
Type	N
Form	C
Internal cooling	

P	
M	
K	
N	•
S	
H	

Cutting data page 467





DIN 2174 ~DIN 371/~DIN 376 Article no. **4146**

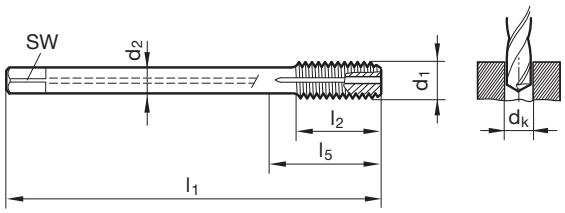
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 467





Company std. Company std. Article no. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

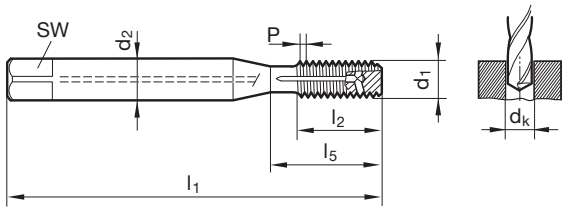
Oil feed fluteless taps f. ISO metric threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

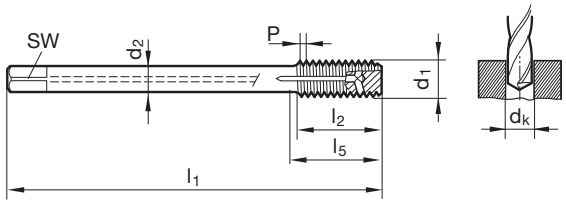
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 467

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **1931**

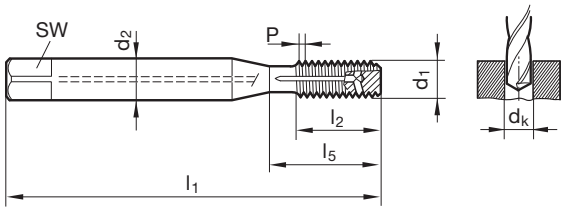
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 467





DIN 2174 ~DIN 371 Article no. **1927**

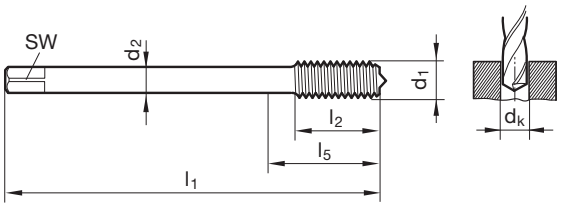
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 466





DIN 2174 ~DIN 374 Article no. **929**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

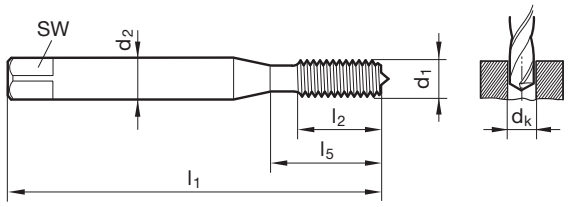
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

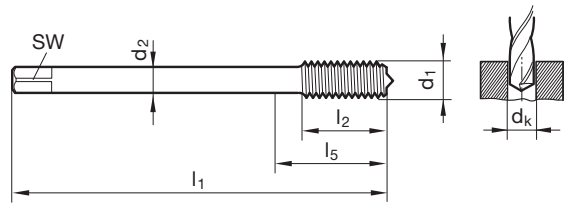
P	•
M	•
K	
N	○
S	
H	

Cutting data page 466

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1257**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1258**

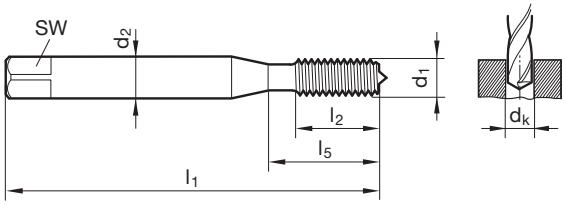
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	Cb
Type	N
Form	C
Internal cooling	

P	
M	
K	
N	•
S	
H	

Cutting data page 466





DIN 2174 ~DIN 371 Article no. **1568**

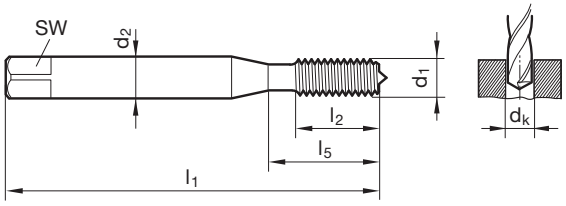
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 371 Article no. **1740**

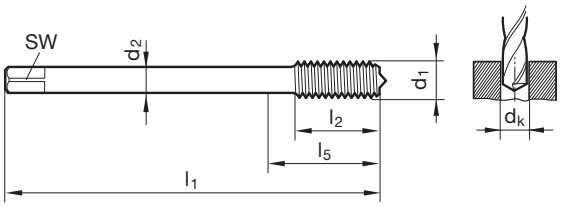
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

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DIN 2174 ~DIN 374 Article no. **928**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007

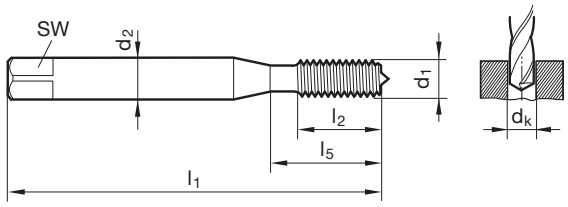
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	Cb
Type	N
Form	C
Internal cooling	

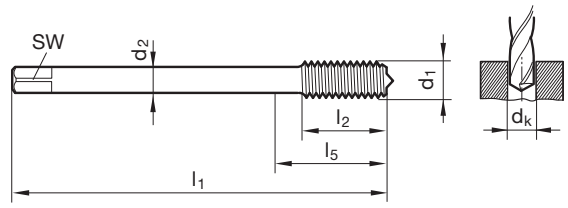
P	
M	
K	
N	•
S	
H	

Cutting data page 466

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1569**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1580**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

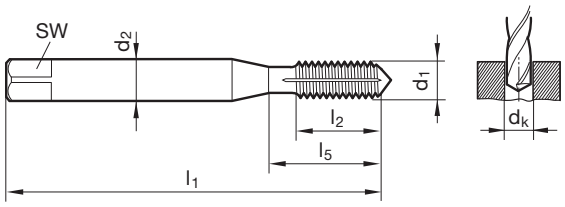
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

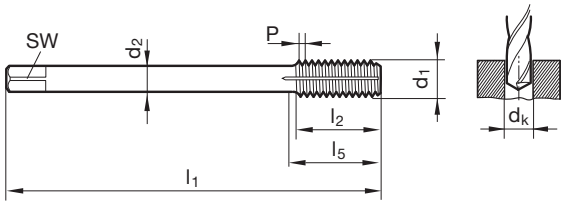
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 467

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1275**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	6.000	4.900	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	8.000	6.200	7.65	80.000	14.000	30.000	8.004
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 Article no. **927**

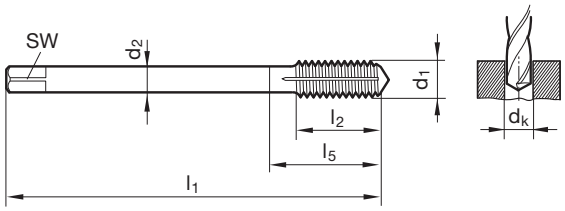
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 x 1	14.000	11.000	17.55	110.000	25.000	44.000	18.005
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	○
H	

Cutting data page 467





DIN 2174 ~DIN 374 Article no. **2008**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 6 X0.75	4.500	3.400	5.65	80.000	13.000	30.000	6.004
M 8 X0.75	6.000	4.900	7.65	80.000	14.000	30.000	8.004
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 X1.25	7.000	5.500	9.40	100.000	20.000	39.000	10.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

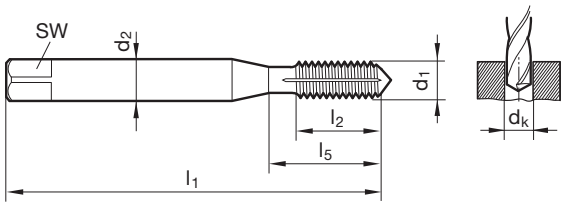
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	S
Type	N
Form	C
Internal cooling	

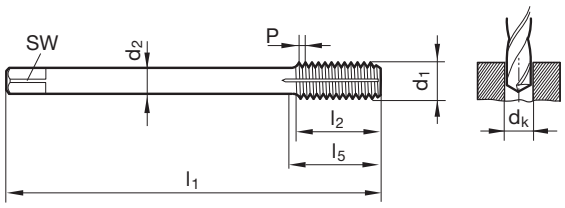
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 467

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1277**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **926**

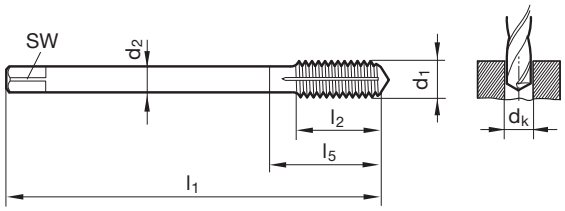
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	16.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	16.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 x 1	12.000	9.000	15.55	100.000	22.000	44.000	16.005
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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DIN 2174 ~DIN 374 Article no. **333**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

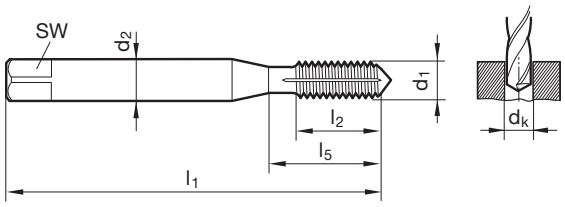
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

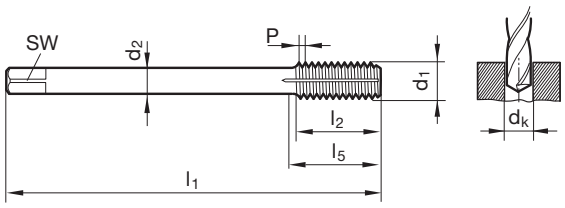
P	•
M	•
K	
N	○
S	○
H	

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~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1268**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1269**

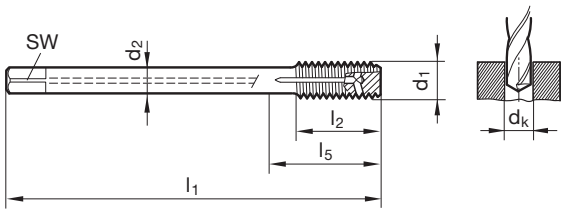
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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DIN 2174 ~DIN 374 Article no. **338**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

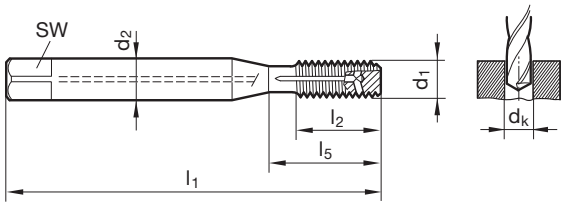
Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

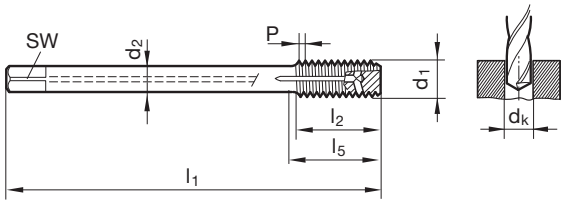
P	•
M	•
K	
N	≥ 7
S	•
H	

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~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1272** **1729**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1273** **1731**

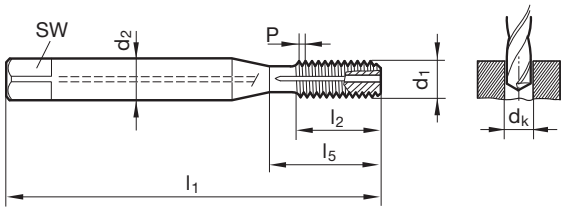
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6HX
Surface	Cb
Type	N
Form	C
Internal cooling	

P	
M	
K	
N	•
S	
H	

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DIN 2174 ~DIN 371/~DIN 374 Article no. **4147**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	11.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

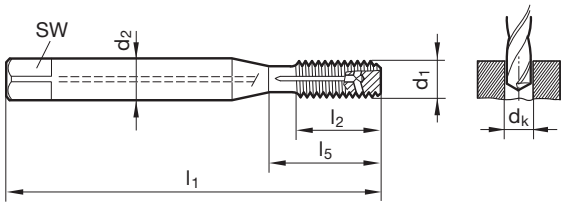
Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

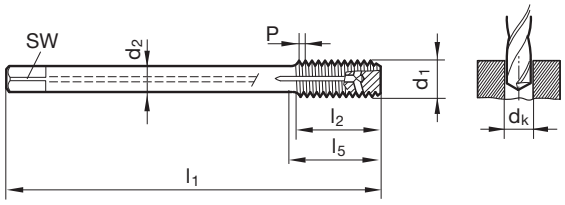
P	•
M	•
K	
N	≥ 7
S	•
H	

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~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1716** **1732**

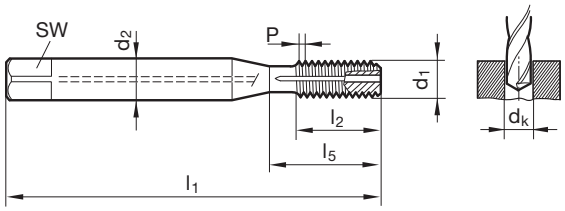
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E
Tolerance on Ø	6GX
Surface	Cb
Type	N
Form	C
Internal cooling	

P	
M	
K	
N	•
S	
H	

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DIN 2174 ~DIN 371/~DIN 374 Article no. **4151**

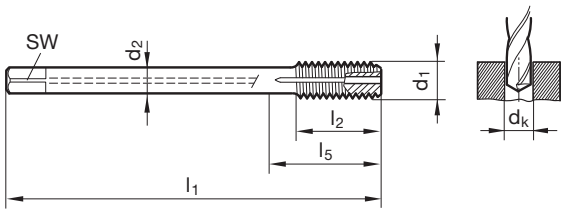
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	11.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	14.000	39.000	10.006
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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Company std. Article no. **4145**

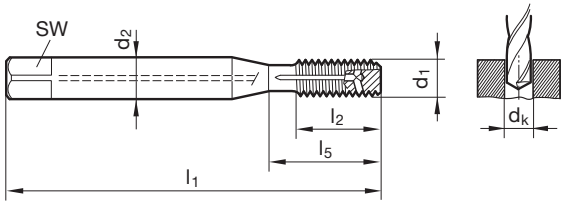
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

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DIN 2174 ~DIN 371/~DIN 376 Article no. **1581**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007

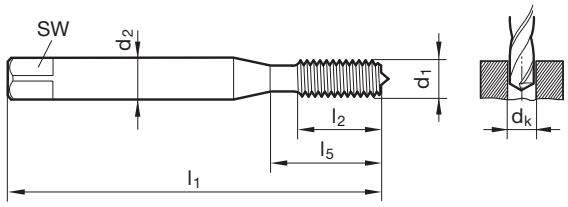
Fluteless machine taps for UNC-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

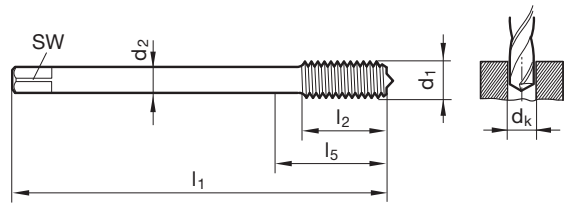
P	•
M	•
K	
N	○
S	
H	

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~ DIN 371



~ DIN 374





DIN 2184-1 ~DIN 371 — Article no. **2273** **1582**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.55	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.90	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	3.15	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.80	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	4.35	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	5.00	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.75	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	7.30	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.80	100.000	20.000	39.000	9.525

DIN 2184-1 ~DIN 376 — Article no. **2274** **1583**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
7/16 - 14	8.000	6.200	10.30	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	11.80	110.000	25.000	49.000	12.700
9/16 - 12	11.000	9.000	13.30	110.000	28.000	53.000	14.288
5/8 - 11	12.000	9.000	14.80	110.000	30.000	53.000	15.875
3/4 - 10	14.000	11.000	17.90	125.000	33.000	62.000	19.050
7/8 - 9	18.000	14.500	21.00	140.000	35.000	62.000	22.225

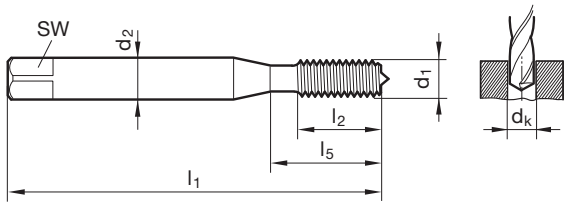
Fluteless machine taps for UNF-threads

Tool material	HSS-E	
Tolerance on Ø	2BX	2BX
Surface	S	S
Type	N	N
Form	C	C
Internal cooling		

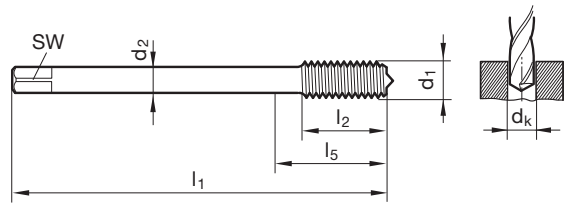
P	•
M	•
K	
N	○
S	
H	

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~ DIN 371



~ DIN 374





DIN 2184-1 ~DIN 371 — Article no. **1283** **1584**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.60	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.90	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	3.20	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.85	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.45	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	5.10	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.95	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	7.45	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	9.05	90.000	18.000	35.000	9.525

DIN 2184-1 ~DIN 374 — Article no. **1585** **2275**

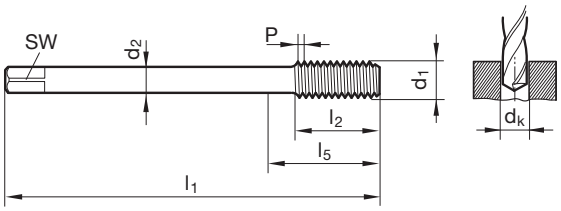
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
10 - 32	3.500	2.700	4.45	70.000	14.000	25.000	4.826
12 - 28	4.000	3.000	5.10	80.000	16.000	30.000	5.486
1/4 - 28	4.500	3.400	5.95	80.000	16.000	30.000	6.350
5/16 - 24	6.000	4.900	7.45	90.000	18.000	35.000	7.938
3/8 - 24	7.000	5.500	9.05	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	10.55	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	12.10	100.000	20.000	40.000	12.700
9/16 - 18	11.000	9.000	13.65	100.000	22.000	40.000	14.288
5/8 - 18	12.000	9.000	15.25	100.000	22.000	44.000	15.875
3/4 - 16	14.000	11.000	18.35	110.000	25.000	44.000	19.050
7/8 - 14	18.000	14.500	21.40	125.000	25.000	44.000	22.225
1 - 12	18.000	14.500	24.45	140.000	28.000	50.000	25.400

Fluteless machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	
H	

Cutting data page 466





DIN 2184-1 DIN 2189 Article no. **966**

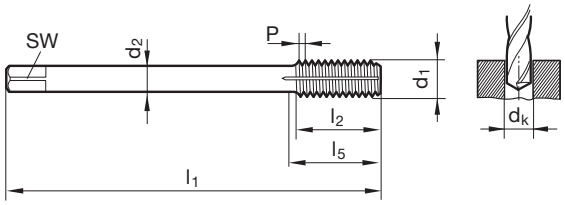
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	30.000	56.000	33.249
G1 1/4	11.000	32.000	24.000	40.75	170.000	30.000	57.000	41.910

Fluteless machine taps for BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 467





DIN 2184-1 DIN 2189 Article no. **1586**

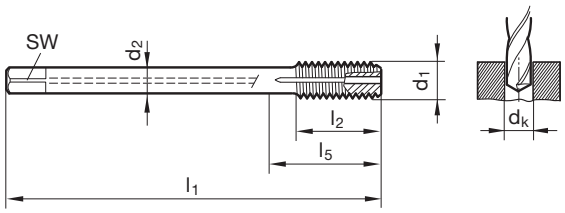
d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	18.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	18.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	20.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	22.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	25.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	28.000	53.000	26.441

Oil feed fluteless taps f. BSP-threads

Tool material	HSS-E
Tolerance on Ø	
Surface	Cb
Type	N
Form	C
Internal cooling	

P	
M	
K	
N	•
S	
H	

Cutting data page 467





DIN 2184-1 DIN 2189 Article no. **4152**

d1	P	d2	SW	dk	l1	l2	l5	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	
G1/16	28.000	6.000	4.900	7.30	90.000	11.000	30.000	7.723
G1/8	28.000	7.000	5.500	9.30	90.000	11.000	35.000	9.728
G1/4	19.000	11.000	9.000	12.50	100.000	14.000	40.000	13.157
G3/8	19.000	12.000	9.000	16.00	100.000	14.000	44.000	16.662
G1/2	14.000	16.000	12.000	20.00	125.000	18.000	44.000	20.955
G3/4	14.000	20.000	16.000	25.50	140.000	20.000	53.000	26.441
G1	11.000	25.000	20.000	32.00	160.000	24.000	56.000	33.249



Aluminum, non-ferrous metals and plastics

THREAD MILLING CUTTERS

N

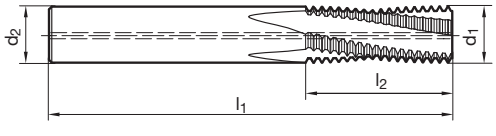
Thread milling cutters without chamfer for ISO metric threads

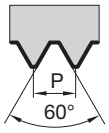
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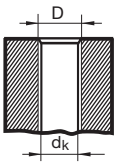
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide		
Surface	C	C	◯
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3737	3743	3734

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007

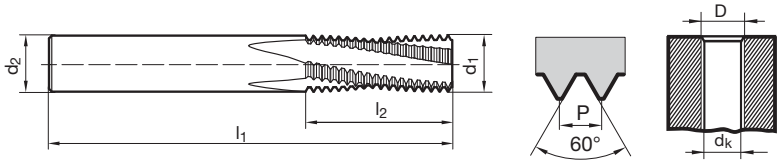
Thread milling cutters without chamfer for ISO metric threads

2xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW





Company std.	Article no.	4132	4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000

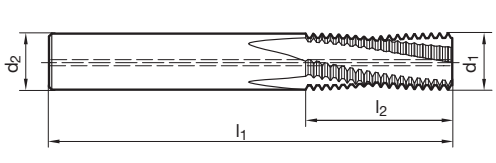
Thread milling cutters without chamfer for ISO metric threads

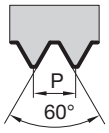
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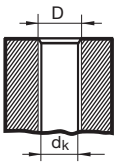
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3735** **3740**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

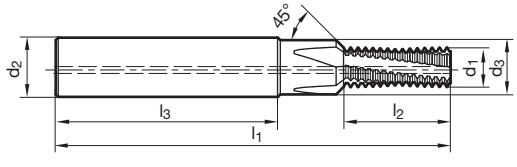
Thread milling cutters with chamfer for ISO metric threads

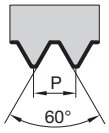
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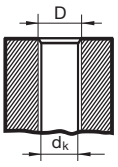
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3525	3543	3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

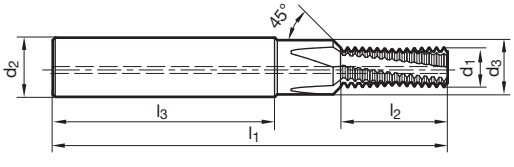
Thread milling cutters with chamfer for ISO metric threads

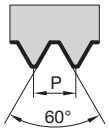
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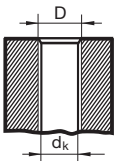
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3526	3544	3511

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

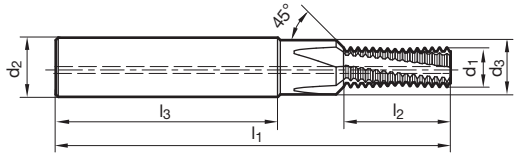
Thread milling cutters with chamfer for ISO metric threads

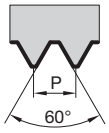
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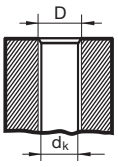
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3759	3760

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

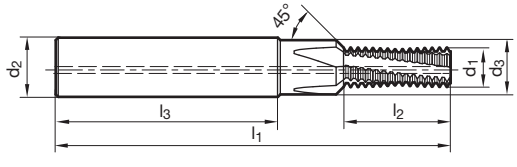
Thread milling cutters with chamfer for ISO metric fine threads

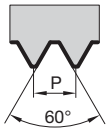
1,5xD

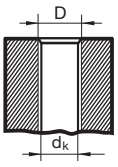
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3527	3545	3512

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

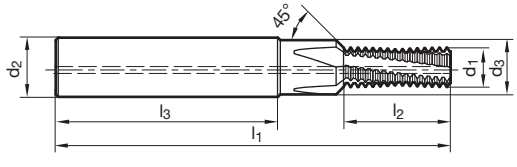
Thread milling cutters with chamfer for ISO metric fine threads

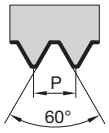
2xD

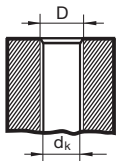
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3528	3546	3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

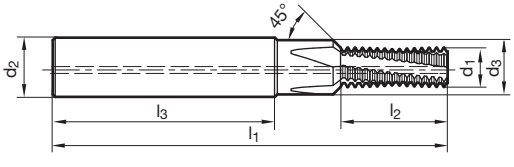
Thread milling cutters with chamfer for ISO metric fine threads

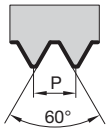
2,5xD

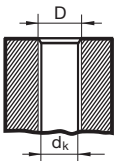
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

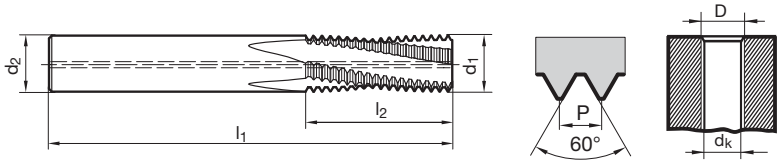
Thread milling cutters without chamfer for UNC-threads

2xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW





Company std.	Article no.	4134	4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

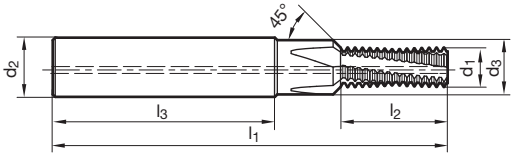
Thread milling cutters with chamfer for UNC-threads

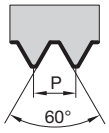
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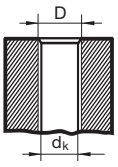
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

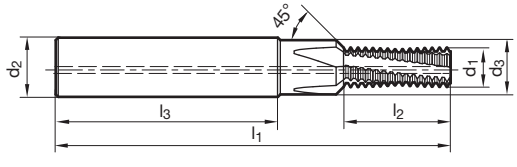
Thread milling cutters with chamfer for UNC-threads

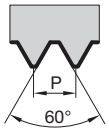
2xD

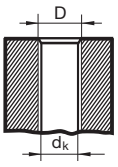
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3517	3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

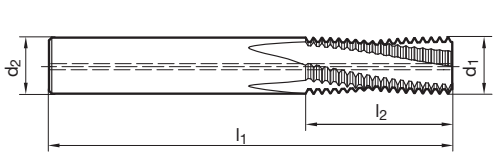
Thread milling cutters without chamfer for UNF-threads

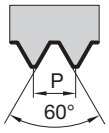
2xD

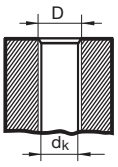
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4136** **4137**

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

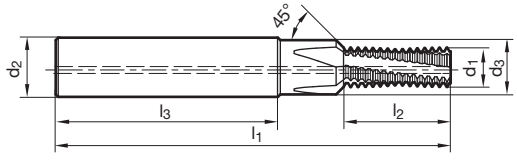
Thread milling cutters with chamfer for UNF-threads

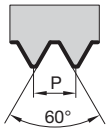
1,5xD

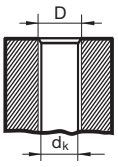
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3518** **3536**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

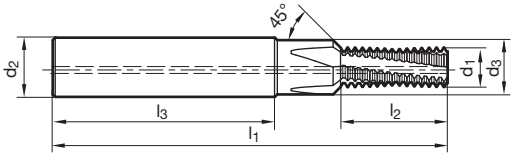
Thread milling cutters with chamfer for UNF-threads

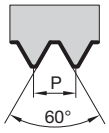
2xD

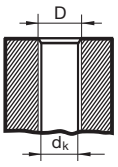
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3519	3537

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

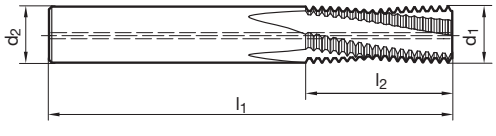
Thread milling cutters without chamfer for BSP-threads

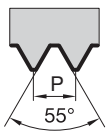
2xD

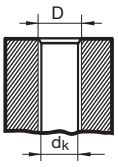
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

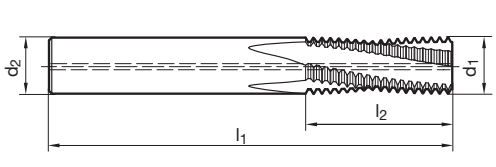
Thread milling cutters without chamfer for BSP-threads

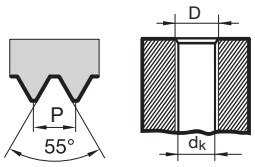
2,5xD

P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 468

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW









Company std.	Article no.	3746	3750

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

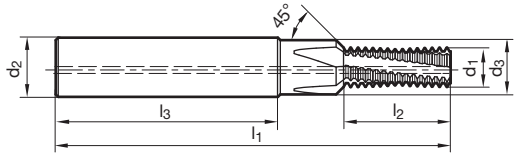
Thread milling cutters with chamfer for BSP-threads

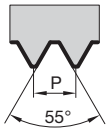
1,5xD

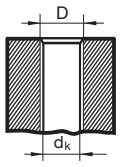
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

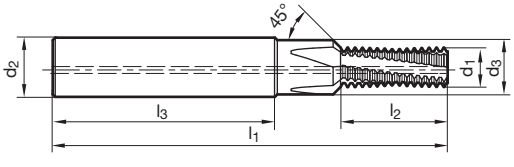
Thread milling cutters with chamfer for BSP-threads

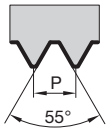
2xD

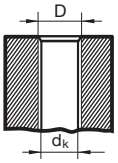
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

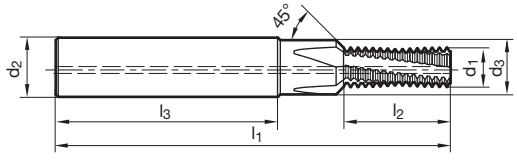
Thread milling cutters with chamfer for BSP-threads

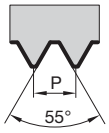
2,5xD

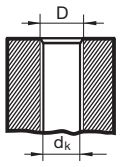
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3765	3766

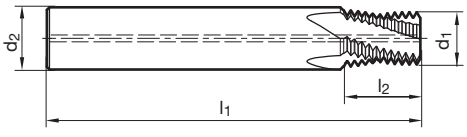
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

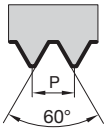
Thread milling cutters without chamfer for NPT-threads

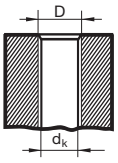
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 468











Company std.	Article no.	3753	3754

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

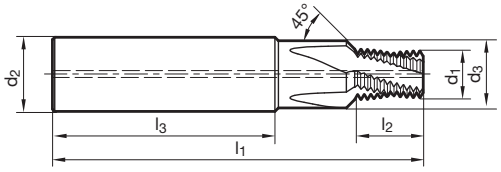
Thread milling cutters with chamfer for NPT-threads

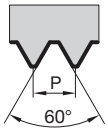
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

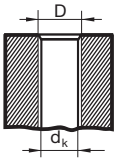
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469











Company std. Article no. **3520** **3538**

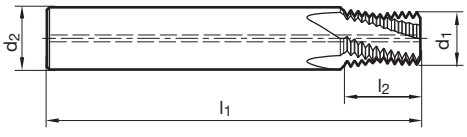
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

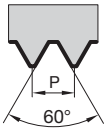
Thread milling cutters without chamfer for NPTF-threads

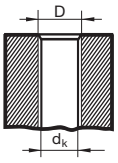
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 468











Company std.	Article no.	3756	3757

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

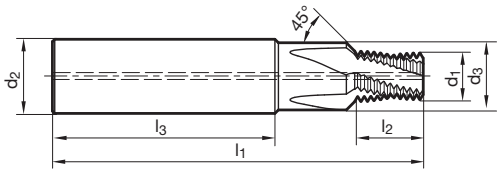
Thread milling cutters with chamfer for NPTF-threads

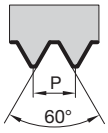
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

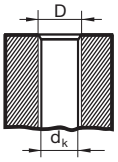
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 469











Company std.	Article no.	3521	3539

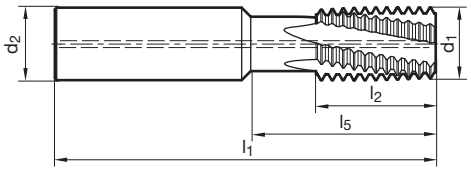
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

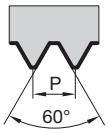
Universal thread milling cutters for ISO metric threads

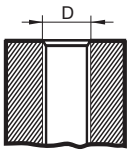
Tool material	Solid carbide		
Surface	C	C	○
Type	TMU SP	TMU SP	TMU SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 470









Company std. Article no. **3541** **3556** **3523**

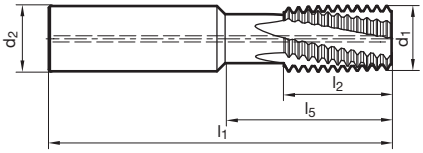
P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

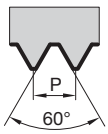
External thread milling cutters

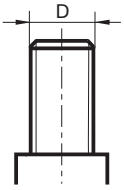
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 470











Company std. Article no. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

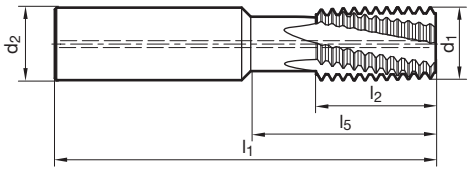
Universal thread milling cutters for UN-threads

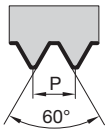
P	•
M	•
K	•
N	•
S	•
H	≤55

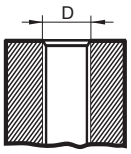
Cutting data page 470

Tool material	Solid carbide	
Surface	C	C
Type	TMU UN	TMU UN
Internal cooling		
Shank form	HA	HB

NEW











Company std. Article no. **3595** **3596**

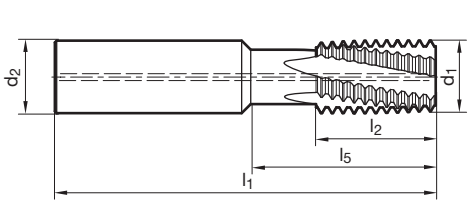
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

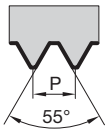
Universal thread milling cutters for BSP-threads

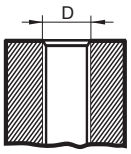
Tool material	Solid carbide		
Surface	C	C	○
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 470













Company std.	Article no.	3542	3557	3524

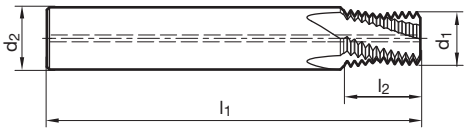
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

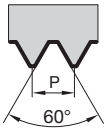
Universal thread milling cutters for NPT-threads

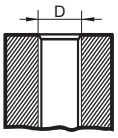
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 470











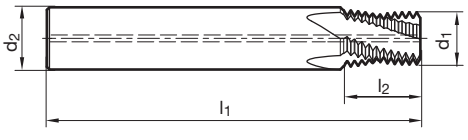
Company std. Article no. **3768** **3769**

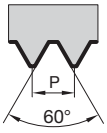
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

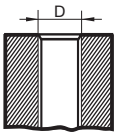
Universal thread milling cutters for NPTF-threads

P	•	Cutting data page 470
M	•	
K	•	
N	•	
S	•	
H	≤55	

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3772** **3773**

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Micro-thread milling cutters

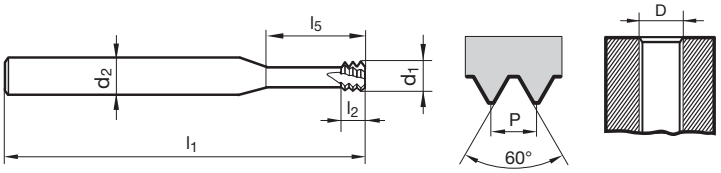
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 470

Tool material	**Solid carbide**
Surface	C
Type	SP M
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4226**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Micro-thread milling cutters

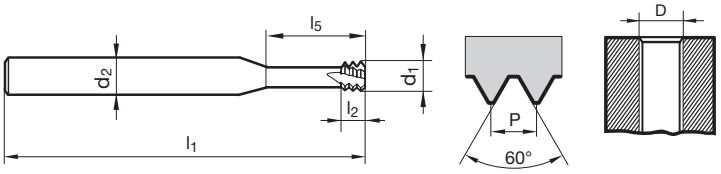
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 470

Tool material	**Solid carbide**
Surface	C
Type	SP G
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4228**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Micro-thread milling cutters

3xD

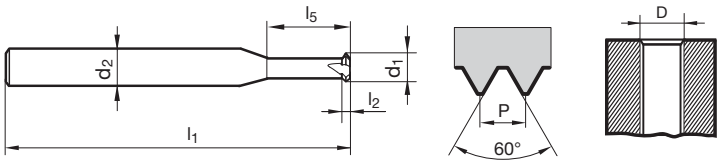
Tool material	Solid carbide
Surface	C
Type	SP M/MF
Threads	1,0
Shank form	HA

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 470

NEW





Company std. Article no. **4225**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

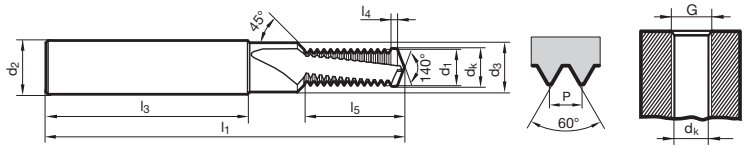
Drill thread milling cutters for ISO metric threads

1,5xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide			
Surface			C	C
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling				
Shank form	HA	HA	HA	HA





Company std.	Article no.	3774	3775	3776	3777

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.50	48.000	36.000	0.500	5.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.30	48.000	36.000	0.700	6.900	2	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	0.800	8.800	2	5.000
M6	1.000	4.750	8.000	6.600	5.00	62.000	36.000	1.000	10.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.80	74.000	40.000	1.250	13.700	2	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	1.500	18.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	1.500	20.900	2	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	1.500	23.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.00	102.000	48.000	1.500	26.000	2	16.000

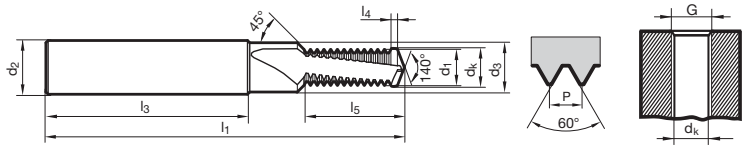
Drill thread milling cutters for ISO metric threads

2xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide			
Surface	◯	◯	C	C
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕		✕	
Shank form	HA	HA	HA	HA





Company std.	Article no.	3778	3779	3780	3781

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.50	48.000	36.000	0.500	7.000	2	3.000
M4	0.700	3.200	6.000	4.500	3.30	48.000	36.000	0.700	9.000	2	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	0.800	11.200	2	5.000
M6	1.000	4.750	8.000	6.600	5.00	62.000	36.000	1.000	13.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.80	74.000	40.000	1.250	18.700	2	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	1.500	22.500	2	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	1.500	26.100	2	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	1.500	31.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.00	102.000	48.000	1.500	36.000	2	16.000

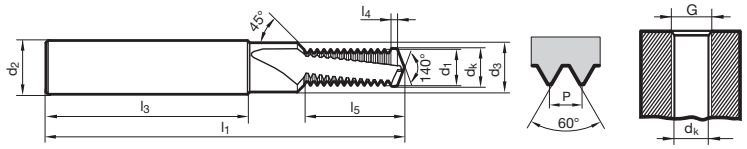
Drill thread milling cutters for ISO metric threads

2,5xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide			
Surface	◯	◯	C	C
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕		✕	
Shank form	HA	HA	HA	HA





Company std.	Article no.	3782	3783	3784	3785

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.400	6.000	3.400	2.500	48.000	36.000	0.500	8.500	2	3.000
M4	0.700	3.200	6.000	4.500	3.300	48.000	36.000	0.700	11.100	2	4.000
M5	0.800	4.000	6.000	5.500	4.200	54.000	36.000	0.800	13.600	2	5.000
M6	1.000	4.750	8.000	6.600	5.000	62.000	36.000	1.000	16.900	2	6.000
M8	1.250	6.350	10.000	9.000	6.800	74.000	40.000	1.250	22.500	2	8.000
M10	1.500	7.950	12.000	11.000	8.500	80.000	45.000	1.500	27.000	2	10.000
M12	1.750	9.950	14.000	13.500	10.200	90.000	45.000	1.500	31.400	2	12.000
M14	2.000	11.200	16.000	15.500	12.000	102.000	48.000	1.500	39.700	2	14.000
M16	2.000	13.200	18.000	17.500	14.000	102.000	48.000	1.500	46.000	2	16.000

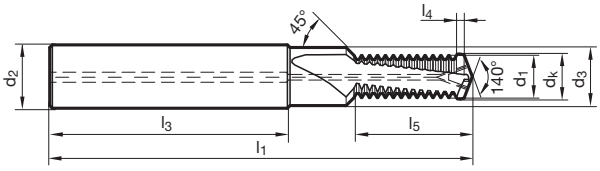
Drill thread milling cutters for ISO metric fine threads

1,5xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide		
Surface	◯	C	C
Type	DTMC SP	DTMC SP	DTMC SP
Internal cooling			
Shank form	HA	HA	HA





Company std. Article no. **3787** **3788** **3789**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	6.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	8.300	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	9.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	14.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	14.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	16.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	16.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	20.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	21.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	23.300	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	26.600	2	16.007

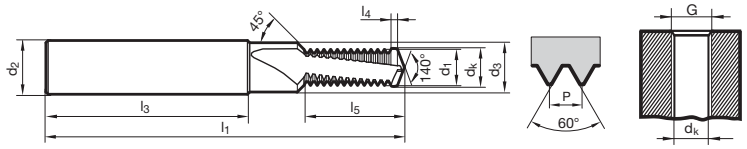
Drill thread milling cutters for ISO metric fine threads

2xD

P	
M	
K	○
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide			
Surface	◯	◯	C	C
Type	DTMC SP	DTMC SP	DTMC SP	DTMC SP
Internal cooling	✕		✕	
Shank form	HA	HA	HA	HA





Company std.	Article no.	3790	3791	3792	3793

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.200	6.000	4.500	3.500	48.000	36.000	0.500	8.600	2	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.500	54.000	36.000	0.500	10.800	2	5.003
M12 X 1.5	0.750	4.750	8.000	6.600	5.200	62.000	36.000	0.750	12.900	2	6.004
M 8 X0.75	0.750	6.350	10.000	9.000	7.200	74.000	40.000	0.750	17.100	2	8.004
M8 x 1	1.000	6.350	10.000	9.000	7.000	74.000	40.000	1.000	17.300	2	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.000	80.000	45.000	1.000	21.600	2	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.800	80.000	45.000	1.250	21.600	2	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.000	90.000	45.000	1.000	26.000	2	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.500	90.000	45.000	1.500	27.400	2	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.500	102.000	48.000	1.500	30.800	2	14.007
M16 X1.5	1.500	13.200	18.000	17.500	14.500	102.000	48.000	1.500	34.100	2	16.007

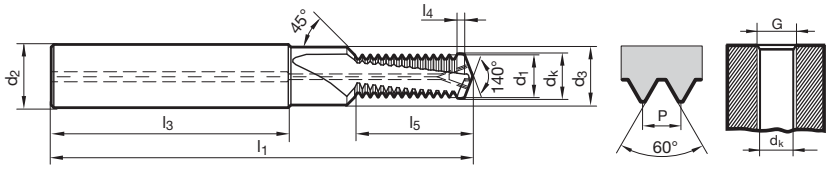
Drill thread milling cutters for UNC-threads

2xD

P	
M	
K	•
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide	
Surface	◯	C
Type	DTMC SP	DTMC SP
Internal cooling		
Shank form	HA	HA





Company std.	Article no.	4138	4139

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	20.000	5.000	8.000	6.600	5.100	62.000	36.000	1.300	14.900	2	6.350
5/16 - 18	18.000	6.250	10.000	9.000	6.600	74.000	40.000	1.500	18.100	2	7.938
3/8 - 16	16.000	7.500	12.000	11.000	8.000	80.000	45.000	1.500	22.100	2	9.525
7/16 - 14	14.000	8.800	12.000	11.000	9.400	80.000	45.000	1.500	25.000	2	11.113
1/2 - 13	13.000	10.200	14.000	13.500	10.800	90.000	45.000	1.500	26.900	2	12.700
9/16 - 12	12.000	11.600	16.000	15.500	12.200	102.000	48.000	1.500	31.200	2	14.288
5/8 - 11	11.000	13.000	18.000	17.500	13.500	102.000	48.000	1.500	36.300	2	15.875

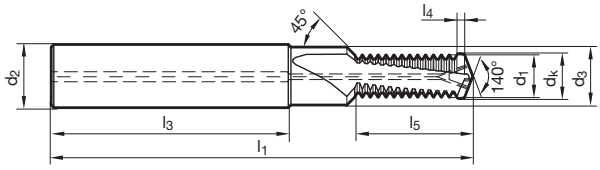
Drill thread milling cutters for UNF-threads

2xD

P	
M	
K	•
N	•
S	
H	

Cutting data page 471

Tool material	Solid carbide	
Surface	◯	C
Type	DTMC SP	DTMC SP
Internal cooling		
Shank form	HA	HA





Company std. Article no. **4140** **4141**

D	P	d1	d2	d3	dk	l1	l3	l4	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	28.000	5.000	8.000	6.600	5.500	62.000	36.000	1.000	12.800	2	6.350
5/16 - 24	24.000	6.250	10.000	9.000	6.900	74.000	40.000	1.100	18.200	2	7.938
3/8 - 24	24.000	7.950	12.000	11.000	8.500	80.000	45.000	1.100	20.600	2	9.525
7/16 - 20	20.000	9.500	12.000	11.000	9.900	80.000	45.000	1.300	24.700	2	11.113
1/2 - 20	20.000	10.200	14.000	13.500	11.500	90.000	45.000	1.300	27.500	2	12.700
9/16 - 18	18.000	11.600	16.000	15.500	12.900	102.000	48.000	1.500	30.600	2	14.288
5/8 - 18	18.000	13.000	18.000	17.500	14.500	102.000	48.000	1.500	33.700	2	15.875



TITANIUM

S

Nickel, iron and cobalt based high temperature special alloys, titanium and titanium alloys



SPECIAL-
SUPER-
TI-ALLOYS

S TITANIUM, SPECIAL ALLOYS

Titanium

Nickel

M		MF	
ISO 2/6H	ISO 3/6G	ISO 2/6H	ISO 3/6G
No 1 M3 - M16 Art.-No. 2901 from page 602		No 1 M3x0,35 - M10x1,25 Art.-No. 2903 from page 606	
No 1 M3 - M16 Art.-No. 2909 from page 604		No 1 M3x0,35 - M10x1,25 Art.-No. 2910 from page 608	
No 1 M3 - M16 Art.-No. 2916 from page 602		No 1 M3x0,35 - M10x1,25 Art.-No. 2917 from page 606	
No 1 M3 - M16 Art.-No. 2920 from page 604		No 1 M3x0,35 - M10x1,25 Art.-No. 2921 from page 608	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



THROUGH HOLE
BLIND HOLE

No 1
Nr. 6 - 3/8
Art.-No. 2905
from page 610



Through hole
HSS-E-PM, TiCN, form B

No 1
Nr. 4 - 5/8
Art.-No. 2912
from page 612

No 1
Nr. 4 - 5/8
Art.-No. 2914
from page 617



Blind hole
HSS-E-PM, TiCN, form C

No 1
Nr. 6 - 3/8
Art.-No. 2918
from page 610

No 1
Nr. 6 - 3/8
Art.-No. 2919
from page 614



Through hole
HSS-E-PM, TiAlN, form B

No 1
Nr. 4 - 5/8
Art.-No. 2922
from page 612

No 1
Nr. 4 - 5/8
Art.-No. 2923
from page 616



Blind hole
HSS-E-PM, TiAlN, form C

S TITANIUM, SPECIAL ALLOYS

with internal cooling

with lubrication

M		MF	
6HX	6GX	6HX	6GX
No 1 M3 - M20 Art.-No. 1270/1271 from page 623	No 1 M5 - M10 Art.-No. 1713 from page 624	No 1 M8x1 - M24x1,5 Art.-No. 1272/1273 from page 632	No 1 M8x1 - M24x1,5 Art.-No. 1715/1716 from page 633
No 1 M3 - M20 Art.-No. 1725/1727 from page 623	No 1 M3 - M20 Art.-No. 1726/1728 from page 625	No 1 M8x1 - M24x1,5 Art.-No. 1729/1731 from page 632	No 1 M8x1 - M24x1,5 Art.-No. 1730/1732 from page 633
No 1 M3 - M20 Art.-No. 1972/1931 from page 627		No 1 M10x1 - M24x1,5 Art.-No. 1581 from page 635	
M3 - M20 Art.-No. 1266/1267 from page 621		M8x1 - M24x2 Art.-No. 1268/1269 from page 630	

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2BX	2BX	-



THROUGH HOLE
BLIND HOLE

FORM C



HSS-E-PM, TiCN, form C

FORM E

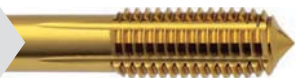


HSS-E-PM, TiN, form E

SOLID CARBIDE



Solid carbide, TiCN, form C



HSS-E, TiN, form C

Special-, super- and Ti-alloys

S TITANIUM, SPECIAL ALLOYS

	M UNIVERSAL	MF UNIVERSAL
1.5xD	No 1 M3 - M20 Art.-No. 3525 from page 643	No 1 M4x0,5 - M16x1,5 Art.-No. 3527 from page 646
2xD	No 1 M3 - M20 Art.-No. 3526 from page 644	No 1 M4x0,5 - M16x1,5 Art.-No. 3528 from page 647
2.5xD	No 1 M3 - M20 Art.-No. 3759 from page 645	No 1 M4x0,5 - M16x1,5 Art.-No. 3762 from page 648
3xD	No 1 M1,6 - M16 Art.-No. 4226 from page 637	
universal	No 1 Ø8xP0,5 - Ø30xP3,5 Art.-No. 3541 from page 664	No 1 Ø8xP0,5 - Ø30xP3,5 Art.-No. 3541 from page 664

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	UNIVERSAL	-



THROUGH HOLE
BLIND HOLE

No 1
1/4 - 1/2
Art.-No. 3516
from page 650

No 1
1/4 - 1/2
Art.-No. 3518
from page 653

No 1
1/8 - 3/8
Art.-No. 3514
from page 657



Solid carbide, TiCN

No 1
1/4 - 1/2
Art.-No. 3517
from page 651

No 1
1/4 - 1/2
Art.-No. 3519
from page 654

No 1
1/8 - 3/8
Art.-No. 3515
from page 658



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiCN

No 1
Ø10xUN24 - Ø20xUN16
Art.-No. 3595
from page 666

No 1
Ø10xUN24 - Ø20xUN16
Art.-No. 3595
from page 666

No 1
Ø10xG19 - Ø20xG11
Art.-No. 3542
from page 667



Solid carbide, TiCN

Special-, super- and Ti-alloys

SPECIAL-, SUPER- AND TI-ALLOYS



THROUGH HOLES

	Thread depth		≤3xD	
	Tool material		HSS-E-PM	
	Type/form		TiNi/B	TiNi/B
	Surface		C	A
	Coolant delivery		☒	☒
	Shank tolerance		h9	h9
				
	Thread type	**Tolerance**	**Article no. / page**	
	M	4H		
		6H		
		6HX	2901 602	2916 602
		6GX		
	MF	6H		
		6HX	2903 606	2917 606
		6GX		
	UNC	2B		
		2BX	2905 610	2918 610
	UNF	2B		
		2BX		2919 614
	G			
	BSW			
	NPT			
	NPTF			
	EG M	6H Mod.		
	MJ	4HX	1057 603	
	MJF	4HX	1058 607	
	UNJC	3BX	1059 611	
	UNJF	3BX	1060 615	
	PG			
	Suitable lubricant		○/●/△	○/●/△

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min	
S	Titanium and Titanium alloys	≤ 1200 N/mm²	Titanium	3.7025	4	4
			TiAl5Sn2	3.7115		
			TiAl6V4	3.7165		
	Nickel, cobalt, iron alloys	≤ 1400 N/mm²	Hastelloy C4	2.4610	4	4
			Inconel 718	2.4668		
			Nimonic 105	2.4634		

SPECIAL-, SUPER- AND TI-ALLOYS



BLIND HOLES

		Thread depth	≤3xD	
		Tool material	HSS-E-PM	
		Type/form	Ti R15/C	Ni R10/C (K)
		Surface	C	A
		Coolant delivery	☒	☒
		Shank tolerance	h9	h9
				
	Thread type	**Tolerance**	**Article no. / page**	
	M	4H		
		6H		
		6HX	2909 604	2920 604
		6G		
	MF	6H		
		6HX	2910 608	2921 608
		6G		
	UNC	2B		
		2BX	2912 612	2922 612
	UNF	2B		
		2BX	2914 617	2923 616
	G			
	BSW			
	NPT			
	NPTF			
	EG M	6H Mod.		
	MJ	4HX	1061 605	1065 605
	MJF	4HX	1062 609	1066 609
	UNJC	3BX	1063 613	1067 613
	UNJF	3BX	1064 618	1068 618
	PG			
		Suitable lubricant	●/●/△	●/●/△

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min	
S	Titanium and Titanium alloys	≤ 1200 N/mm²	Titanium TiAl5Sn2 TiAl6V4	3.7025 3.7115 3.7165	**4**	-
	Nickel, cobalt, iron alloys	≤ 1400 N/mm²	Hastelloy C4 Inconel 718 Nimonic 105	2.4610 2.4668 2.4634	-	**4**

SPECIAL-, SUPER- AND TI-ALLOYS



THROUGH HOLES AND **BLIND** HOLES

Thread depth		≤3xD			
Tool material		HSS-E-PM			
Type/form		N/C	N/C	N/C	N/C
Surface		S	S	S	S
Coolant delivery		☒	☒	radial	axial
Shank tolerance		h9	h9	h9	h9
					
Thread type	**Tolerance**	**Article no. / page**			
M	4H				
	6H				
	6HX	322/339 620	1266/1267 621	323/342 622	4143 626
	6GX				
MF	6H				
	6HX	333 629	1268/1269 630	338 631	4145 634
	6GX				
UNC	2B				
	2BX				
UNF	2B				
	2BX				
G					
BSW					
NPT					
NPTF					
EG M	6H Mod.				
MJ	4HX				
MJF	4HX				
UNJC	3BX				
UNJF	3BX				
PG					
Suitable lubricant		●/●/△	●/●/△	●/●/△/□	●/●/△

= No 1

○ = Air
● = Neat oil
● = Soluble oil
△ = Paste
□ = Minimal quantity lubrication (MQL)

	Group of materials	Tensile strength	Material example	Material no.	Recommended cutting speed vc m/min			
S	Titanium and Titanium alloys	≤ 1200 N/mm²	Titanium	3.7025	4	4	4	4
			TiAl5Sn2	3.7115				
			TiAl6V4	3.7165				
	Nickel, cobalt, iron alloys	≤ 1400 N/mm²	Hastelloy C4	2.4610	4	4	4	4
			Inconel 718	2.4668				
			Nimonic 105	2.4634				

≤3xD

HSS-E-PM			Solid carbide	
N/C	N/C	N/E	N/C	N/E
C	A	S	C	C
radial	radial	axial	radial	radial
h9	h9	h9	h6	h6
				
Article no. / page				
1270/1271 623	1717/1719 623	1725/1727 623	1972/1931 627	1927 628
1713 624	1718/1720 625	1726/1728 625		
1272/1273 632	1721/1723 632	1729/1731 632	1581 635	
1715/1716 633		1730/1732 633		
○/●/△/□	○/●/△/□	○/●/△	○/●/△/□	○/●/△/□

Recommended cutting speed vc m/min				
4	4	4	10	10
4	4	4	10	10

S

SPECIAL-, SUPER- AND TI-ALLOYS



THROUGH HOLES AND **BLIND** HOLES

	Thread depth	≤2xD				≤2,5xD		≤1,5xD	
	Tool material	Solid carbide							
	Type	TM SP	TM SP	TM SP	TM SP	TM SP	TM SP	TMC SP	TMC SP
	Surface	C	C	C	C	C	C	C	C
	Coolant delivery	☒	☒	axial	axial	axial	axial	axial	axial
	Shank form	HA	HB	HA	HB	HA	HB	HA	HA
	Spiral	27°	27°	27°	27°	27°	27°	10°	10°
									
Thread type		**Article no. / page**							
M		4132 641	4133 641	3737 640	3743 640	3735 642	3740 642	3525 643	3543 643
MF				3737 640	3743 640			3527 646	3545 646
UNC				4134 649	4135 649			3516 650	3534 650
UNF				4136 652	4137 652			3518 653	3536 653
G				3745 655	3748 655	3746 656	3750 656	3514 657	3529 657
BSW									
NPT				3753 660	3754 660			3520 661	3538 661
NPTF				3756 662	3757 662			3521 663	3539 663
EG M		EG-threads can be produced with every thread milling cutter type and dimension							
MJ									
MJF									
UNJC									
UNJF									
PG									
Suitable lubricant		●/●	●/●	●/●	●/●	●/●	●/●	●/●	●/●

= No 1

○ = Air
● = Neat oil
● = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Hardness	Material example	Material no.	Application recommendations							
S	Titanium and Titanium alloys	≤ 1200 N/mm²	Titanium	3.7025	+	+	+	+	+	+	++	++
			TiAl5Sn2	3.7115								
			TiAl6V4	3.7165								
	Nickel, cobalt, iron alloys	≤ 1400 N/mm²	Hastelloy C4	2.4610	+	+	+	+	+	+	++	++
			Inconel 718	2.4668								
			Nimonic 105	2.4634								

≤2xD		≤2,5xD		universal				≤3xD	
Solid carbide									
TMC SP	TMC SP	TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	MTM 1 SP
C	C	C	C	C	C	C	C	C	C
axial	axial	axial	axial	axial	axial	axial	axial	☒	☒
HA	HB	HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	27°	27°	15°	15°	15°	15°	15°	15°
									
Article no. / page									
3526 644	3544 644	3759 645	3760 645	3541 664	3556 664	4162 665	4163 665	4226 637	4225 639
3528 647	3546 647	3762 648	3763 648	3541 664	3556 664	4162 665	4163 665		4225 639
3517 651	3535 651			3595 666	3596 666				
3519 654	3537 654			3595 666	3596 666				
3515 658	3533 658	3765 659	3766 659	3542 667	3557 667	3542 667	3557 667	4228 638	
				3768 668	3769 668				
				3772 669	3773 669				
EG-threads can be produced with every thread milling cutter type and dimension									
○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●	○/●

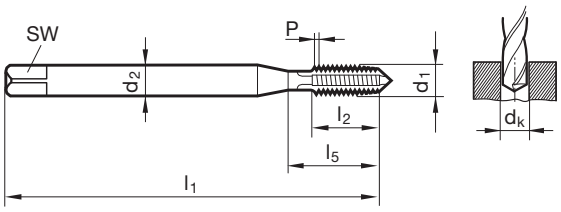
Application recommendations									
++	++	++	++	++	++	++	++	++	++
++	++	++	++	++	++	++	++	++	++

Machine taps for ISO metric threads

P	
M	
K	
N	
S	•
H	

Cutting data page 596

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	A
Type	TiNi	TiNi
Form	B	B
Internal cooling		







DIN 2184-1 DIN 371/DIN 376 Article no. **2901** **2916**

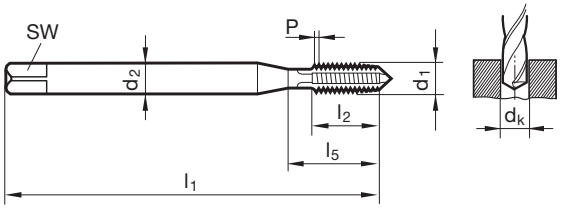
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	4HX
Surface	C
Type	TiNi
Form	B
Internal cooling	

P	
M	
K	
N	
S	•
H	

Cutting data page 596





DIN 2184-1 DIN 371/DIN 376 Article no. **1057**

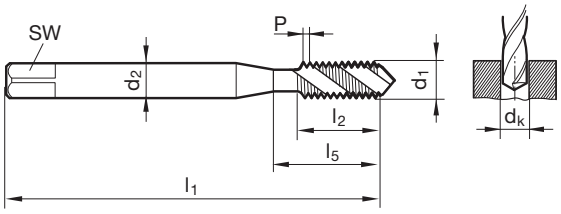
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
MJ 3 X0.5	0.500	3.500	2.700	2.60	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.40	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.30	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.10	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.90	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.60	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.40	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.20	110.000	26.000	54.000

Machine taps for ISO metric threads

P	
M	
K	
N	
S	•
H	

Cutting data page 597

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		







DIN 2184-1 DIN 371/DIN 376 Article no. **2909** **2920**

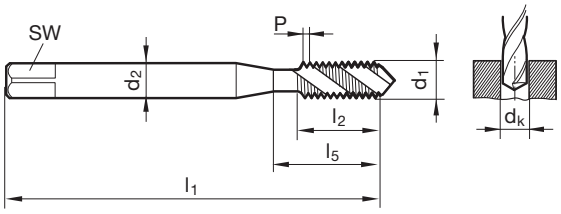
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.30	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.20	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.00	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.80	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.50	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.00	110.000	26.000	54.000

Machine taps for ISO metric threads

P		
M		
K		
N		
S	•	
H		

Cutting data page 597

Tool material	HSS-E-PM	
Tolerance on Ø	4HX	4HX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		





DIN 2184-1 DIN 371/DIN 376 — Article no. **1061** **1065**

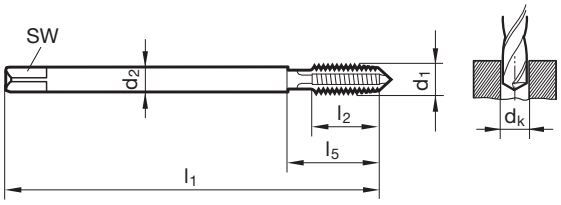
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
MJ 3 X0.5	0.500	3.500	2.700	2.60	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.40	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.30	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.10	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.90	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.60	100.000	20.000	39.000
M12	1.750	9.000	7.000	10.40	110.000	24.000	49.000
M16	2.000	12.000	9.000	14.20	110.000	26.000	54.000

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	A
Type	TiNi	TiNi
Form	B	B
Internal cooling		

P	
M	
K	
N	
S	•
H	

Cutting data page 596





DIN 2184-1 DIN 371 Article no. **2903** **2917**

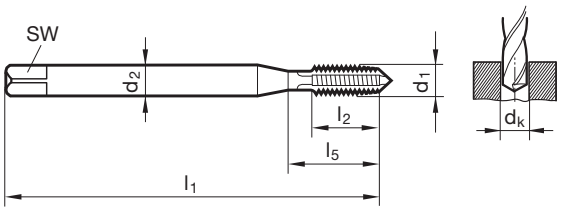
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	3.500	2.700	2.65	56.000	6.000	18.000	3.002
M 4 X0.5	4.500	3.400	3.50	63.000	7.500	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	8.500	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	11.000	30.000	6.003
M 6 X0.75	6.000	4.900	5.20	80.000	11.000	30.000	6.004
M 8 X0.5	8.000	6.200	7.50	80.000	14.000	30.000	8.003
M 8 X0.75	8.000	6.200	7.20	80.000	14.000	30.000	8.004
M8 x 1	8.000	6.200	7.00	90.000	14.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	20.000	35.000	10.005
M10 X1.25	10.000	8.000	8.80	100.000	20.000	39.000	10.006

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	4HX
Surface	C
Type	TiNi
Form	B
Internal cooling	

P	
M	
K	
N	
S	•
H	

Cutting data page 596





DIN 2184-1 DIN 371 Article no. **1058**

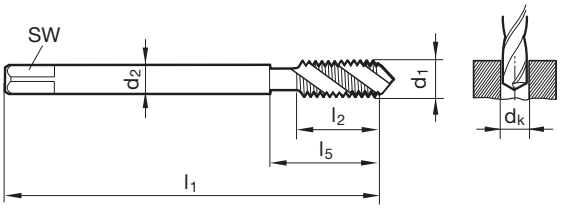
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
MJ 6 X0.5	6.000	4.900	5.60	80.000	11.000	30.000	6.003
MJ 6 X0.75	6.000	4.900	5.40	80.000	11.000	30.000	6.004
MJ8 x 1	8.000	6.200	7.10	90.000	14.000	35.000	8.005
MJ10 x 1	10.000	8.000	9.10	90.000	20.000	35.000	10.005
MJ10 X1.25	10.000	8.000	8.90	100.000	20.000	39.000	10.006

Machine taps for ISO metric fine threads

P	
M	
K	
N	
S	•
H	

Cutting data page 597

Tool material	HSS-E-PM	
Tolerance on Ø	6HX	6HX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		







DIN 2184-1 DIN 371 — Article no. **2910** **2921**

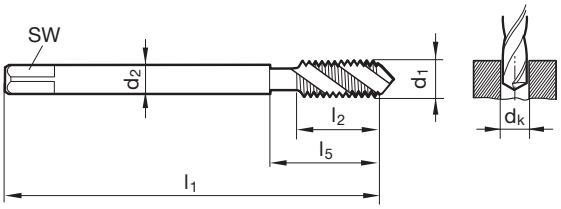
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M 3 X0.35	3.500	2.700	2.65	56.000	6.000	18.000	3.002
M 4 X0.5	4.500	3.400	3.50	63.000	7.500	21.000	4.003
M 5 X0.5	6.000	4.900	4.50	70.000	8.500	25.000	5.003
M 6 X0.5	6.000	4.900	5.50	80.000	11.000	30.000	6.003
M 6 X0.75	6.000	4.900	5.20	80.000	11.000	30.000	6.004
M 8 X0.5	8.000	6.200	7.50	80.000	14.000	30.000	8.003
M 8 X0.75	8.000	6.200	7.20	80.000	14.000	30.000	8.004
M8 x 1	8.000	6.200	7.00	90.000	14.000	35.000	8.005
M10 x 1	10.000	8.000	9.00	90.000	20.000	35.000	10.005
M10 X1.25	10.000	8.000	8.80	100.000	20.000	39.000	10.006

Machine taps for ISO metric fine threads

P	
M	
K	
N	
S	•
H	

Cutting data page 597

Tool material	HSS-E-PM	
Tolerance on Ø	4HX	4HX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		





DIN 2184-1 DIN 371 — Article no. **1062** **1066**

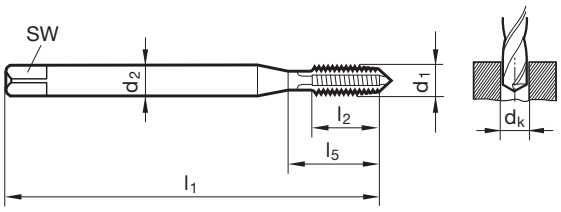
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
MJ 6 X0.5	6.000	4.900	5.60	80.000	11.000	30.000	6.003
MJ 6 X0.75	6.000	4.900	5.40	80.000	11.000	30.000	6.004
MJ 8 X0.5	8.000	6.200	7.60	80.000	14.000	30.000	8.003
MJ 8 X0.75	8.000	6.200	7.40	80.000	14.000	30.000	8.004
MJ8 x 1	8.000	6.200	7.10	90.000	14.000	35.000	8.005
MJ10 x 1	10.000	8.000	9.10	90.000	16.000	35.000	10.005
MJ10 X1.25	10.000	8.000	8.90	100.000	16.000	39.000	10.006

Machine taps for UNC-threads

P	
M	
K	
N	
S	•
H	

Cutting data page 596

Tool material	HSS-E-PM	
Tolerance on Ø	2BX	2BX
Surface	C	A
Type	TiNi	TiNi
Form	B	B
Internal cooling		







DIN 2184-1 ~DIN 371 — Article no. **2905** **2918**

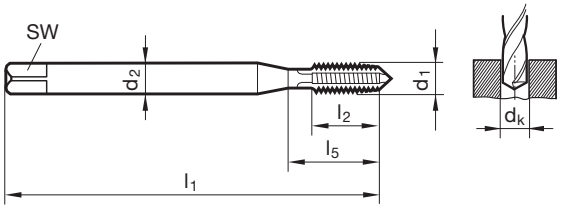
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525

Machine taps for UNC-threads

Tool material	HSS-E-PM
Tolerance on Ø	3BX
Surface	C
Type	TiNi
Form	B
Internal cooling	

P
M
K
N
S •
H

Cutting data page 596





DIN 2184-1 ~DIN 371/~DIN 376 Article no. **1059**

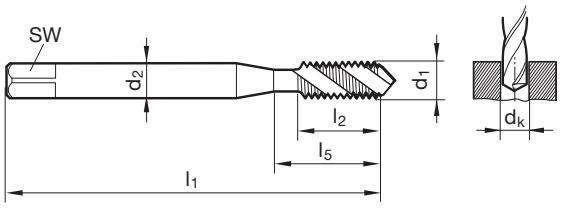
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875

Machine taps for UNC-threads

P	
M	
K	
N	
S	•
H	

Cutting data page 597

Tool material	HSS-E-PM	
Tolerance on Ø	2BX	2BX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		







DIN 2184-1 ~DIN 371/~DIN 376 — Article no. **2912** **2922**

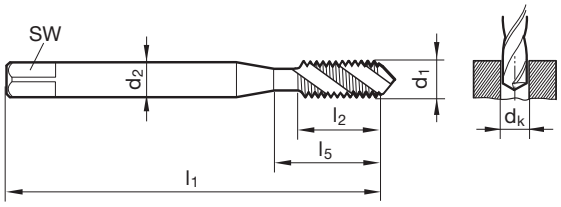
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 40	3.500	2.700	2.35	56.000	11.000	18.000	2.845
5 - 40	3.500	2.700	2.65	56.000	11.000	18.000	3.175
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875

Machine taps for UNC-threads

P		
M		
K		
N		
S	•	
H		

Cutting data page 597

Tool material	HSS-E-PM	
Tolerance on Ø	3BX	3BX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		





DIN 2184-1 ~DIN 371/~DIN 376 — Article no. **1063** **1067**

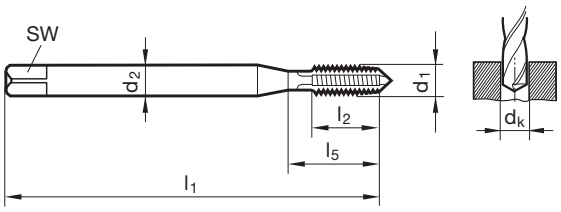
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 32	4.000	3.000	2.85	56.000	12.000	20.000	3.505
8 - 32	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 24	6.000	4.900	3.90	70.000	14.000	25.000	4.826
12 - 24	6.000	4.900	4.50	80.000	16.000	30.000	5.486
1/4 - 20	7.000	5.500	5.10	80.000	16.000	30.000	6.350
5/16 - 18	8.000	6.200	6.60	90.000	18.000	35.000	7.938
3/8 - 16	10.000	8.000	8.00	100.000	20.000	39.000	9.525
7/16 - 14	8.000	6.200	9.40	100.000	22.000	42.000	11.113
1/2 - 13	9.000	7.000	10.80	110.000	25.000	49.000	12.700
5/8 - 11	12.000	9.000	13.50	110.000	30.000	53.000	15.875

Machine taps for UNF-threads

Tool material	HSS-E-PM
Tolerance on Ø	2BX
Surface	A
Type	TiNi
Form	B
Internal cooling	

P	
M	
K	
N	
S	•
H	

Cutting data page 596





DIN 2184-1 ~DIN 371 Article no. **2919**

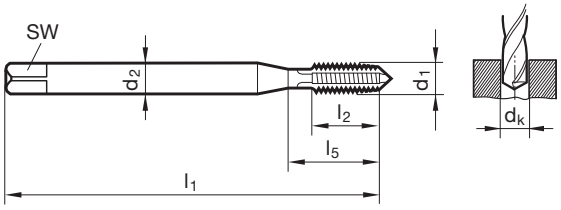
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	4.000	3.000	2.95	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	90.000	18.000	35.000	9.525

Machine taps for UNF-threads

Tool material	HSS-E-PM
Tolerance on Ø	3BX
Surface	C
Type	TiNi
Form	B
Internal cooling	

P
M
K
N
S •
H

Cutting data page 596





DIN 2184-1 ~DIN 371/~DIN 374 Article no. **1060**

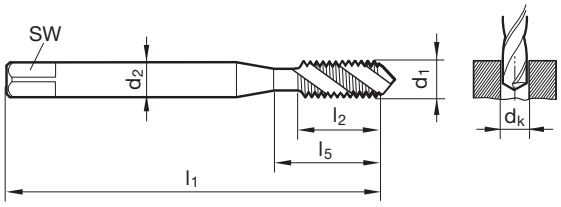
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	4.000	3.000	2.95	56.000	12.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	100.000	20.000	39.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875

Machine taps for UNF-threads

Tool material	HSS-E-PM
Tolerance on Ø	2BX
Surface	A
Type	Ni R10
Form	C (K)
Internal cooling	

P	
M	
K	
N	
S	•
H	

Cutting data page 597





DIN 2184-1 ~DIN 371/~DIN 374 Article no. **2923**

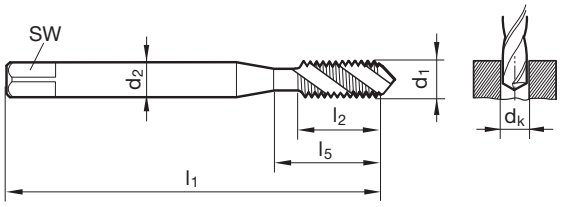
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.40	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.70	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	2.95	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875

Machine taps for UNF-threads

Tool material	HSS-E-PM
Tolerance on Ø	2BX
Surface	C
Type	Ti R15
Form	C
Internal cooling	

P	
M	
K	
N	
S	•
H	

Cutting data page 597





DIN 2184-1 ~DIN 371/~DIN 374 Article no. **2914**

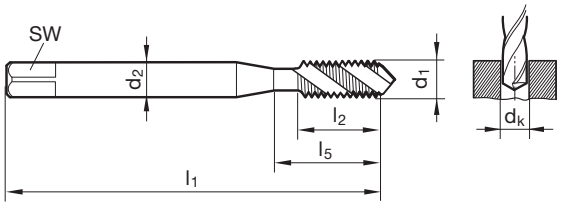
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
4 - 48	3.500	2.700	2.40	56.000	10.000	18.000	2.845
5 - 44	3.500	2.700	2.70	56.000	10.000	18.000	3.175
6 - 40	4.000	3.000	2.95	56.000	11.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	90.000	18.000	35.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875

Machine taps for UNF-threads

P	
M	
K	
N	
S	•
H	

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Tool material	HSS-E-PM	
Tolerance on Ø	3BX	3BX
Surface	C	A
Type	Ti R15	Ni R10
Form	C	C (K)
Internal cooling		







DIN 2184-1 ~DIN 371/~DIN 374 — Article no. **1064** **1068**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
6 - 40	4.000	3.000	2.95	56.000	12.000	20.000	3.505
8 - 36	4.500	3.400	3.50	63.000	12.000	21.000	4.166
10 - 32	6.000	4.900	4.10	70.000	14.000	25.000	4.826
12 - 28	6.000	4.900	4.60	80.000	16.000	30.000	5.486
1/4 - 28	7.000	5.500	5.50	80.000	16.000	30.000	6.350
5/16 - 24	8.000	6.200	6.90	90.000	18.000	35.000	7.938
3/8 - 24	10.000	8.000	8.50	100.000	20.000	39.000	9.525
7/16 - 20	8.000	6.200	9.90	100.000	22.000	42.000	11.113
1/2 - 20	9.000	7.000	11.50	100.000	20.000	40.000	12.700
5/8 - 18	12.000	9.000	14.50	100.000	22.000	44.000	15.875



FLUTELESS TAPS

S

Special-, super- and Ti-alloys

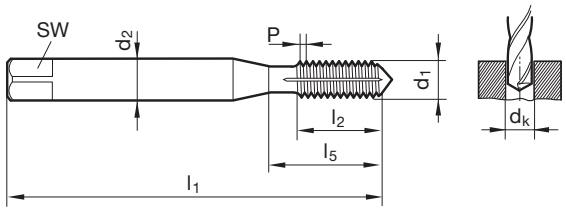
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

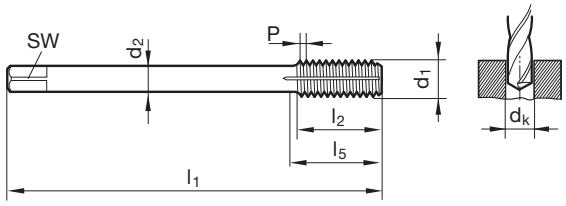
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 598

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **322**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **339**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

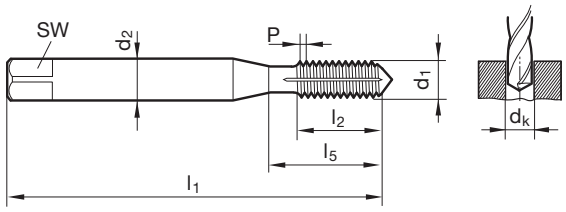
Fluteless machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

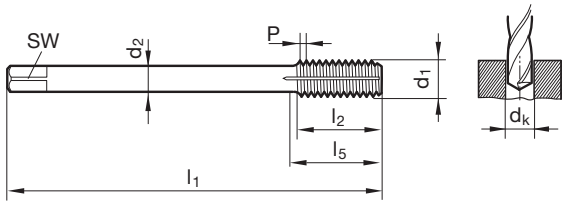
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 598

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1266**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 Article no. **1267**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

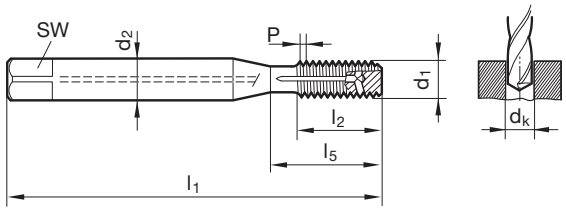
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

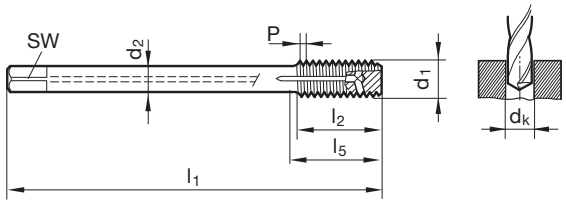
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 598

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **323**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **342**

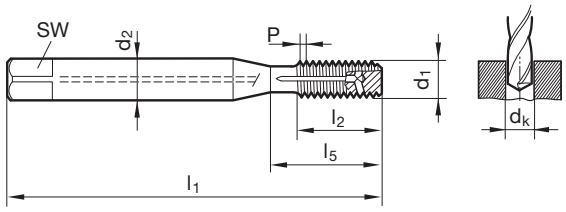
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000

Oil feed fluteless taps f. ISO metric threads

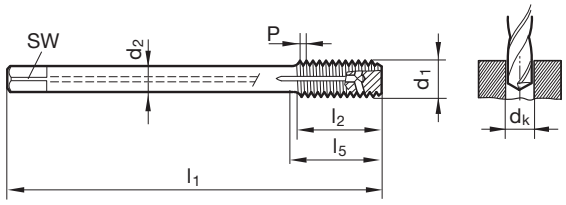
P	•	Cutting data page 599
M	•	
K		
N	≥ 7	
S	•	
H		

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 — Article no. **1270** **1717** **1725**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1271** **1719** **1727**

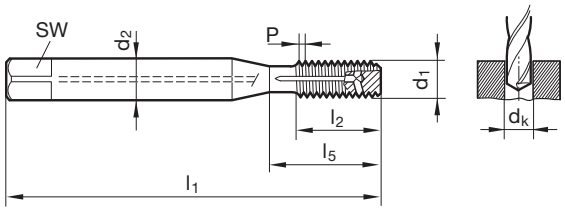
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	30.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6GX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

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DIN 2174 ~DIN 371 Article no. **1713**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

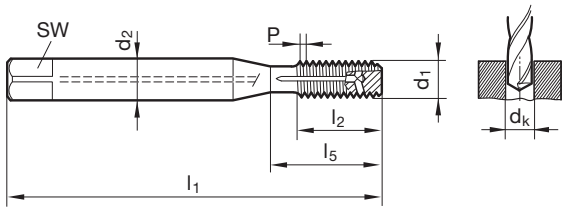
Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	A	S
Type	N	N
Form	C	E
Internal cooling		

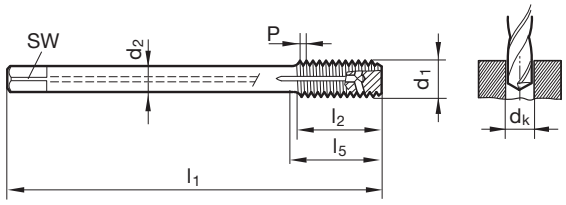
P	•
M	•
K	
N	
S	•
H	

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~ DIN 371



~ DIN 376







DIN 2174 ~DIN 371 — Article no. **1718** **1726**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.65	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.55	80.000	16.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	17.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	20.000	39.000

DIN 2174 ~DIN 376 — Article no. **1720** **1728**

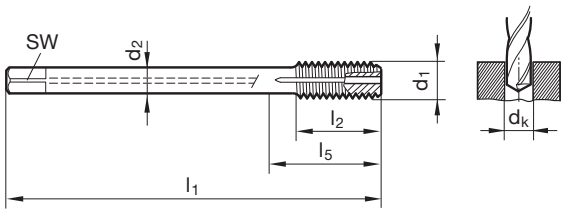
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	24.000	49.000
M14	2.000	11.000	9.000	13.10	110.000	26.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	26.000	54.000
M20	2.500	16.000	12.000	18.90	140.000	32.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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Company std. Company std. Article no. **4143**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	112.000	6.000	18.000
M4	0.700	2.800	2.100	3.70	112.000	7.500	77.000
M5	0.800	3.500	2.700	4.65	125.000	8.500	90.000
M6	1.000	4.500	3.400	5.55	125.000	11.000	90.000
M8	1.250	6.000	4.900	7.40	140.000	14.000	97.000
M10	1.500	7.000	5.500	9.30	160.000	16.000	117.000
M12	1.750	9.000	7.000	11.20	180.000	18.500	133.000
M16	2.000	12.000	9.000	15.10	220.000	20.000	168.000
M20	2.500	16.000	12.000	18.90	280.000	25.000	225.000

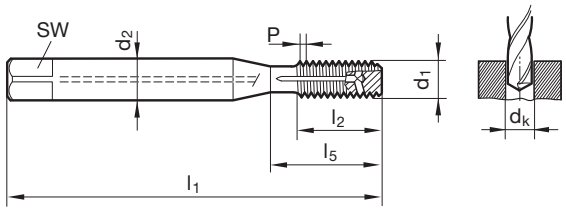
Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

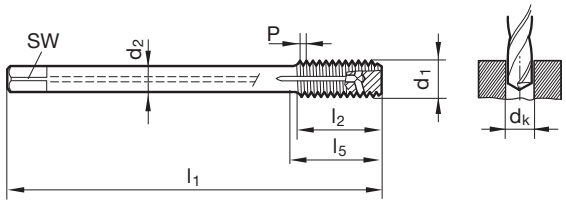
P	•
M	•
K	
N	≥ 7
S	•
H	

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~ DIN 371



~ DIN 376





DIN 2174 ~DIN 371 Article no. **1972**

d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

DIN 2174 ~DIN 376 Article no. **1931**

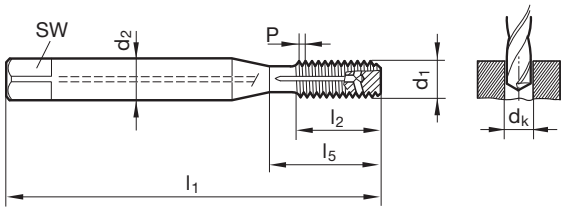
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M12	1.750	9.000	7.000	11.20	110.000	18.500	49.000
M14	2.000	11.000	9.000	13.10	110.000	20.000	53.000
M16	2.000	12.000	9.000	15.10	110.000	20.000	54.000
M18	2.500	14.000	11.000	16.90	125.000	25.000	62.000
M20	2.500	16.000	12.000	18.90	140.000	25.000	62.000

Oil feed fluteless taps f. ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	6HX
Surface	C
Type	N
Form	E
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 599





DIN 2174 ~DIN 371 Article no. **1927**

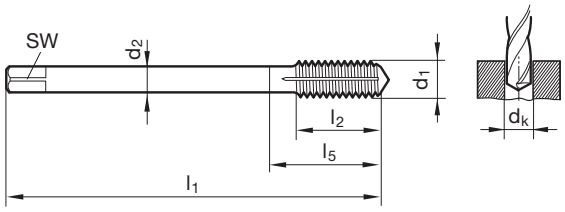
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.80	56.000	6.000	18.000
M4	0.700	4.500	3.400	3.70	63.000	7.500	21.000
M5	0.800	6.000	4.900	4.65	70.000	8.500	25.000
M6	1.000	6.000	4.900	5.55	80.000	11.000	30.000
M8	1.250	8.000	6.200	7.40	90.000	14.000	35.000
M10	1.500	10.000	8.000	9.30	100.000	16.000	39.000

Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

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DIN 2174 ~DIN 374 Article no. **333**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	11.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	16.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	16.000	44.000	20.007

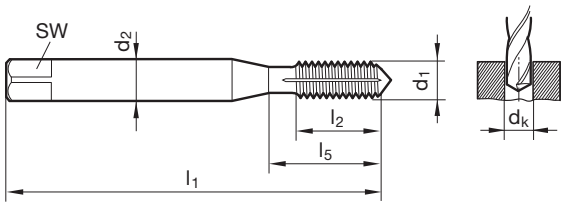
Fluteless machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

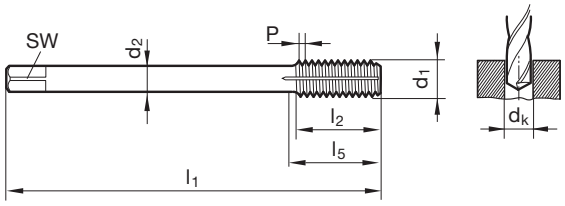
P	•
M	•
K	
N	○
S	○
H	

Cutting data page 598

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 Article no. **1268**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005

DIN 2174 ~DIN 374 Article no. **1269**

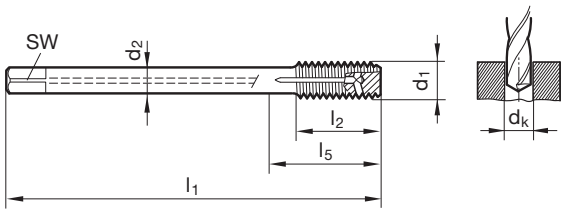
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 x 2	18.000	14.500	23.10	140.000	28.000	48.000	24.008

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 598





DIN 2174 ~DIN 374 Article no. **338**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	90.000	11.000	35.000	8.005
M10 x 1	7.000	5.500	9.55	90.000	11.000	35.000	10.005
M12 X1.5	9.000	7.000	11.30	100.000	16.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007

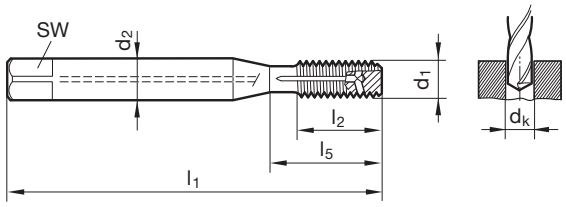
Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM		
Tolerance on Ø	6HX	6HX	6HX
Surface	C	A	S
Type	N	N	N
Form	C	C	E
Internal cooling			

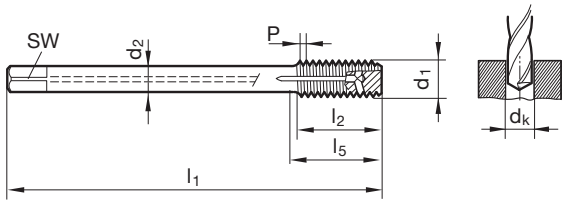
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 599

~ DIN 371



~ DIN 374





DIN 2174 ~DIN 371 — Article no. **1272** **1721** **1729**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M9 x 1	9.000	7.000	8.55	90.000	16.000	35.000	9.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1273** **1723** **1731**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.25	9.000	7.000	11.40	100.000	20.000	40.000	12.006
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	20.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	20.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 x 1	16.000	12.000	19.55	125.000	25.000	44.000	20.005
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M22 X1.5	18.000	14.500	21.30	125.000	25.000	44.000	22.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

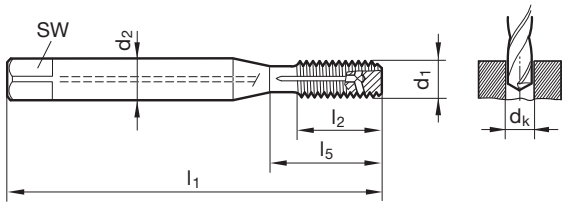
Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM	
Tolerance on Ø	6GX	6GX
Surface	C	S
Type	N	N
Form	C	E
Internal cooling		

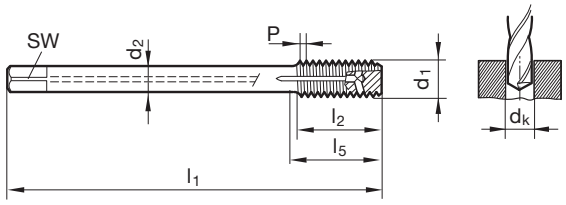
P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 599

~ DIN 371



~ DIN 374







DIN 2174 ~DIN 371 — Article no. **1715** **1730**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.55	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.55	90.000	16.000	35.000	10.005
M10 X1.25	10.000	8.000	9.40	100.000	20.000	39.000	10.006

DIN 2174 ~DIN 374 — Article no. **1716** **1732**

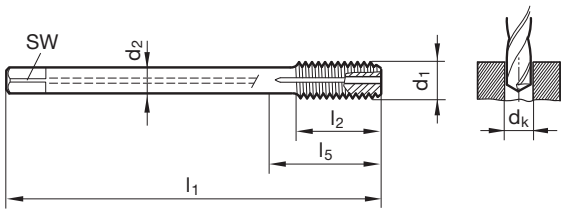
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M12 x 1	9.000	7.000	11.55	100.000	20.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	20.000	40.000	12.007
M14 X1.5	11.000	9.000	13.30	100.000	20.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	22.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	25.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	25.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	28.000	48.000	24.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	S
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	○
S	○
H	

Cutting data page 598





Company std. Company std. Article no. **4145**

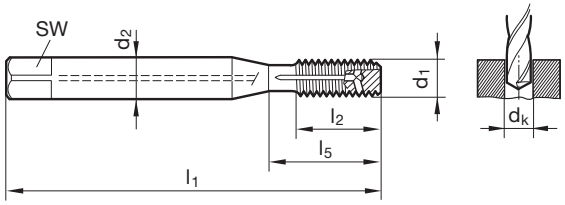
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	6.000	4.900	7.55	140.000	14.000	97.000	8.005
M10 x 1	7.000	5.500	9.55	160.000	16.000	117.000	10.005
M10 X1.25	7.000	5.500	9.40	160.000	16.000	117.000	10.006
M12 x 1	9.000	7.000	11.55	180.000	18.500	133.000	12.005
M12 X1.5	9.000	7.000	11.30	180.000	18.500	133.000	12.007
M14 X1.5	11.000	9.000	13.30	220.000	20.000	168.000	14.007
M16 X1.5	12.000	9.000	15.30	220.000	20.000	168.000	16.007

Oil feed fluteless taps f. ISO metric fine threads

Tool material	Solid carbide
Tolerance on Ø	6HX
Surface	C
Type	N
Form	C
Internal cooling	

P	•
M	•
K	
N	≥ 7
S	•
H	

Cutting data page 599





DIN 2174 ~DIN 371/~DIN 376 Article no. **1581**

d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M10 x 1	10.000	8.000	9.55	90.000	11.000	35.000	10.005
M12 x 1	9.000	7.000	11.55	100.000	15.000	40.000	12.005
M12 X1.5	9.000	7.000	11.30	100.000	15.000	40.000	12.007
M14 x 1	11.000	9.000	13.55	100.000	15.000	40.000	14.005
M14 X1.25	11.000	9.000	13.40	100.000	15.000	40.000	14.006
M14 X1.5	11.000	9.000	13.30	100.000	15.000	40.000	14.007
M16 X1.5	12.000	9.000	15.30	100.000	15.000	44.000	16.007
M18 X1.5	14.000	11.000	17.30	110.000	15.000	44.000	18.007
M20 X1.5	16.000	12.000	19.30	125.000	15.000	44.000	20.007
M24 X1.5	18.000	14.500	23.30	140.000	15.000	48.000	24.007



THREAD MILLING CUTTERS

S

Micro-thread milling cutters

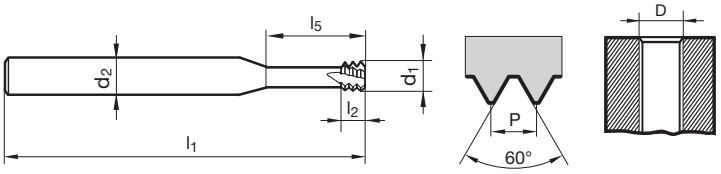
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 601

Tool material	**Solid carbide**
Surface	C
Type	SP M
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4226**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M 1.6	0.350	1.200	3.000	39.000	1.100	4.800	3	1.600
M 1.8	0.350	1.400	3.000	39.000	1.100	5.400	3	1.800
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.400	6.000	58.000	1.500	9.500	4	3.000
M 3.5	0.600	2.800	6.000	58.000	1.800	11.000	4	3.500
M4	0.700	3.200	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	4.000	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	73.000	4.500	33.000	4	10.000
M12	1.750	9.000	10.000	84.000	5.300	38.000	4	12.000
M16	2.000	11.800	10.000	84.000	6.000	35.000	5	16.000

Micro-thread milling cutters

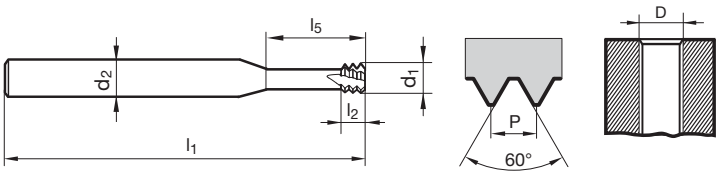
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 601

Tool material	**Solid carbide**
Surface	C
Type	SP G
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4228**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	6.200	8.000	64.000	2.700	19.500	4	9.728
G3/8	19.000	9.950	10.000	73.000	4.000	25.000	4	16.662
G7/8	14.000	11.950	12.000	84.000	5.400	37.000	4	30.201
G2	11.000	15.950	16.000	105.000	6.900	44.000	5	59.614

Micro-thread milling cutters

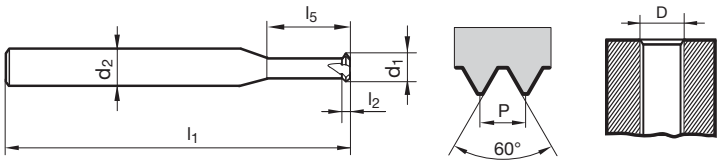
3xD

P	•
M	•
K	•
N	•
S	•
H	

Cutting data page 601

Tool material	**Solid carbide**
Surface	C
Type	SP M/MF
Threads	1,0
Shank form	HA

NEW





Company std. Article no. **4225**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M1.4 - M1.8	0.350	1.050	3.000	39.000	0.400	3.800	3	1.800
M2 - M2.4	0.400	1.500	3.000	39.000	0.400	7.000	3	2.400
M2.5 - M3	0.500	2.000	3.000	39.000	0.500	9.000	4	3.000
M3.5 - M4.5	0.750	2.800	6.000	58.000	0.800	14.000	4	4.500
M5 - M7	1.000	4.000	6.000	58.000	1.000	19.000	4	7.000
M8 - M10	1.500	6.400	8.000	64.000	1.500	24.000	5	10.000

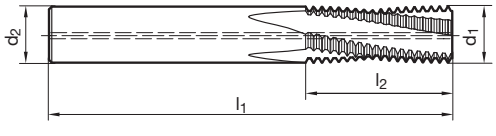
Thread milling cutters without chamfer for ISO metric threads

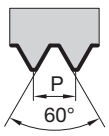
2xD

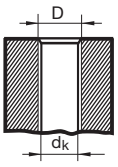
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide		
Surface	C	C	◯
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std. Article no. **3737** **3743** **3734**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M8 x 1	1.000	6.400	8.000	7.00	62.000	17.500	3	8.005
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M10 x 1	1.000	7.950	10.000	9.00	74.000	21.500	3	10.005
M10 X1.25	1.250	7.950	10.000	8.80	74.000	21.900	3	10.006
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M12 X1.5	1.500	9.950	10.000	10.50	74.000	26.300	4	12.007
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M14 X1.5	1.500	11.200	12.000	12.50	90.000	30.800	4	14.007
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M16 X1.5	1.500	12.800	14.000	14.50	90.000	33.800	4	16.007
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000
M20 X1.5	1.500	14.950	16.000	18.50	102.000	42.800	4	20.007

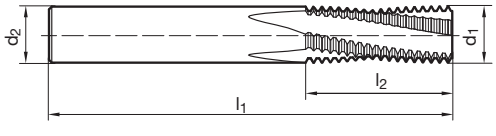
Thread milling cutters without chamfer for ISO metric threads

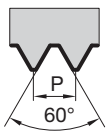
2xD

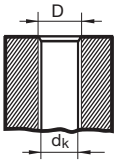
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	4132	4133

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	13.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	18.100	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	21.800	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	25.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	31.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	35.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	41.300	4	20.000

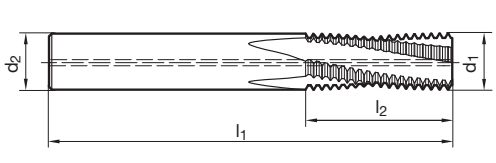
Thread milling cutters without chamfer for ISO metric threads

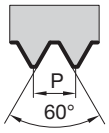
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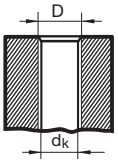
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3735** **3740**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M6	1.000	4.800	6.000	5.00	54.000	16.500	3	6.000
M8	1.250	6.400	8.000	6.80	62.000	21.900	3	8.000
M10	1.500	7.950	10.000	8.50	74.000	26.300	3	10.000
M12	1.750	9.950	10.000	10.20	74.000	32.400	4	12.000
M14	2.000	11.200	12.000	12.00	90.000	37.000	4	14.000
M16	2.000	12.800	14.000	14.00	90.000	43.000	4	16.000
M20	2.500	14.950	16.000	17.50	102.000	48.800	4	20.000

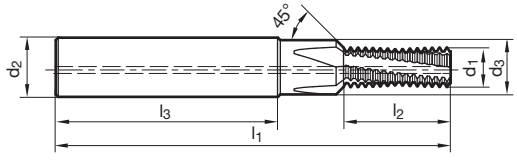
Thread milling cutters with chamfer for ISO metric threads

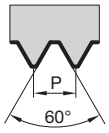


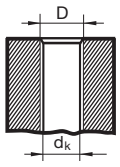
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	









Company std.	Article no.	3525	3543	3510

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

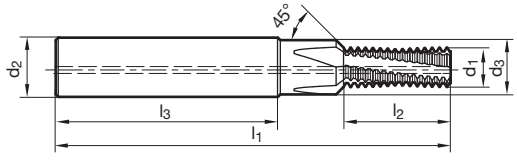
Thread milling cutters with chamfer for ISO metric threads

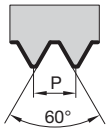
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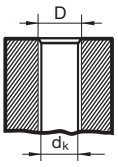
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std. Article no. **3526** **3544** **3511**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

Thread milling cutters with chamfer for ISO metric threads

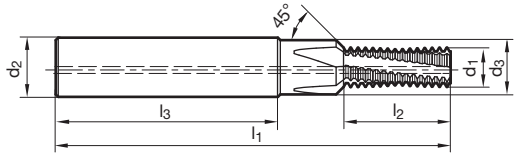
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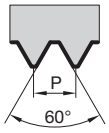
P	•
M	•
K	•
N	•
S	•
H	≤55

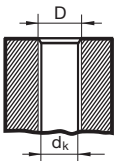
Cutting data page 601

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

NEW











Company std. Article no. **3759** **3760**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	7.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	35.600	10.900	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	13.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	16.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	21.900	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	26.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	32.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	37.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	43.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	48.800	4	20.000

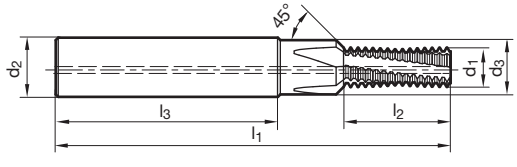
Thread milling cutters with chamfer for ISO metric fine threads

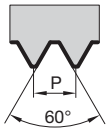
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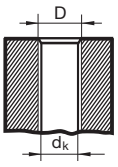
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std. Article no. **3527** **3545** **3512**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

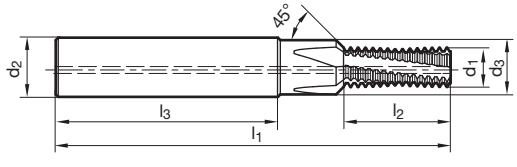
Thread milling cutters with chamfer for ISO metric fine threads

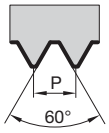
2xD

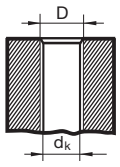
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide		
Surface	C	C	○
Type	TMC SP	TMC SP	TMC SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	













Company std.	Article no.	3528	3546	3513

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

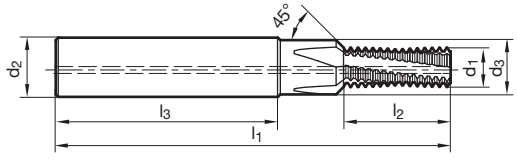
Thread milling cutters with chamfer for ISO metric fine threads

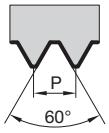
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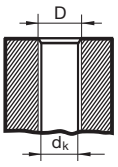
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3762** **3763**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	10.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	12.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	15.300	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	15.400	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	20.600	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	20.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	25.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	25.600	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	30.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	30.800	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	38.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	41.300	4	16.007

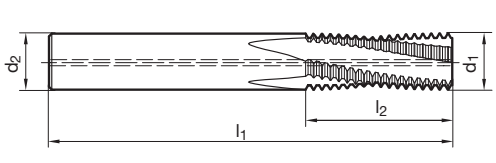
Thread milling cutters without chamfer for UNC-threads

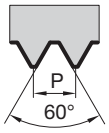
2xD

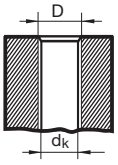
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	4134	4135

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 24	3.400	6.000	3.90	54.000	11.100	3	4.826
12 - 24	4.100	6.000	4.50	54.000	12.200	3	5.486
1/4 - 20	4.700	6.000	5.10	54.000	14.600	3	6.350
5/16 - 18	6.100	8.000	6.60	64.000	17.600	3	7.938
3/8 - 16	7.600	8.000	8.00	64.000	21.400	3	9.525
7/16 - 14	9.000	10.000	9.40	74.000	24.500	3	11.113
1/2 - 13	9.950	10.000	10.80	74.000	28.300	4	12.700
9/16 - 12	11.400	12.000	12.20	90.000	30.700	4	14.288
5/8 - 11	12.700	14.000	13.50	90.000	35.800	4	15.875

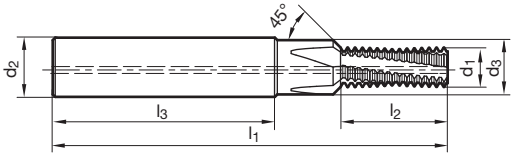
Thread milling cutters with chamfer for UNC-threads

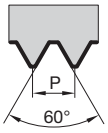


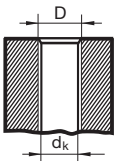
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3516** **3534**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

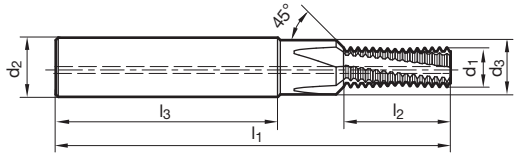
Thread milling cutters with chamfer for UNC-threads

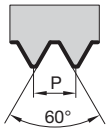
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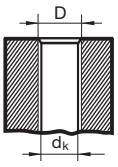
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3517	3535

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

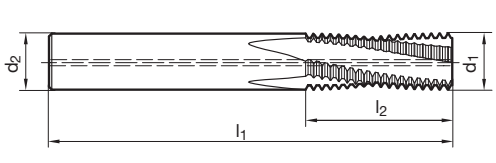
Thread milling cutters without chamfer for UNF-threads

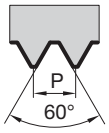
2xD

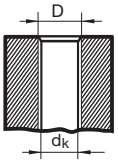
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **4136** **4137**

D	d1	d2	dk	l1	l2	Z	Code no.
	mm	mm	mm	mm	mm		
10 - 32	3.800	6.000	4.10	54.000	11.500	3	4.826
12 - 28	4.300	6.000	4.60	54.000	12.200	3	5.486
1/4 - 28	5.100	6.000	5.50	54.000	14.100	3	6.350
5/16 - 24	6.300	8.000	6.90	64.000	17.500	3	7.938
3/8 - 24	7.800	8.000	8.50	64.000	20.600	3	9.525
7/16 - 20	9.400	10.000	9.90	74.000	24.800	3	11.113
1/2 - 20	9.950	10.000	11.50	74.000	27.300	4	12.700
9/16 - 18	11.400	12.000	12.90	90.000	30.300	4	14.288
5/8 - 18	12.700	14.000	14.50	90.000	33.200	4	15.875

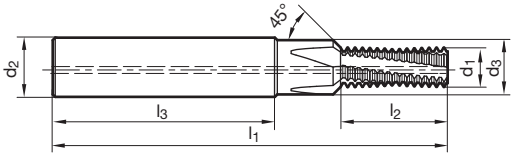
Thread milling cutters with chamfer for UNF-threads

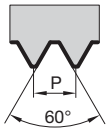


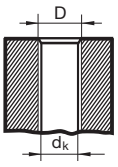
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3518	3536

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

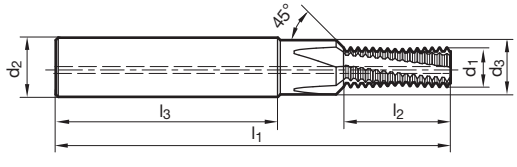
Thread milling cutters with chamfer for UNF-threads

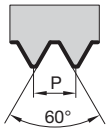
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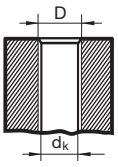
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3519** **3537**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

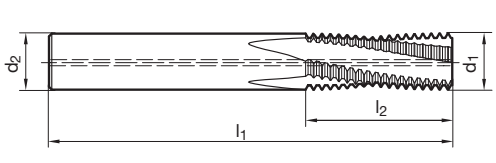
Thread milling cutters without chamfer for BSP-threads

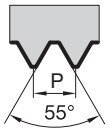
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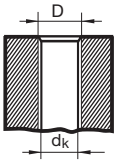
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3745	3748

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	21.300	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	28.700	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	35.400	4	16.662

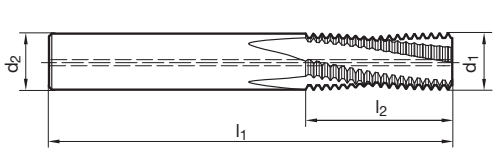
Thread milling cutters without chamfer for BSP-threads

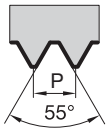
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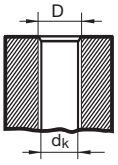
P	•
M	○
K	•
N	•
S	○
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3746** **3750**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	8.000	8.80	64.000	24.900	3	9.728
G1/4	19.000	10.500	12.000	11.80	90.000	35.400	4	13.157
G3/8	19.000	13.600	14.000	15.25	90.000	43.500	4	16.662

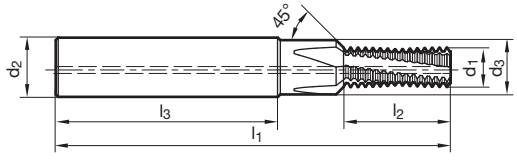
Thread milling cutters with chamfer for BSP-threads

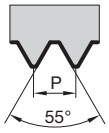


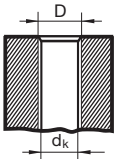
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

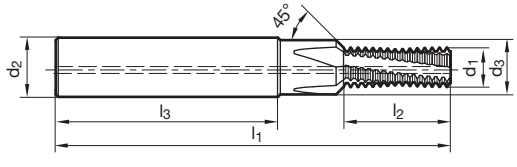
Thread milling cutters with chamfer for BSP-threads

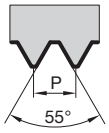
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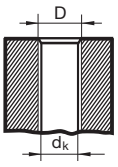
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3515** **3533**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

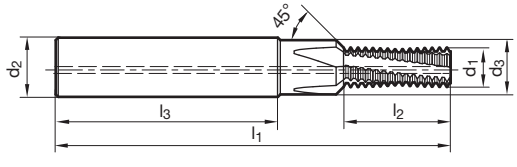
Thread milling cutters with chamfer for BSP-threads

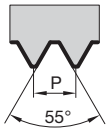
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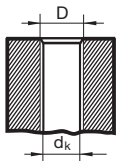
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3765** **3766**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	24.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	35.400	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	43.500	4	16.662

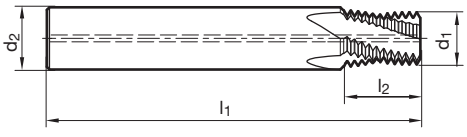
Thread milling cutters without chamfer for NPT-threads



Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600





Company std. Article no. **3753** **3754**

D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

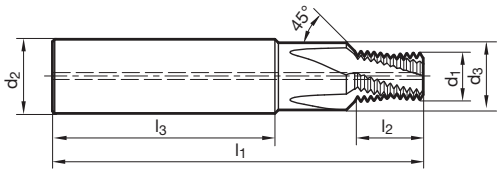
Thread milling cutters with chamfer for NPT-threads

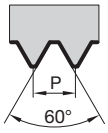
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB

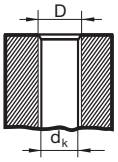
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600











Company std. Article no. **3520** **3538**

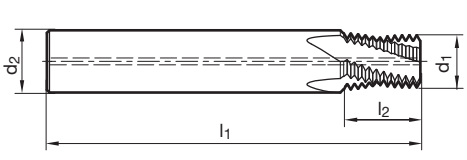
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

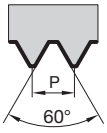
Thread milling cutters without chamfer for NPTF-threads

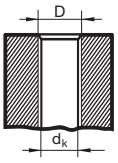
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600











Company std. Article no. **3756** **3757**

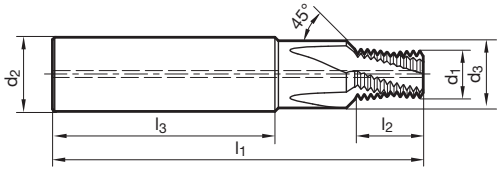
D	P	d1	d2	dk	l1	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm		
1/16	27.000	5.900	8.000	6.15	54.000	9.900	3	8.190
1/8	27.000	7.300	8.000	8.40	64.000	9.900	3	10.620
1/4	18.000	9.950	12.000	11.10	72.000	19.000	4	14.140
3/8	18.000	12.500	14.000	14.30	80.000	14.800	4	17.570

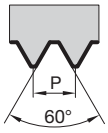
Thread milling cutters with chamfer for NPTF-threads

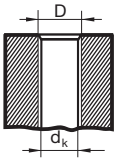
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 600

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3521	3539

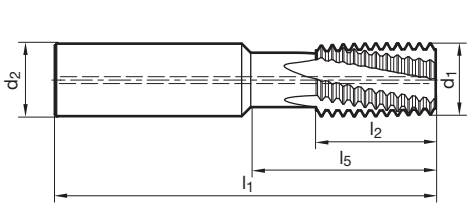
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

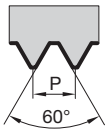
Universal thread milling cutters for ISO metric threads

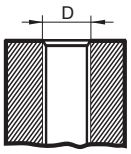
Tool material	Solid carbide		
Surface	C	C	○
Type	TMU SP	TMU SP	TMU SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601













Company std.	Article no.	3541	3556	3523

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

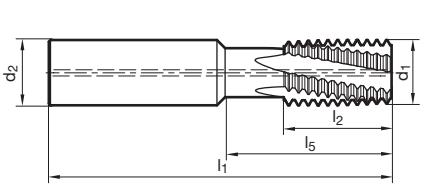
External thread milling cutters

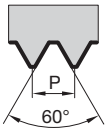
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB

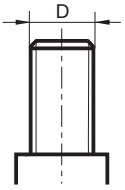
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601











Company std. Article no. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

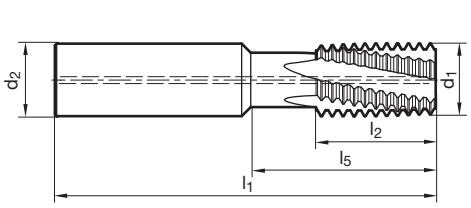
Universal thread milling cutters for UN-threads

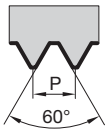
Tool material	Solid carbide	
Surface	C	C
Type	TMU UN	TMU UN
Internal cooling		
Shank form	HA	HB

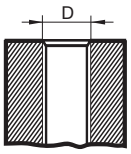
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601











Company std. Article no. **3595** **3596**

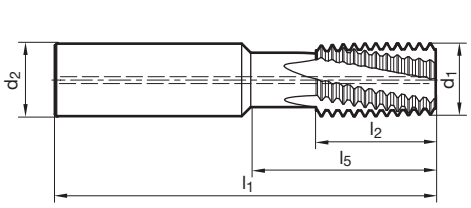
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

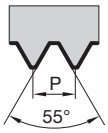
Universal thread milling cutters for BSP-threads

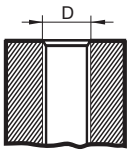
Tool material	Solid carbide		
Surface	C	C	○
Type	TM SP	TM SP	TM SP
Internal cooling			
Shank form	HA	HB	HA
		NEW	

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601













Company std. Article no. **3542** **3557** **3524**

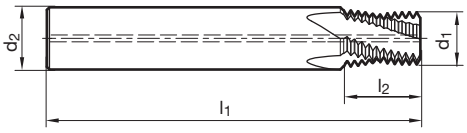
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

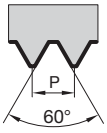
Universal thread milling cutters for NPT-threads

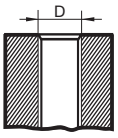
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601











Company std. Article no. **3768** **3769**

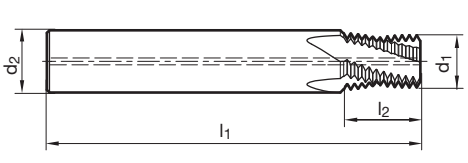
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

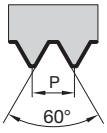
Universal thread milling cutters for NPTF-threads

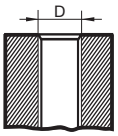
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 601











Company std.	Article no.	3772	3773

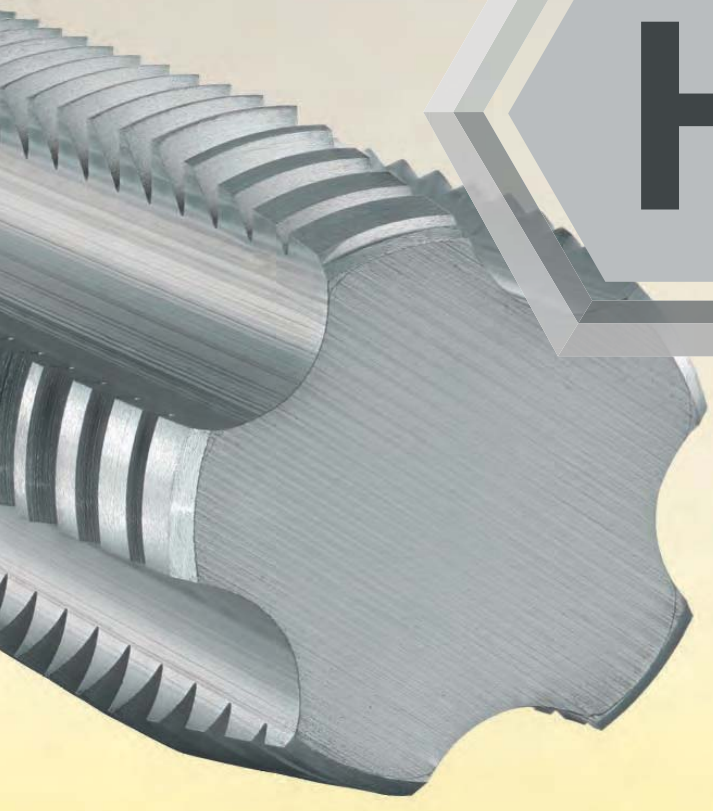
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

HARDENED

HARDENED STEEL

High tensile steels, hardened steels, chilled cast iron

H



HARDENED STEEL

M

ISO2/6H

ISO3/6G

MF

ISO2/6H

ISO3/6G

45 – 55 HRC

No 1
M3 - M16
Art.-No. 1201
from page 680

No 1
M8x1 - M12x1,5
Art.-No. 4161
from page 682

55 – 62 HRC

No 1
M3 - M16
Art.-No. 2944
from page 681

No 1
M6x0,5 - M12x1,5
Art.-No. 1161
from page 683

Core hole drills

No 1
Art.-No. 1946
from page 677

No 1
Art.-No. 1946
from page 677

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
2B	2B	-



THROUGH HOLE
BLIND HOLE



HSS-E-PM, TiCN, form D



Solid carbide, TiCN, form D



Solid carbide, TiAlN

H HARDENED STEEL

	M	MF
	UNIVERSAL	**UNIVERSAL**
max. 55 HRC 1.5xD	No 1 M3 - M20 Art.-No. 3525 from page 685	No 1 M4x0,5 - M16x1,5 Art.-No. 3527 from page 687
max. 55 HRC 2xD	No 1 M3 - M20 Art.-No. 3526 from page 686	No 1 M4x0,5 - M16x1,5 Art.-No. 3528 from page 688
max. 65 HRC 3xD	No 1 M2 - M12 Art.-No. 4227 from page 703	
Core hole drills	No 1 Art.-No. 1946 from page 677	No 1 Art.-No. 1946 from page 677

No 1 ideal tool

QUICKFINDER

UNC	UNF	G
UNIVERSAL	**UNIVERSAL**	**-**



THROUGH HOLE
BLIND HOLE

No 1
1/4 - 1/2
Art.-No. 3516
from page 689

No 1
1/4 - 1/2
Art.-No. 3518
from page 691

No 1
1/8 - 3/8
Art.-No. 3514
from page 693



Solid carbide, TiCN

No 1
1/4 - 1/2
Art.-No. 3517
from page 690

No 1
1/4 - 1/2
Art.-No. 3519
from page 692

No 1
1/8 - 3/8
Art.-No. 3515
from page 694



Solid carbide, TiCN



Solid carbide, TiCN



Solid carbide, TiAlN

HARDENED STEEL

THROUGH HOLES



	Thread depth		≤1,5xD	≤3xD	
	Tool material		HSS-E	Solid carbide	
	Type/form		H/D	H/D	H
	Surface		C	C	A
	Coolant delivery		☒	☒	☒
	Shank tolerance		h9	h9	HA
			 45 ... 55 HRC	 ≤ 65 HRC	 Core drill
	Thread type	**Tolerance**	**Article no. / page**		
	M	4H			
		6H		2944 681	1946 677
		6HX	1201 680		1946 677
		6G			
	MF	6H		1161 683	1946 677
		6HX	4161 682		1946 677
		6G			
	UNC	2B			
		2BX			
	UNF	2B			
		2BX			
	G				
	BSW				
	NPT				
	NPTF				
	EG M	6H Mod.			
	MJ	4HX			
	MJF	4HX			
	UNJC	3BX			
	UNJF	3BX			
	PG				
		Suitable lubricant	●/△	●/△	○/●

= No 1

○ = Air
● = Neat oil
○ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Hardness	Material example	Material no.	Application recommendations		
H	High tensile steels, hardened steels	45 - 55 HRC	Hardox 500		**3**	-	
		55 - 62 HRC			-	**2**	

Special tapping size hole diameter for hard machining with Guhring no. 2944

Thread size	Tapping size hole Ø		Core diameter of int. thread			
			min.		max.	
	to DIN 336 mm	with Guh. no. 2944 mm	to DIN 336 mm	with Guh. no. 2944 mm	to DIN 336 mm	with Guh. no. 2944 mm
M3	2.50	2.60	2.495	2.559	2.599	2.699
M4	3.30	3.40	3.242	3.342	3.422	3.522
M5	4.20	4.30	4.134	4.234	4.334	4.434
M6	5.00	5.10	4.917	5.017	5.153	5.253
M8	6.80	6.90	6.647	6.747	6.912	7.012
M10	8.50	8.60	8.376	8.476	8.676	8.776
M12	10.20	10.40	10.106	10.206	10.441	10.541
M16	12.00	14.10	13.835	15.935	14.210	16.310

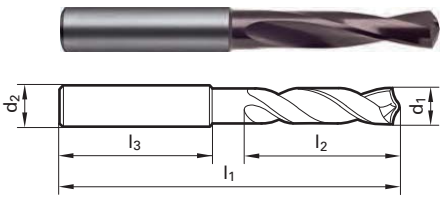
Special tapping size hole diameter for hard machining with Guhring no. 1161

Thread size	Tapping size hole Ø		Core diameter of int. thread			
			min.		max.	
	to DIN 336 mm	with Guh. no. 1161 mm	to DIN 336 mm	with Guh. no. 1161 mm	to DIN 336 mm	with Guh. no. 1161 mm
M6x0,5	5.50	5.60	5.459	5.559	5.599	5.699
M8x1	7.00	7.10	6.917	7.017	7.153	7.253
M10x1	9.00	9.10	8.917	9.017	9.153	9.253
M12x1	11.00	11.10	10.917	11.017	11.153	11.253
M12x1,5	10.50	10.60	10.376	10.476	10.676	10.776

Article no.	**1946**
Tool material	**Solid carbide**
Carbide grade	K
Type	H
Surface finish	A
DIN	DIN 6537
Shank form	HA

The Guhring drill for tapping size holes in hardened materials!

Guhring's hard drill enables the efficient and process reliable production of holes in hardened steels up to 62 HRC. Convex cutting edges give the tool its extremely high rigidity and ensure an optimal chip fracture. The flute profile is optimised for hard machining and evacuates the swarf safely from the hole. The Guhring hard drill is available as standard tool with straight shank to DIN 6535 HA in the diameter range from 2.6 to 14.1 mm.



d1	d2	l1	l2	l3
mm	mm	mm	mm	mm
2.600	6.000	62.00	20.00	36.00
3.000	6.000	62.00	20.00	36.00
3.400	6.000	62.00	20.00	36.00
4.000	6.000	66.00	24.00	36.00
4.300	6.000	66.00	24.00	36.00
5.000	6.000	66.00	28.00	36.00
5.100	6.000	66.00	28.00	36.00
5.600	6.000	66.00	28.00	36.00
6.000	6.000	66.00	28.00	36.00
6.900	8.000	79.00	34.00	36.00
7.100	8.000	79.00	34.00	36.00
8.000	8.000	79.00	41.00	36.00
8.600	10.000	89.00	47.00	40.00
9.100	10.000	89.00	47.00	40.00
10.000	10.000	89.00	47.00	40.00
10.400	12.000	102.00	55.00	45.00
10.600	12.000	102.00	55.00	45.00
11.100	12.000	102.00	55.00	45.00
12.000	12.000	102.00	55.00	45.00
14.100	16.000	115.00	65.00	48.00

Cutting rates at 3 x D with Guhring no. 1946

	Hardness	HRC 40…48	HRC 48 … 62
	Cutting speed v_c	40 m/min	30 m/min
drill Ø in mm	Feed rate	f (mm/rev):	f (mm/rev):
	2.6	0.032	0.025
	3.4	0.040	0.032
	4.3	0.050	0.040
	5.1	0.050	0.040
	5.6	0.050	0.040
	6.9	0.070	0.055
	7.1	0.070	0.055
	8.6	0.090	0.070
	9.1	0.090	0.070
	10.4	0.110	0.090
	10.5	0.110	0.090
	11.0	0.120	0.100
	14.1	0.120	0.100

HARDENED STEEL



THROUGH HOLES AND **BLIND** HOLES

	Thread depth	≤1,5xD	
	Tool material		
	Type	TMC SP	TMC SP
	Surface	C	C
	Coolant delivery	axial	axial
	Shank form	HA	HA
	Spiral	10°	10°
			
	Thread type	**Article no. / page**	
	M	3525 685	3543 685
	MF	3527 687	3545 687
	UNC	3516 689	3534 689
	UNF	3518 691	3536 691
	G	3514 693	3529 693
	BSW		
	NPT	3520 695	3538 695
	NPTF	3521 696	3539 696
	EG M		
	MJ		
	MJF		
	UNJC		
	UNJF		
	PG		
	Suitable lubricant	◯/●	◯/●

= No 1

◯ = Air
● = Neat oil
◯ = Soluble oil
△ = Paste
☐ = Minimal quantity lubrication (MQL)

	Group of materials	Hardness	Material example	Material no.	Application recommendations	
H	High tensile steels, hardened steels	45 - 55 HRC	Hardox 500		++	++
		55 - 62 HRC			-	-

≤2xD		universal				≤3xD	
Solid carbide							
TMC SP	TMC SP	TMU SP	TMU SP	TMU SP	TMU SP	MTM 3 SP	H
C	C	C	C	C	C	C	A
axial	axial	axial	axial	axial	axial	☒	☒
HA	HB	HA	HB	HA	HB	HA	HA
10°	10°	15°	15°	15°	15°	15°	15°
				 for external threads	 for external threads		
Article no. / page							
3526 686	3544 686	3541 697	3556 697	4162 698	4163 698	4227 703	1946 677
3528 688	3546 688	3541 697	3556 697	4162 698	4163 698		1946 677
3517 690	3535 690	3595 699	3596 699				
3519 692	3537 692	3595 699	3596 699				
3515 694	3533 694	3542 700	3557 700	3542 700	3557 700		
		3768 701	3769 701				
		3772 702	3773 702				
EG-threads can be produced with every thread milling cutter type and dimension							
○/●	○/●	○/●	○/●	○/●	○/●	○	○/●

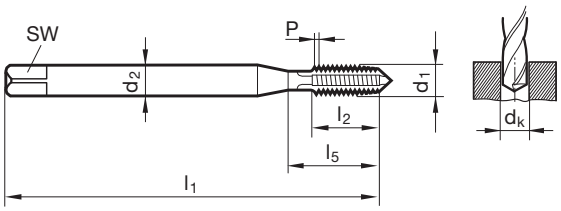
Application recommendations							
++	++	+	+	+	+	++	++
-	-	-	-	-	-	++	++

Machine taps for ISO metric threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	C
Type	H
Form	D
Internal cooling	

P	
M	
K	
N	
S	
H	45-55

Cutting data page 676





DIN 2184-1 DIN 371 Article no. **1201**

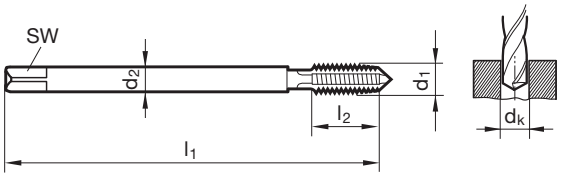
d1	P	d2	SW	dk	l1	l2	l5
	mm	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.60	56.000	10.000	18.000
M4	0.700	4.500	3.400	3.40	63.000	12.000	21.000
M5	0.800	6.000	4.900	4.30	70.000	14.000	25.000
M6	1.000	6.000	4.900	5.10	80.000	16.000	30.000
M8	1.250	8.000	6.200	6.90	90.000	17.000	35.000
M10	1.500	10.000	8.000	8.60	100.000	20.000	39.000
M12	1.750	12.000	9.000	10.40	110.000	24.000	49.000
M14	2.000	11.000	11.000	12.10	110.000	26.000	53.000
M16	2.000	12.000	12.000	14.10	110.000	26.000	54.000

Machine taps for ISO metric threads

Tool material	**Solid carbide**
Tolerance on Ø	ISO2/6H
Surface	C
Type	H
Form	D
Internal cooling	

P	
M	
K	
N	
S	
H	≤62

Cutting data page 676





Company std. ~DIN 371 Article no. **2944**

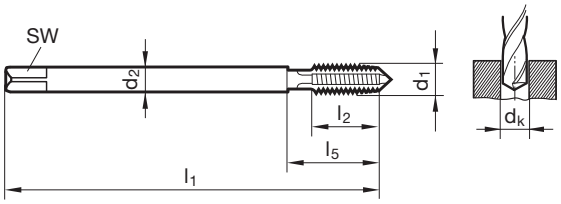
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.60	56.000	12.000
M4	0.700	4.500	3.400	3.40	63.000	14.000
M5	0.800	6.000	4.900	4.30	70.000	17.000
M6	1.000	6.000	4.900	5.10	80.000	20.000
M8	1.250	8.000	6.200	6.90	90.000	20.000
M10	1.500	10.000	8.000	8.60	100.000	24.000
M12	1.750	12.000	9.000	10.40	110.000	28.000
M16	2.000	16.000	12.000	14.10	110.000	40.000

Machine taps for ISO metric fine threads

Tool material	HSS-E-PM
Tolerance on Ø	6HX
Surface	C
Type	H
Form	D
Internal cooling	

P	
M	
K	
N	
S	
H	45-55

Cutting data page 676





DIN 2184-1 DIN 371 Article no. **4161**

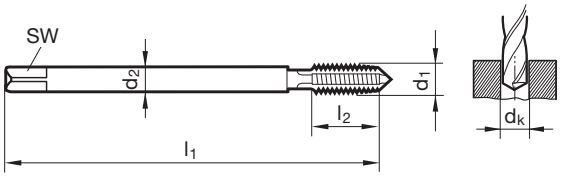
d1	d2	SW	dk	l1	l2	l5	Code no.
	mm	mm	mm	mm	mm	mm	
M8 x 1	8.000	6.200	7.10	90.000	16.000	35.000	8.005
M10 x 1	10.000	8.000	9.10	90.000	16.000	35.000	10.005
M12 x 1	12.000	9.000	11.10	100.000	20.000	40.000	12.005
M12 X1.5	12.000	9.000	10.60	100.000	20.000	40.000	12.007

Machine taps for ISO metric fine threads

Tool material	**Solid carbide**
Tolerance on Ø	ISO2/6H
Surface	C
Type	H
Form	D
Internal cooling	

P	
M	
K	
N	
S	
H	≤62

Cutting data page 676





Company std. ~DIN 371 Article no. **1161**

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
M 6 X0.5	6.000	4.900	5.60	80.000	15.000	6.003
M8 x 1	8.000	6.200	7.10	90.000	18.000	8.005
M10 x 1	10.000	8.000	9.10	90.000	22.000	10.005
M12 x 1	12.000	9.000	11.10	100.000	25.000	12.005
M12 X1.5	12.000	9.000	10.60	100.000	28.000	12.007



THREAD MILLING CUTTERS

H

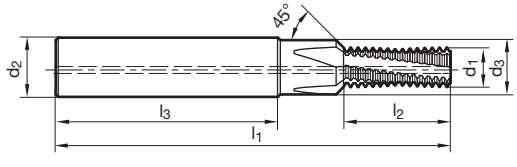
Thread milling cutters with chamfer for ISO metric threads

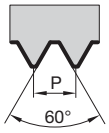
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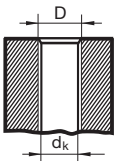
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3525** **3543**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	5.300	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	7.400	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	9.200	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	10.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	13.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	17.300	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	20.100	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	25.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	27.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	33.800	4	20.000

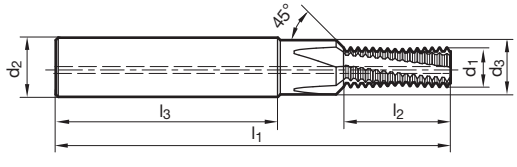
Thread milling cutters with chamfer for ISO metric threads

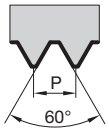
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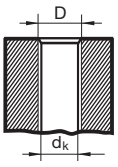
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3526** **3544**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M3	0.500	2.300	6.000	3.400	2.50	48.000	36.000	6.800	3	3.000
M4	0.700	3.000	6.000	4.500	3.30	48.000	36.000	8.800	3	4.000
M5	0.800	4.000	6.000	5.500	4.20	54.000	36.000	10.800	3	5.000
M6	1.000	4.800	8.000	6.600	5.00	62.000	36.000	13.500	3	6.000
M8	1.250	6.400	10.000	9.000	6.80	74.000	40.000	18.100	3	8.000
M10	1.500	7.950	12.000	11.000	8.50	80.000	45.000	21.800	4	10.000
M12	1.750	9.950	14.000	13.500	10.20	90.000	45.000	25.400	4	12.000
M14	2.000	11.200	16.000	15.500	12.00	102.000	48.000	31.000	4	14.000
M16	2.000	12.800	18.000	17.500	14.00	102.000	48.000	35.000	4	16.000
M20	2.500	14.500	20.000	21.500	17.50	125.000	50.000	41.300	4	20.000

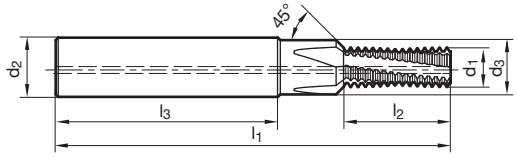
Thread milling cutters with chamfer for ISO metric fine threads

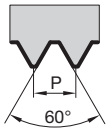
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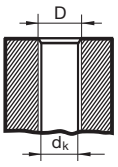
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3527** **3545**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	7.300	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	8.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	9.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	10.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	13.100	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	13.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	16.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	16.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	19.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	20.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	23.300	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	26.300	4	16.007

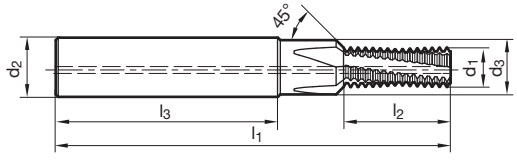
Thread milling cutters with chamfer for ISO metric fine threads

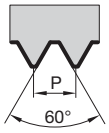
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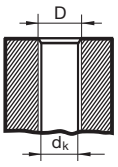
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3528** **3546**

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm	mm		
M 4 X0.5	0.500	3.000	6.000	4.500	3.50	48.000	36.000	8.800	3	4.003
M 5 X0.5	0.500	4.000	6.000	5.500	4.50	54.000	36.000	10.800	3	5.003
M 6 X0.5	0.500	4.800	8.000	6.600	5.50	62.000	36.000	12.800	3	6.003
M 6 X0.75	0.750	4.800	8.000	6.600	5.20	62.000	36.000	13.100	3	6.004
M 8 X0.75	0.750	6.400	10.000	9.000	7.20	74.000	40.000	16.900	3	8.004
M8 x 1	1.000	6.400	10.000	9.000	7.00	74.000	40.000	17.500	3	8.005
M10 x 1	1.000	7.950	12.000	11.000	9.00	80.000	45.000	21.500	4	10.005
M10 X1.25	1.250	7.950	12.000	11.000	8.80	80.000	45.000	21.900	4	10.006
M12 x 1	1.000	9.950	14.000	13.500	11.00	90.000	45.000	25.500	4	12.005
M12 X1.5	1.500	9.950	14.000	13.500	10.50	90.000	45.000	26.300	4	12.007
M14 X1.5	1.500	11.200	16.000	15.500	12.50	102.000	48.000	30.800	4	14.007
M16 X1.5	1.500	12.800	18.000	17.500	14.50	102.000	48.000	33.800	4	16.007

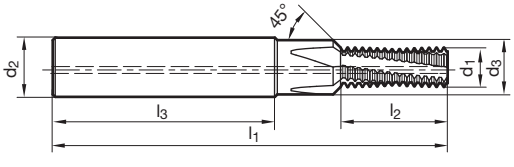
Thread milling cutters with chamfer for UNC-threads

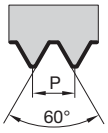


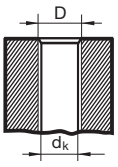
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3516	3534

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	12.100	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	14.800	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	16.700	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	19.000	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	22.500	4	12.700

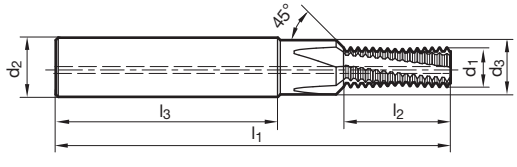
Thread milling cutters with chamfer for UNC-threads

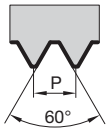


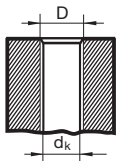
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3517** **3535**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 20	4.800	8.000	6.600	5.10	62.000	36.000	14.600	3	6.350
5/16 - 18	5.950	10.000	9.000	6.60	74.000	40.000	17.600	3	7.938
3/8 - 16	7.100	12.000	11.000	8.00	80.000	45.000	21.400	4	9.525
7/16 - 14	7.950	12.000	11.000	9.40	80.000	45.000	24.500	4	11.113
1/2 - 13	9.950	14.000	13.500	10.80	90.000	45.000	28.300	4	12.700

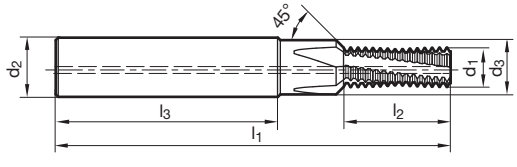
Thread milling cutters with chamfer for UNF-threads

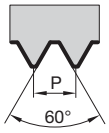
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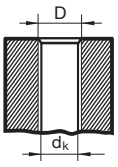
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3518** **3536**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	11.300	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	13.200	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	16.400	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	18.400	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	21.000	4	12.700

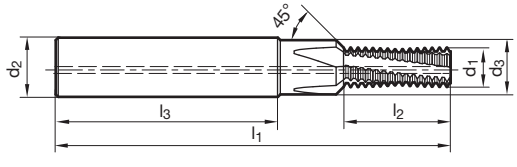
Thread milling cutters with chamfer for UNF-threads

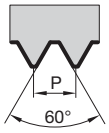
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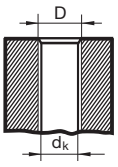
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3519** **3537**

D	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	mm	mm	mm	mm	mm	mm	mm		
1/4 - 28	4.800	8.000	6.600	5.50	62.000	36.000	14.100	3	6.350
5/16 - 24	5.950	10.000	9.000	6.90	74.000	40.000	17.500	3	7.938
3/8 - 24	7.950	12.000	11.000	8.50	80.000	45.000	20.600	4	9.525
7/16 - 20	7.950	12.000	11.000	9.90	80.000	45.000	24.800	4	11.113
1/2 - 20	9.950	14.000	13.500	11.50	90.000	45.000	27.300	4	12.700

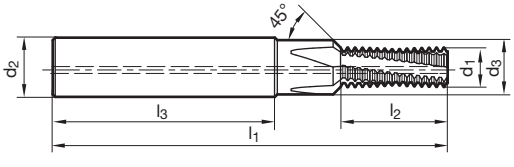
Thread milling cutters with chamfer for BSP-threads

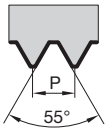


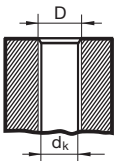
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3514	3529

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	15.900	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	22.100	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	27.400	4	16.662

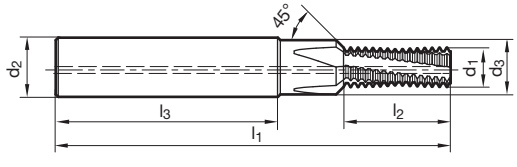
Thread milling cutters with chamfer for BSP-threads

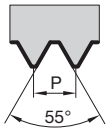
2xD

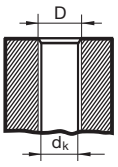
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std. Article no. **3515** **3533**

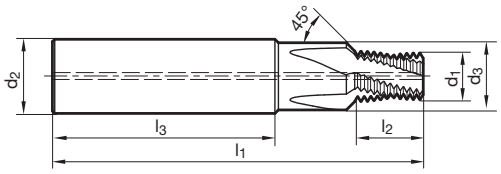
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
G1/8	28.000	7.950	12.000	11.000	8.80	80.000	45.000	21.300	4	9.728
G1/4	19.000	9.950	14.000	13.900	11.80	90.000	45.000	28.700	4	13.157
G3/8	19.000	13.600	18.000	17.500	15.25	102.000	48.000	35.400	4	16.662

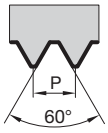
Thread milling cutters with chamfer for NPT-threads

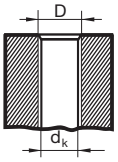
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678

Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3520	3538

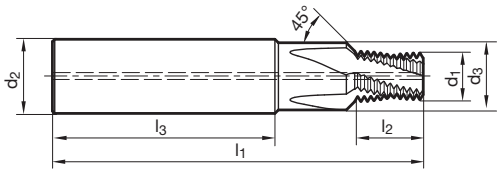
D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

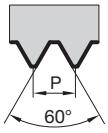
Thread milling cutters with chamfer for NPTF-threads

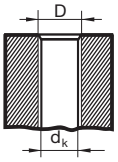
Tool material	Solid carbide	
Surface	C	C
Type	TMC SP	TMC SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 678











Company std.	Article no.	3521	3539

D	P	d1	d2	d3	dk	l1	l3	l2	Z	Code no.
	G/inch	mm	mm	mm	mm	mm	mm	mm		
1/8	27.000	7.300	12.000	11.000	8.40	70.000	45.000	9.900	4	10.620
1/4	18.000	9.950	16.000	14.500	11.10	80.000	48.000	14.800	4	14.140
3/8	18.000	12.500	18.000	17.500	14.30	80.000	48.000	14.800	4	17.570

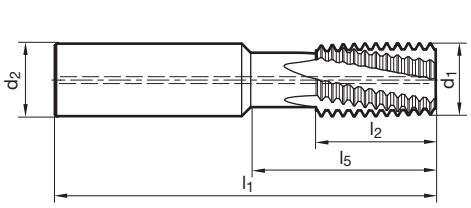
Universal thread milling cutters for ISO metric threads

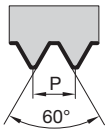
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB

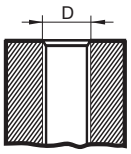
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679











Company std.	Article no.	3541	3556

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 10	7.950	8.000	64.000		20.000	4	8.050
1.000	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.100
1.250	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.125
1.500	≥ 12	9.950	10.000	70.000	25.000	16.000	4	10.150
1.000	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 14	11.950	12.000	80.000	31.000	20.000	4	12.150
1.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.100
1.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.200
3.000	≥ 24	17.950	18.000	102.000	50.000	33.000	5	18.300
1.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.100
1.500	≥ 26	19.950	20.000	105.000	50.000	33.000	5	20.150
2.000	≥ 27	19.950	20.000	105.000	50.000	33.000	5	20.200
2.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.250
3.000	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.300
3.500	≥ 30	19.950	20.000	105.000	50.000	33.000	5	20.350

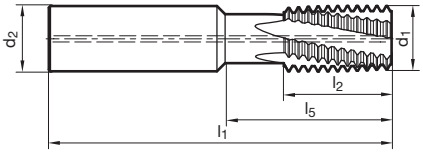
External thread milling cutters

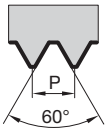
Tool material	Solid carbide	
Surface	C	C
Type	TMU SP	TMU SP
Internal cooling		
Shank form	HA	HB

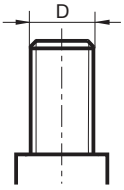
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679











Company std. Article no. **4162** **4163**

P	D	d1	d2	l1	l5	l2	Z	Code no.
mm		mm	mm	mm	mm	mm		
0.500	≥ 3	9.950	10.000	70.000	25.000	16.000	4	10.050
0.750	≥ 5	9.950	10.000	70.000	25.000	16.000	4	10.075
1.000	≥ 6	11.950	12.000	80.000	31.000	20.000	4	12.100
1.250	≥ 8	11.950	12.000	80.000	31.000	20.000	4	12.125
1.500	≥ 10	11.950	12.000	80.000	31.000	20.000	4	12.150
1.500	≥ 10	15.950	16.000	90.000	40.000	25.000	5	16.150
2.000	≥ 14	15.950	16.000	90.000	40.000	25.000	5	16.200
2.500	≥ 18	15.950	16.000	90.000	40.000	25.000	5	16.250
3.000	≥ 24	19.950	20.000	105.000	50.000	33.000	5	20.300

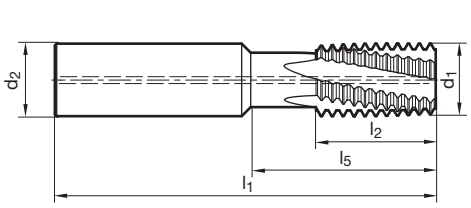
Universal thread milling cutters for UN-threads

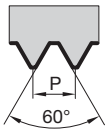
Tool material	Solid carbide	
Surface	C	C
Type	TMU UN	TMU UN
Internal cooling		
Shank form	HA	HB

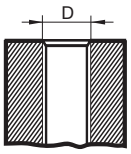
NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679











Company std.	Article no.	3595	3596

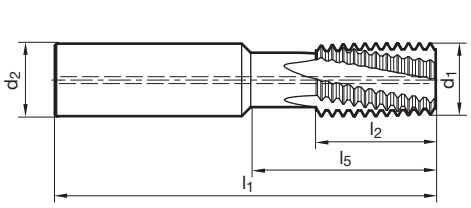
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
24.000	≥ 1/2	9.950	10.000	70.000	25.000	16.000	4	10.240
10.000	≥ 3/4	11.950	12.000	80.000	31.000	20.000	4	12.100
16.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.160
18.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.180
20.000	≥ 11/16	11.950	12.000	80.000	31.000	20.000	4	12.200
24.000	≥ 5/8	11.950	12.000	80.000	31.000	20.000	4	12.240
12.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.120
14.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.140
16.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.160
18.000	≥ 7/8	15.950	16.000	90.000	40.000	25.000	5	16.180
20.000	≥ 13/16	15.950	16.000	90.000	40.000	25.000	5	16.200
7.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.070
8.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.080
12.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.120
14.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.140
16.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.160

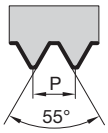
Universal thread milling cutters for BSP-threads

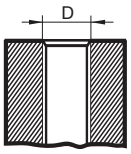
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679











Company std. Article no. **3542** **3557**

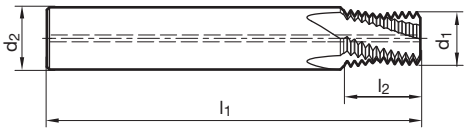
P	D	d1	d2	l1	l5	l2	Z	Code no.
G/inch		mm	mm	mm	mm	mm		
19.000	≥ 1/4	9.950	10.000	70.000	25.000	16.000	4	10.190
14.000	≥ 1/2	15.950	16.000	90.000	40.000	25.000	5	16.140
11.000	≥ 1	19.950	20.000	105.000	50.000	33.000	5	20.110

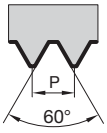
Universal thread milling cutters for NPT-threads

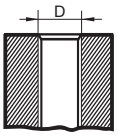
P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679

Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW











Company std.	Article no.	3768	3769

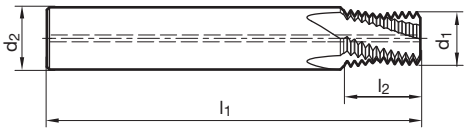
P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

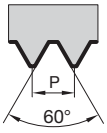
Universal thread milling cutters for NPTF-threads

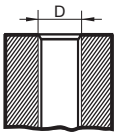
Tool material	Solid carbide	
Surface	C	C
Type	TM SP	TM SP
Internal cooling		
Shank form	HA	HB
		NEW

P	•
M	•
K	•
N	•
S	•
H	≤55

Cutting data page 679











Company std. Article no. **3772** **3773**

P	D	d1	d2	l1	l2	Z	Code no.
G/inch		mm	mm	mm	mm		
14.000	≥ 1/2	14.500	16.000	90.000	19.050	5	21.900
11.500	≥ 1	18.500	20.000	90.000	23.190	5	34.180

Micro-thread milling cutters

3xD

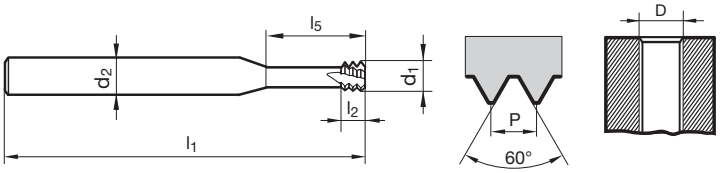
P	
M	
K	
N	
S	○
H	●

Cutting data page 679

Tool material	**Solid carbide**
Surface	A
Type	SP M
Threads	3,0
Shank form	HA

NEW





Company std. Article no. **4227**

D	P	d1	d2	l1	l2	l5	Z	Code no.
	mm	mm	mm	mm	mm	mm		
M2	0.400	1.550	3.000	39.000	1.200	6.000	4	2.000
M 2.5	0.450	1.950	3.000	39.000	1.400	7.500	4	2.500
M3	0.500	2.350	6.000	58.000	1.500	9.500	4	3.000
M4	0.700	3.100	6.000	58.000	2.100	12.500	4	4.000
M5	0.800	3.800	6.000	58.000	2.400	16.000	4	5.000
M6	1.000	4.800	6.000	58.000	3.000	20.000	4	6.000
M8	1.250	5.950	6.000	58.000	3.800	24.000	4	8.000
M10	1.500	7.800	8.000	64.000	4.500	23.000	4	10.000
M12	1.750	9.000	10.000	73.000	5.300	26.000	5	12.000

HAND TAPS

DIES

Material group	Tens. strength MPa (N/mm2)	Hardness HB	Cutting speed vc m/min	
			HSS	HSS-E
Structural steels	≤ 800	–	8 - 12	–
Free-cutting steels	≤ 1000	–	10 - 14	–
Unalloyed case hardened steels	≤ 750	–	6 - 10	–
Unalloyed heat-treatable steels	≤ 850	–	6 - 10	–
Alloyed case hardened steels	≥ 850 ... 1200	–	–	5 - 8
Alloyed heat-treatable steels	≥ 850 ... 1200	–	–	5 - 8
Alloyed tool steels	≤ 1000	–	–	5 - 8
High speed tool steels	≥ 650 ... 1000	–	–	5 - 8
Stainless- and acid-resistant steels, sulphured	≤ 850	–	–	4 - 6
austenitic	≤ 850	–	–	4 - 6
martensitic	≤ 850	–	–	4 - 6
Structural steels	≤ 800	–	8 - 12	–
Free-cutting steels	≤ 1000	–	10 - 14	–
Case hardened steels	≤ 1000	–	6 - 10	–
Heat-treatable steels	≤ 1200	–	6 - 10	–
Nitriding steels	≤ 1200	–	–	5 - 8
Spheroidal graphite iron	–	≤ 240	5 - 8	–
Aluminium and Al-alloys	≤ 400	–	10 - 20	–
Al wrought alloys	≤ 400	–	10 - 20	–
Al cast alloys ≤ 10 % Si	≤ 600	–	10 - 15	–
> 10 % Si	≤ 600	–	10 - 12	–
Cast iron	–	≤ 240	5 - 8	–
Spheroidal graphite iron	–	≤ 240	5 - 8	–
Malleable cast iron	–	< 300	5 - 8	–
Brass, short-chipping	≤ 600	–	5 - 8	–
long-chipping	≤ 600	–	20 - 30	–
Plastics	–	–	12 - 18	–
Magnesium-alloys	≤ 450	–	10 - 20	–
Titanium and Ti-alloys	≤ 1200	–	–	2 - 6
Ni-alloys	≤ 1200	–	–	2 - 6

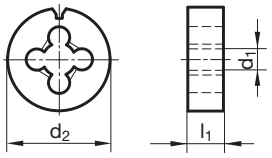
Material group	Material example	Helix angle	Lubricant
Structural steels	St 37-2, St 50-2 etc.	17 - 22°	Cutting oil
Free-cutting steels	9 S Mn 28, 9 S MnPb 28 etc.	17 - 22°	Cutting oil
Case hardened steels	C 15, Ck 15, 16 MnCr 5 etc.	17 - 22°	Cutting oil, special cutting oil
Heat-treatable steels	C 35 Pb, C 45 etc.	13 - 18°	Cutting oil, special cutting oil
Stainless- and acidresistant steels	x12 CrMoS 17, x12 CrNiS 188 etc.	13 - 18°	Special cutting oil
Grey cast iron	GG 15, GG25	8 - 12°	Cutting oil, petroleum
Brass, short-chipping, Ms58	CuZn 39 Pb 2, CuZn 40 Pb 2	10 - 12°	Cutting oil
Brass, long-chipping, Ms60	CuZn 20, CuZn 37	3 - 7°	Cutting oil
Al-alloys, long-chipping	AlCuMg 1, AlMg 3 Si	23 - 28°	Special cutting oil, petroleum
Al-alloys, short-chipping	GD-AlSi 8 Cu 3, GD AlSi 12	13 - 18°	Special cutting oil, petroleum

Die nuts for ISO metric threads

6g | R | WN | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	◯
	>M 2.6
Chamfer lead	1.75xP





Company std. Article no. **121**

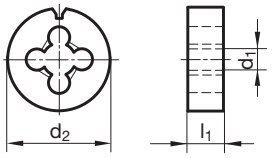
d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M3	0.500	16.000	5.000	2.92	3.010
M4	0.700	20.000	5.000	3.91	4.020
M5	0.800	16.000	5.000	4.90	5.010
M5	0.800	20.000	7.000	4.90	5.020
M6	1.000	16.000	5.000	5.88	6.010
M6	1.000	20.000	7.000	5.88	6.020
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000

Die nuts for ISO metric threads

6g | R | WN | B

Tool material	HSS
Surface	◯
	>M 2.6
Chamfer lead	1.75xP

P	≤ 1000
M	
K	•
N	•
S	
H	





Company std. Article no. **125**

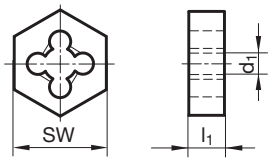
d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M2	0.400	16.000	3.500	1.94	2.000
M3	0.500	20.000	3.500	2.92	3.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000

Dies for ISO metric threads

6g | R | DIN 382

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	○
Chamfer lead	1.75xP





DIN 382 Article no. **139**

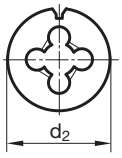
d1	P	SW	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M5	0.800	18.000	7.000	4.90	5.000
M6	1.000	18.000	7.000	5.88	6.000
M8	1.250	21.000	9.000	7.87	8.000
M10	1.500	27.000	11.000	9.85	10.000
M12	1.750	36.000	14.000	11.83	12.000
M16	2.000	41.000	18.000	15.82	16.000
M20	2.500	41.000	18.000	19.79	20.000
M24	3.000	50.000	22.000	23.77	24.000
M52	5.000	85.000	36.000	51.66	52.000

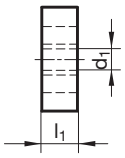
Dies for ISO metric threads

6g | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS	
Surface	◯	◯
		>M 2.6
Chamfer lead	1.75xP	1.75xP









DIN EN 22568	Article no.	151	153

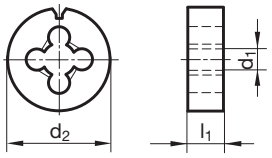
d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M1	0.250	16.000	5.000	0.97	1.000
M 1.2	0.250	16.000	5.000	1.17	1.200
M 1.4	0.300	16.000	5.000	1.36	1.400
M 1.6	0.350	16.000	5.000	1.54	1.600
M2	0.400	16.000	5.000	1.94	2.000
M 2.3	0.400	16.000	5.000	2.25	2.300
M 2.5	0.450	16.000	5.000	2.43	2.500
M 2.6	0.450	16.000	5.000	2.54	2.600
M3	0.500	20.000	5.000	2.92	3.000
M 3.5	0.600	20.000	5.000	3.41	3.500
M4	0.700	20.000	5.000	3.91	4.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M7	1.000	25.000	9.000	6.88	7.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M18	2.500	45.000	18.000	17.79	18.000
M20	2.500	45.000	18.000	19.79	20.000
M24	3.000	55.000	22.000	23.77	24.000
M30	3.500	65.000	25.000	29.73	30.000

Dies for ISO metric threads

6g | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	◯
	>M 2.6
Chamfer lead	1.75xP





DIN EN 22568 Article no. **152**

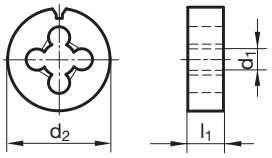
d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M3	0.500	20.000	5.000	2.92	3.000
M 3.5	0.600	20.000	5.000	3.41	3.500
M4	0.700	20.000	5.000	3.91	4.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M7	1.000	25.000	9.000	6.88	7.000
M8	1.250	25.000	9.000	7.87	8.000
M9	1.250	25.000	9.000	8.87	9.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M18	2.500	45.000	18.000	17.79	18.000
M20	2.500	45.000	18.000	19.79	20.000
M22	2.500	55.000	22.000	21.79	22.000
M24	3.000	55.000	22.000	23.77	24.000
M27	3.000	65.000	25.000	26.77	27.000
M30	3.500	65.000	25.000	29.73	30.000

Dies for ISO metric threads

6g | R | DIN EN 22568 | B

P	≤ 1200
M	•
K	
N	
S	
H	

Tool material	**HSS-E**
Surface	●
	>M 2.6
Chamfer lead	1.75xP





DIN EN 22568 Article no. **130**

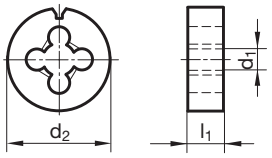
d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M2	0.400	16.000	3.500	1.94	2.000
M 2.2	0.450	16.000	3.500	2.13	2.200
M 2.5	0.450	16.000	5.000	2.43	2.500
M3	0.500	16.000	5.000	2.92	3.010
M3	0.500	20.000	5.000	2.92	3.020
M4	0.700	16.000	5.000	3.91	4.010
M4	0.700	20.000	5.000	3.91	4.020
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M20	2.500	45.000	18.000	19.79	20.000

Dies for ISO metric threads

6g | L | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	**HSS**
Surface	◯
	>M 2.6
Chamfer lead	1.75xP





DIN EN 22568 Article no. **156**

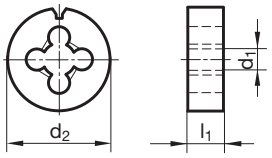
d1	P	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	mm	
M3	0.500	20.000	5.000	2.92	3.000
M4	0.700	20.000	5.000	3.91	4.000
M5	0.800	20.000	7.000	4.90	5.000
M6	1.000	20.000	7.000	5.88	6.000
M8	1.250	25.000	9.000	7.87	8.000
M10	1.500	30.000	11.000	9.85	10.000
M12	1.750	38.000	14.000	11.83	12.000
M14	2.000	38.000	14.000	13.82	14.000
M16	2.000	45.000	18.000	15.82	16.000
M20	2.500	45.000	18.000	19.79	20.000

Dies for ISO metric fine threads

6g | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS	
Surface	◯	◯
		>M 2.6
Chamfer lead	1.75xP	1.75xP







DIN EN 22568 Article no. **161** **162**

d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
M 3 X0.35	20.000	5.000	2.94	3.002
M 4 X0.5	20.000	5.000	3.92	4.003
M 5 X0.5	20.000	5.000	4.92	5.003
M 6 X0.5	20.000	5.000	5.92	6.003
M 6 X0.75	20.000	7.000	5.91	6.004
M 7 X0.5	25.000	9.000	6.92	7.003
M 7 X0.75	25.000	9.000	6.91	7.004
M 8 X0.5	25.000	9.000	7.92	8.003
M 8 X0.75	25.000	9.000	7.91	8.004
M8 x 1	25.000	9.000	7.88	8.005
M 9 X0.75	25.000	9.000	8.91	9.004
M9 x 1	25.000	9.000	8.88	9.005
M10 X0.75	30.000	11.000	9.91	10.004
M10 x 1	30.000	11.000	9.88	10.005
M10 X1.25	30.000	11.000	9.87	10.006
M11 x 1	30.000	11.000	10.88	11.005
M12 X0.75	38.000	10.000	11.91	12.004
M12 x 1	38.000	10.000	11.88	12.005
M12 X1.25	38.000	10.000	11.87	12.006
M12 X1.5	38.000	10.000	11.85	12.007
M13 x 1	38.000	10.000	12.88	13.005
M14 x 1	38.000	10.000	13.88	14.005
M14 X1.25	38.000	10.000	13.87	14.006
M14 X1.5	38.000	10.000	13.85	14.007
M15 x 1	38.000	10.000	14.88	15.005
M16 x 1	45.000	14.000	15.88	16.005
M16 X1.5	45.000	14.000	15.85	16.007
M17 x 1	45.000	14.000	16.88	17.005
M18 x 1	45.000	14.000	17.88	18.005
M18 X1.5	45.000	14.000	17.85	18.007
M20 x 1	45.000	14.000	19.88	20.005
M20 X1.5	45.000	14.000	19.85	20.007
M20 x 2	45.000	14.000	19.82	20.008
M22 x 1	55.000	16.000	21.88	22.005
M22 X1.5	55.000	16.000	21.85	22.007
M24 X1.5	55.000	16.000	23.85	24.007

DIN EN 22568 Article no. **161** **162**

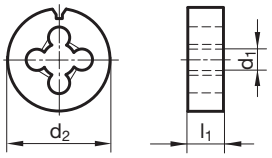
d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
M24 x 2	55.000	16.000	23.82	24.008
M25 X1.5	55.000	16.000	24.85	25.007
M26 X1.5	55.000	16.000	25.85	26.007
M27 X1.5	65.000	18.000	26.85	27.007
M27 x 2	65.000	18.000	26.82	27.008
M28 X1.5	65.000	18.000	27.85	28.007
M30 X1.5	65.000	18.000	29.85	30.007
M30 x 2	65.000	18.000	29.82	30.008

Dies for UNC-threads

2a | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	○
Chamfer lead	1.75xP





DIN EN 22568 Article no. **182**

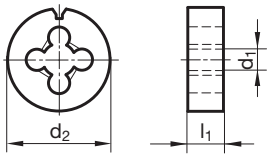
d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
8 - 32	20.000	7.000	4.07	4.166
10 - 24	20.000	7.000	4.71	4.826
1/4 - 20	20.000	7.000	6.22	6.350
5/16 - 18	25.000	9.000	7.80	7.938
3/8 - 16	30.000	11.000	9.37	9.525
7/16 - 14	30.000	11.000	10.95	11.113
1/2 - 13	38.000	14.000	12.52	12.700
5/8 - 11	45.000	18.000	15.68	15.875
3/4 - 10	45.000	18.000	18.84	19.050

Dies for UNF-threads

2a | R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	◯
Chamfer lead	1.75xP





DIN EN 22568 Article no. **185**

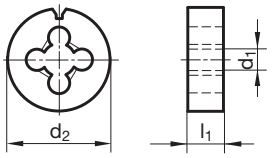
d1	d2	l1	Workpiece Ø	Code no.
	mm	mm	mm	
10 - 32	20.000	7.000	4.73	4.826
1/4 - 28	20.000	7.000	6.24	6.350
5/16 - 24	25.000	9.000	7.82	7.938
3/8 - 24	30.000	11.000	9.41	9.525
7/16 - 20	30.000	11.000	10.98	11.113
1/2 - 20	38.000	10.000	12.56	12.700
9/16 - 18	38.000	10.000	14.14	14.288
5/8 - 18	45.000	14.000	15.73	15.875
3/4 - 16	45.000	14.000	18.89	19.050
7/8 - 14	55.000	16.000	22.05	22.225

Dies for BSP-threads

R | DIN EN 24231 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS	
Surface	◯	◯
Chamfer lead	1.75xP	1.75xP







DIN EN 24231 — Article no. **175** **176**

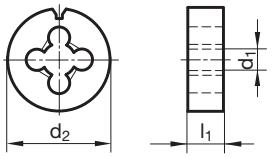
d1	P	d2	l1	Workpiece Ø	Code no.
	G/inch	mm	mm	mm	
G1/8	28.000	30.000	11.000	9.62	9.728
G1/4	19.000	38.000	10.000	13.03	13.157
G3/8	19.000	45.000	14.000	16.54	16.662
G1/2	14.000	45.000	14.000	20.81	20.955
G5/8	14.000	55.000	16.000	22.77	22.911
G3/4	14.000	55.000	16.000	26.30	26.441
G1	11.000	65.000	18.000	33.07	33.249
G1 1/4	11.000	75.000	20.000	41.73	41.910
G1 1/2	11.000	90.000	22.000	47.62	47.803

Dies for R-threads BSPT

R | DIN EN 24230 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	○
Chamfer lead	1.75xP





DIN EN 24230 Article no. **198**

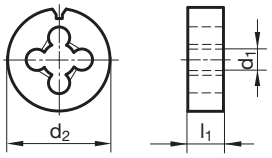
d1	P	d2	l1	Workpiece Ø	Code no.
	G/inch	mm	mm	mm	
R1/8	28	30.000	11.000	9.48	9.728
R1/4	19	38.000	14.000	12.78	13.157
R3/8	19	45.000	14.000	16.26	16.662
R1/2	14	45.000	18.000	20.44	20.955

Dies for NPT-threads

R | DIN EN 22568 | B

P	≤ 1000
M	
K	•
N	•
S	
H	

Tool material	HSS
Surface	○
Chamfer lead	1.75xP





DIN EN 22568 Article no. **191**

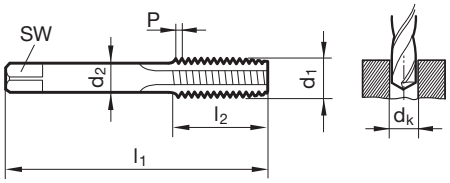
d1	P	d2	l1	Workpiece Ø	Code no.
	G/inch	mm	mm	mm	
1/8	27.000	30.000	11.000	9.93	10.620
1/4	18.000	38.000	14.000	13.18	14.140
3/8	18.000	45.000	14.000	16.60	17.570
1/2	14.000	45.000	18.000	20.63	21.900
3/4	14.000	55.000	22.000	25.95	27.230

Hand taps for ISO metric threads

ISO2/6H | R

P	≤ 800
M	
K	
N	○
S	
H	

Tool material	HSS			
Surface	◯	◯	◯	◯
Type	N	N	N	N
Description	Set	V	M	F





DIN 352 — Article no. **861** **862** **863** **864**

d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	32.000	5.500
M 1.1	0.250	2.500	2.100	0.85	32.000	5.500
M 1.2	0.250	2.500	2.100	0.95	32.000	5.500
M 1.4	0.300	2.500	2.100	1.10	32.000	7.000
M 1.6	0.350	2.500	2.100	1.25	32.000	8.000
M 1.7	0.350	2.500	2.100	1.35	32.000	8.000
M 1.8	0.350	2.500	2.100	1.45	32.000	8.000
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M 2.6	0.450	2.800	2.100	2.15	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M 4.5	0.750	6.000	4.900	3.70	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M7	1.000	6.000	4.900	6.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M9	1.250	7.000	5.500	7.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M11	1.500	8.000	6.200	9.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M18	2.500	14.000	11.000	15.50	95.000	30.000
M20	2.500	16.000	12.000	17.50	95.000	32.000
M22	2.500	18.000	14.500	19.50	100.000	32.000
M24	3.000	18.000	14.500	21.00	110.000	36.000
M27	3.000	20.000	16.000	24.00	110.000	36.000
M30	3.500	22.000	18.000	26.50	125.000	40.000
M36	4.000	28.000	22.000	32.00	150.000	50.000
M42	4.500	32.000	24.000	37.50	150.000	56.000
M45	4.500	36.000	29.000	40.50	160.000	58.000
M60	5.500	45.000	35.000	54.50	200.000	70.000

DIN 352 Article no. **861** **862** **863** **864**

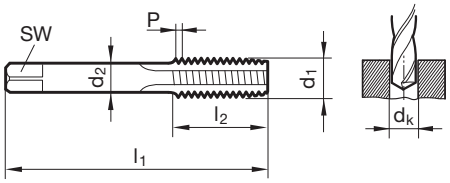
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M64	6.000	50.000	39.000	58.00	220.000	75.000
M68	6.000	50.000	39.000	62.00	220.000	75.000

Hand taps for ISO metric threads

ISO2/6H | R

P	≤ 800
M	
K	
N	○
S	
H	

Tool material	HSS		
Surface	◯	◯	◯
Type	N	N	N
Description	Set	V	F





DIN 352 — Article no. **882** **883** **864**

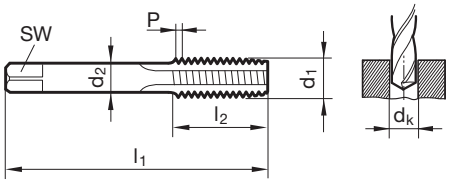
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M1	0.250	2.500	2.100	0.75	32.000	5.500
M 1.1	0.250	2.500	2.100	0.85	32.000	5.500
M 1.2	0.250	2.500	2.100	0.95	32.000	5.500
M 1.4	0.300	2.500	2.100	1.10	32.000	7.000
M 1.6	0.350	2.500	2.100	1.25	32.000	8.000
M 1.7	0.350	2.500	2.100	1.35	32.000	8.000
M 1.8	0.350	2.500	2.100	1.45	32.000	8.000
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000
M 2.3	0.400	2.800	2.100	1.90	36.000	9.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M 2.6	0.450	2.800	2.100	2.15	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M 4.5	0.750	6.000	4.900	3.70	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M7	1.000	6.000	4.900	6.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M9	1.250	7.000	5.500	7.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M11	1.500	8.000	6.200	9.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M18	2.500	14.000	11.000	15.50	95.000	30.000
M20	2.500	16.000	12.000	17.50	95.000	32.000
M22	2.500	18.000	14.500	19.50	100.000	32.000
M24	3.000	18.000	14.500	21.00	110.000	36.000
M27	3.000	20.000	16.000	24.00	110.000	36.000
M30	3.500	22.000	18.000	26.50	125.000	40.000
M36	4.000	28.000	22.000	32.00	150.000	50.000
M42	4.500	32.000	24.000	37.50	150.000	56.000
M45	4.500	36.000	29.000	40.50	160.000	58.000

Hand taps for ISO metric threads

ISO2/6H | L

P	≤ 800
M	
K	
N	○
S	
H	

Tool material	HSS			
Surface	◯	◯	◯	◯
Type	N	N-LH	N-LH	N-LH
Description	Set	V	M	F





DIN 352 — Article no. **904** **905** **906** **907**

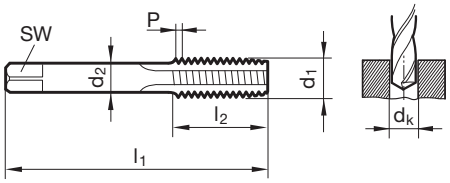
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.2	0.450	2.800	2.100	1.75	36.000	9.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M18	2.500	14.000	11.000	15.50	95.000	30.000

Hand taps for ISO metric threads

ISO2/6H | R

P	≤ 1000
M	•
K	•
N	•
S	
H	

Tool material	HSS-E			
Surface	◯	◯	◯	◯
Type	VA	VA	VA	VA
Description	Set	V	M	F





DIN 352 — Article no. **853** **854** **855** **856**

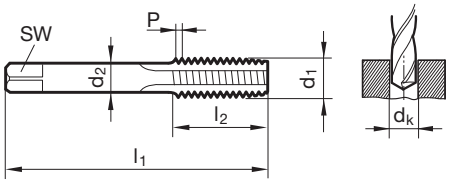
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M20	2.500	16.000	12.000	17.50	95.000	32.000

Hand taps for ISO metric threads

ISO2/6H | R

P	•
M	•
K	•
N	•
S	
H	

Tool material	HSS-E			
Surface	●	●	●	●
Type	H	H	H	H
Description	Set	V	M	F





DIN 352 Article no. **857** **858** **859** **860**

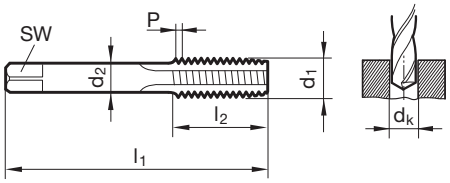
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M2	0.400	2.800	2.100	1.60	36.000	6.400
M2	0.400	2.800	2.100	1.60	36.000	8.000
M 2.5	0.450	2.800	2.100	2.05	40.000	7.000
M 2.5	0.450	2.800	2.100	2.05	40.000	9.000
M3	0.500	3.500	2.700	2.50	40.000	8.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M 3.5	0.600	4.000	3.000	2.90	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	9.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	11.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M6	1.000	6.000	4.900	5.00	56.000	12.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M8	1.250	6.000	4.900	6.80	63.000	11.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M10	1.500	7.000	5.500	8.50	70.000	14.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M12	1.750	9.000	7.000	10.20	75.000	18.000
M14	2.000	11.000	9.000	12.00	80.000	26.000
M14	2.000	11.000	9.000	12.00	80.000	19.000
M16	2.000	12.000	9.000	14.00	80.000	26.000
M16	2.000	12.000	9.000	14.00	80.000	18.000
M18	2.500	14.000	11.000	15.50	95.000	30.000
M18	2.500	14.000	11.000	15.50	95.000	21.000
M20	2.500	16.000	12.000	17.50	95.000	32.000
M20	2.500	16.000	12.000	17.50	95.000	22.000

Hand taps for ISO metric threads

ISO2/6H R

P	•
M	•
K	•
N	•
S	
H	

Tool material	HSS-E-PM			
Surface	●	●	●	●
Type	H	H	H	H
Description	Set	V	M	F





DIN 352 Article no. **1818** **1819** **1820** **1821**

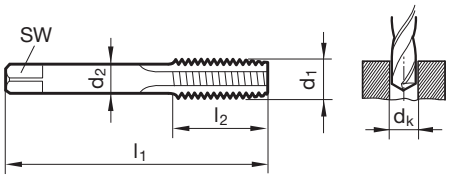
d1	P	d2	SW	dk	l1	l2
	mm	mm	mm	mm	mm	mm
M3	0.500	3.500	2.700	2.50	40.000	8.000
M3	0.500	3.500	2.700	2.50	40.000	10.000
M4	0.700	4.500	3.400	3.30	45.000	12.000
M4	0.700	4.500	3.400	3.30	45.000	9.000
M5	0.800	6.000	4.900	4.20	50.000	14.000
M5	0.800	6.000	4.900	4.20	50.000	11.000
M6	1.000	6.000	4.900	5.00	56.000	16.000
M6	1.000	6.000	4.900	5.00	56.000	12.000
M8	1.250	6.000	4.900	6.80	63.000	17.000
M8	1.250	6.000	4.900	6.80	63.000	11.000
M10	1.500	7.000	5.500	8.50	70.000	20.000
M10	1.500	7.000	5.500	8.50	70.000	14.000
M12	1.750	9.000	7.000	10.20	75.000	24.000
M12	1.750	9.000	7.000	10.20	75.000	18.000

Hand taps for ISO metric fine threads

ISO2/6H | R

P	≤ 800
M	
K	
N	○
S	
H	

Tool material	HSS		
Surface	◯	◯	◯
Type	N	N	N
Description	Set	V	F





DIN 2181 — Article no. **884** **885** **886**

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
M 2 X0.25	2.800	2.100	1.75	36.000	8.000	2.001
M 2.2 X0.25	2.800	2.100	1.95	36.000	9.000	2.201
M 2.3 X0.25	2.800	2.100	2.05	36.000	9.000	2.301
M 2.6 X0.35	2.800	2.100	2.25	40.000	9.000	2.602
M 3 X0.35	3.500	2.700	2.65	40.000	8.000	3.002
M 4 X0.35	4.500	3.400	3.65	45.000	9.000	4.002
M 4 X0.5	4.500	3.400	3.50	45.000	9.000	4.003
M 5 X0.5	6.000	4.900	4.50	50.000	11.000	5.003
M 6 X0.5	6.000	4.900	5.50	56.000	12.000	6.003
M 6 X0.75	6.000	4.900	5.20	56.000	12.000	6.004
M 7 X0.75	6.000	4.900	6.20	56.000	14.000	7.004
M 8 X0.5	6.000	4.900	7.50	56.000	14.000	8.003
M 8 X0.75	6.000	4.900	7.20	56.000	14.000	8.004
M8 x 1	6.000	4.900	7.00	63.000	17.000	8.005
M9 x 1	7.000	5.500	8.00	63.000	17.000	9.005
M10 X0.75	7.000	5.500	9.20	63.000	18.000	10.004
M10 x 1	7.000	5.500	9.00	63.000	18.000	10.005
M10 X1.25	7.000	5.500	8.80	70.000	20.000	10.006
M11 x 1	8.000	6.200	10.00	63.000	18.000	11.005
M12 x 1	9.000	7.000	11.00	70.000	18.000	12.005
M12 X1.25	9.000	7.000	10.80	70.000	20.000	12.006
M12 X1.5	9.000	7.000	10.50	70.000	20.000	12.007
M14 x 1	11.000	9.000	13.00	70.000	20.000	14.005
M14 X1.25	11.000	9.000	12.80	70.000	20.000	14.006
M14 X1.5	11.000	9.000	12.50	70.000	20.000	14.007
M15 x 1	12.000	9.000	14.00	70.000	20.000	15.005
M15 X1.5	12.000	9.000	13.50	70.000	20.000	15.007
M16 x 1	12.000	9.000	15.00	70.000	20.000	16.005
M16 X1.5	12.000	9.000	14.50	70.000	20.000	16.007
M18 x 1	14.000	11.000	17.00	80.000	22.000	18.005
M18 X1.5	14.000	11.000	16.50	80.000	22.000	18.007
M18 x 2	14.000	11.000	16.00	80.000	22.000	18.008
M20 x 1	16.000	12.000	19.00	80.000	22.000	20.005
M20 X1.5	16.000	12.000	18.50	80.000	22.000	20.007
M20 x 2	16.000	12.000	18.00	80.000	22.000	20.008
M22 x 1	18.000	14.500	21.00	80.000	22.000	22.005

DIN 2181 Article no. **884** **885** **886**

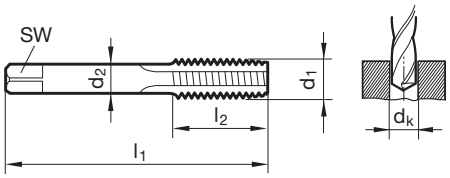
d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
M22 X1.5	18.000	14.500	20.50	80.000	22.000	22.007
M22 x 2	18.000	14.500	20.00	80.000	22.000	22.008
M24 x 1	18.000	14.500	23.00	90.000	22.000	24.005
M24 X1.5	18.000	14.500	22.50	90.000	22.000	24.007
M24 x 2	18.000	14.500	22.00	90.000	22.000	24.008
M26 X1.5	18.000	14.500	24.50	90.000	22.000	26.007
M27 X1.5	20.000	16.000	25.50	90.000	22.000	27.007
M27 x 2	20.000	16.000	25.00	90.000	22.000	27.008
M30 x 1	22.000	18.000	29.00	90.000	22.000	30.005
M30 X1.5	22.000	18.000	28.50	90.000	22.000	30.007
M30 x 2	22.000	18.000	28.00	90.000	22.000	30.008
M32 X1.5	22.000	18.000	30.50	90.000	22.000	32.007
M34 X1.5	28.000	22.000	32.50	100.000	25.000	34.007
M35 X1.5	28.000	22.000	33.50	100.000	25.000	35.007
M36 X1.5	28.000	22.000	34.50	100.000	25.000	36.007
M38 X1.5	28.000	22.000	36.50	100.000	25.000	38.007
M45 X1.5	36.000	29.000	43.50	110.000	25.000	45.007
M52 X1.5	40.000	32.000	50.50	140.000	32.000	52.007

Hand taps for UNC-threads

2B R

P	≤ 800
M	
K	
N	○
S	
H	

Tool material	HSS			
Surface	◯	◯	◯	◯
Type	N	N	N	N
Description	Set	V	M	F





~DIN 352 — Article no. 981 982 983 984

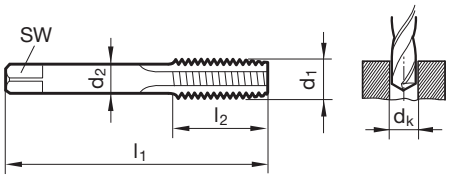
d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
1 - 64	2.800	2.100	1.55	36.000	8.000	1.854
2 - 56	2.800	2.100	1.85	36.000	9.000	2.184
3 - 48	2.800	2.100	2.10	40.000	9.000	2.515
4 - 40	3.500	2.700	2.35	40.000	11.000	2.845
5 - 40	4.000	2.700	2.65	40.000	11.000	3.175
5 - 40	3.500	2.700	2.65	40.000	11.000	3.175
6 - 32	4.000	3.000	2.85	45.000	12.000	3.505
8 - 32	4.500	3.400	3.50	45.000	12.000	4.166
10 - 24	6.000	4.900	3.90	50.000	14.000	4.826
12 - 24	6.000	4.900	4.50	56.000	16.000	5.486
1/4 - 20	6.000	4.900	5.10	56.000	16.000	6.350
5/16 - 18	6.000	4.900	6.60	63.000	18.000	7.938
3/8 - 16	7.000	5.500	8.00	70.000	20.000	9.525
7/16 - 14	8.000	6.200	9.40	70.000	22.000	11.113
1/2 - 13	9.000	7.000	10.80	75.000	25.000	12.700
9/16 - 12	11.000	9.000	12.20	80.000	28.000	14.288
5/8 - 11	12.000	9.000	13.50	80.000	30.000	15.875
3/4 - 10	16.000	11.000	16.50	95.000	33.000	19.050
3/4 - 10	14.000	11.000	16.50	95.000	33.000	19.050
7/8 - 9	18.000	14.500	19.50	100.000	35.000	22.225
1 - 8	18.000	14.500	22.25	110.000	38.000	25.400
1 1/8 - 7	22.000	18.000	25.00	125.000	44.000	28.575
1 1/4 - 7	22.000	18.000	28.00	125.000	44.000	31.750
1 3/8 - 6	28.000	22.000	30.75	150.000	50.000	34.925
1 1/2 - 6	32.000	22.000	34.00	150.000	50.000	38.100
1 3/4 - 5	36.000	29.000	39.50	160.000	58.000	44.450
2 - 4 1/2	40.000	32.000	45.00	180.000	65.000	50.800

Hand taps for UNF-threads

2B R

P	≤ 800
M	
K	
N	○
S	
H	

Tool material	HSS		
Surface	◯	◯	◯
Type	N	N	N
Description	Set	V	F





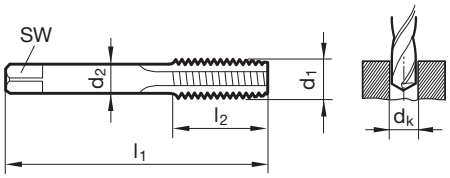
~DIN 2181 — Article no. 985 986 987

d1	d2	SW	dk	l1	l2	Code no.
	mm	mm	mm	mm	mm	
1 - 72	2.800	2.100	1.55	36.000	8.000	1.854
2 - 64	2.800	2.100	1.85	36.000	9.000	2.184
3 - 56	2.800	2.100	2.15	40.000	9.000	2.515
4 - 48	3.500	2.700	2.40	40.000	8.000	2.845
5 - 44	3.500	2.700	2.70	40.000	8.000	3.175
5 - 44	4.000	2.700	2.70	40.000	8.000	3.175
6 - 40	4.000	3.000	2.95	45.000	9.000	3.505
8 - 36	4.500	3.400	3.50	45.000	10.000	4.166
8 - 36	4.500	3.400	3.50	45.000	12.000	4.166
10 - 32	6.000	4.900	4.10	50.000	14.000	4.826
12 - 28	6.000	4.900	4.60	56.000	16.000	5.486
1/4 - 28	6.000	4.900	5.50	56.000	17.000	6.350
5/16 - 24	6.000	4.900	6.90	63.000	17.000	7.938
3/8 - 24	7.000	5.500	8.50	63.000	18.000	9.525
7/16 - 20	8.000	6.200	9.90	70.000	20.000	11.113
7/16 - 20	8.000	6.200	9.90	70.000	18.000	11.113
1/2 - 20	9.000	7.000	11.50	70.000	20.000	12.700
9/16 - 18	11.000	9.000	12.90	70.000	20.000	14.288
5/8 - 18	12.000	9.000	14.50	70.000	20.000	15.875
3/4 - 16	16.000	11.000	17.50	80.000	22.000	19.050
3/4 - 16	14.000	11.000	17.50	80.000	22.000	19.050
7/8 - 14	18.000	14.500	20.40	80.000	22.000	22.225
1 - 12	18.000	14.500	23.25	90.000	22.000	25.400

Hand taps for BSW-threads

Tool material	HSS			
Surface	◯	◯	◯	◯
Type	N	N	N	N
Description	Set	V	M	F

P	≤ 800
M	
K	
N	○
S	
H	





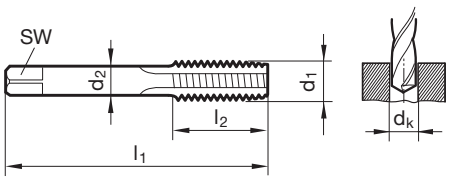
~DIN 352 Article no. **954** **955** **956** **957**

d1	P	d2	SW	dk	l1	l2	Code no.
	G/inch	mm	mm	mm	mm	mm	
W3/32	48.000	2.800	2.100	1.80	40.000	9.000	2.381
W1/8	40.000	3.500	2.700	2.50	40.000	11.000	3.175
W1/8	40.000	4.000	2.700	2.50	40.000	11.000	3.175
W5/32	32.000	4.500	3.400	3.20	45.000	12.000	3.969
W3/16	24.000	6.000	4.900	3.60	50.000	14.000	4.762
W7/32	24.000	6.000	4.900	4.50	56.000	16.000	5.556
W1/4	20.000	6.000	4.900	5.10	56.000	16.000	6.350
W5/16	18.000	6.000	4.900	6.50	63.000	18.000	7.938
W3/8	16.000	7.000	5.500	7.90	70.000	20.000	9.525
W7/16	14.000	8.000	6.200	9.20	70.000	22.000	11.113
W1/2	12.000	9.000	7.000	10.50	75.000	25.000	12.700
W9/16	12.000	11.000	9.000	12.00	80.000	28.000	14.287
W5/8	11.000	12.000	9.000	13.50	80.000	30.000	15.876
W3/4	10.000	16.000	11.000	16.25	95.000	33.000	19.051
W1	8.000	18.000	14.500	22.00	110.000	38.000	25.401
W1 1/2	6.000	32.000	22.000	33.50	150.000	50.000	38.101
W1 5/8	5.000	32.000	24.000	35.50	150.000	58.000	41.277
W1 3/4	5.000	36.000	29.000	39.00	160.000	58.000	44.452
W2	4.500	40.000	32.000	44.50	180.000	65.000	50.802

Hand taps for BSP-threads

Tool material	HSS		
Surface	◯	◯	◯
Type	N	N	N
Description	Set	V	F

P	≤ 800
M	
K	
N	○
S	
H	





DIN 5157 — Article no. **958** **959** **960**

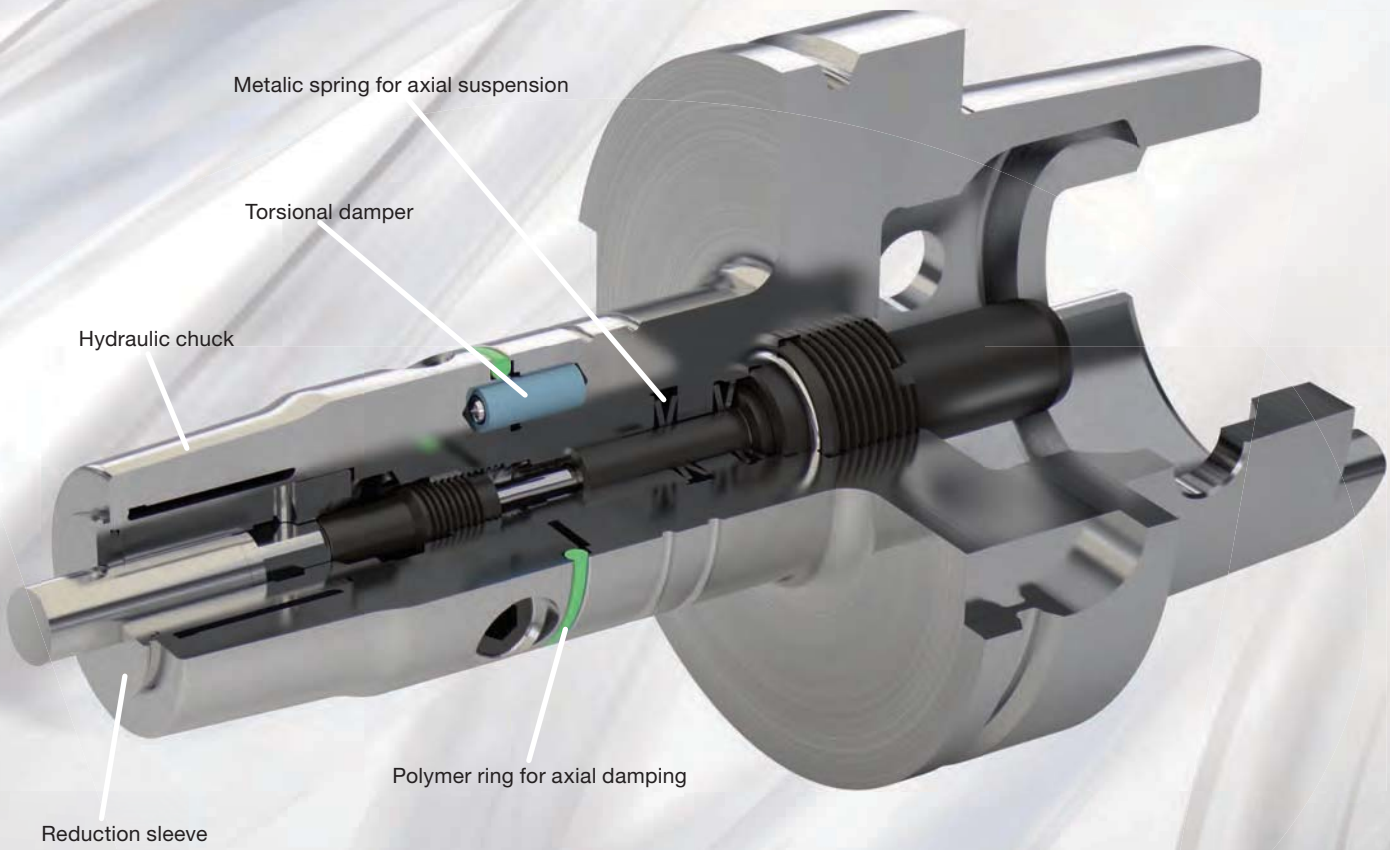
d1	P	d2	SW	dk	l1	l2	Code no.
	G/inch	mm	mm	mm	mm	mm	
G1/8	28.000	7.000	5.500	8.80	63.000	20.000	9.728
G1/8	28.000	7.000	5.500	8.80	63.000	18.000	9.728
G1/4	19.000	11.000	9.000	11.80	70.000	20.000	13.157
G3/8	19.000	12.000	9.000	15.25	70.000	20.000	16.662
G3/8	19.000	12.000	9.000	15.25	70.000	22.000	16.662
G1/2	14.000	16.000	12.000	19.00	80.000	22.000	20.955
G5/8	14.000	18.000	14.500	21.00	80.000	22.000	22.911
G3/4	14.000	20.000	16.000	24.50	90.000	22.000	26.441
G1	11.000	25.000	20.000	30.75	100.000	25.000	33.249
G1 1/4	11.000	32.000	24.000	39.50	125.000	40.000	41.910
G1 3/8	11.000	36.000	29.000	41.75	125.000	40.000	44.323
G1 1/2	11.000	36.000	29.000	45.25	140.000	40.000	47.803
G1 3/4	11.000	40.000	32.000	51.00	140.000	40.000	53.746
G2	11.000	45.000	35.000	57.00	160.000	40.000	59.614



APPING
CHUCKS

GUHROSYNC

THE EASY WAY TO THE PERFECT THREAD

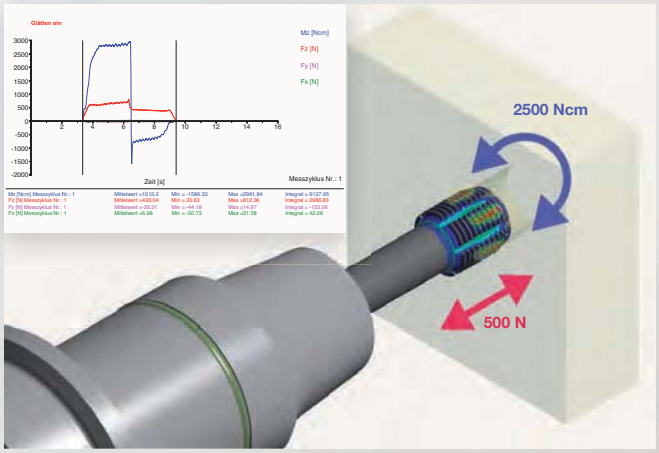


Intelligent design:
As well as the suspension and damping elements in the slender GUHROSync chucks (for the reduction of axial and radial forces during the tapping process) there is also room for the delivery set for MQL or conventional cooling lubrication and the length setting screw.

The optimal combination of long-life metal spring and polymer damping elements considerably reduces axial and radial forces



Rigid chuck

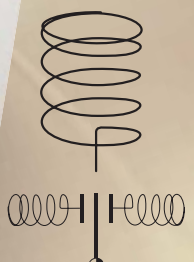


GUHROSync

IMPROVED TOOL LIFE

IMPROVED THREAD QUALITY

GREATER PROCESS RELIABILITY



Made visible:
The spring symbol on the GUHROSync displays the effect of axial and radial force.

- *REDUCTION OF AXIAL AND RADIAL FORCES*
- *COMPENSATES SYNCHRONISATION ERRORS*
- *QUICK AND ACCURATE LENGTH SETTING OF TOOLS*
- *MODULAR DESIGN FOR DIFFERENT STANDARD AND SPECIAL VERSIONS*
- *LONGER TOOL LIFE*
- *REDUCED CYCLE TIMES*
- *IMPROVED THREAD QUALITY*
- *GREATER PROCESS RELIABILITY*

THE BEST OF BOTH SYSTEMS

THE ADVANTAGES OF HYDRAULIC CHUCKS & SYNCHRO TAPPING CHUCKS IN ONE TOOL HOLDER



GUHROSync Synchro tapping chucks

4949 Coolant delivery set HSK-A for conventional cooling



4925 Pull studs for SK
4926



4927 Pull studs for MAS/BT
4928



Shrink fit chucks

4736 HSK-A
4726 TSG 3000 HSK-A
4758 HSK-C
4738 ISO taper



Hydraulic synchro tapping chucks with increased clamping force

4221 MAS-BT
4299 HSK-A
4267 HSK-C
4213 ISO taper



Hydraulic synchro tapping chucks

4601 HSK-A



Hydraulic synchro tapping chucks

4576 ISO taper



Hydraulic synchro tapping chucks

4577 MAS-BT





4525
Hydro-Ø 12 / Ø 20
Cylindrical hydraulic synchro tapping chucks Ø 20 with internal cooling



4364
Setting screws “face” synchro tapping chucks, with conventional int. cooling



4605 Reduction bush sealed
4606 GUHROJET reduction bush



Threading tool:
shank diameter x square



4949
HSK-A coolant supply set for conventional cooling (automatic tool change)



4927
4928
BT pull studs



4925
4926
ISO taper pull studs



4949
HSK-A coolant supply set for conventional cooling (automatic tool change)



4949
HSK-A coolant supply set for conventional cooling (automatic tool change)



4328
HSK-A quick change chuck with internal cooling



4233
Whistle-Notch MAS/BT side lock holders



4322
Whistle-Notch ISO taper side lock holders



4329
Weldon
4334
Whistle-Notch HSK-A side lock holders

4343
HSK-A adaptors for tapping chucks



4327
HSK-A synchro tapping chuck with internal cooling



4340
quick change chuck without internal cooling



4342
quick change chuck with internal cooling



4326
synchro tapping chuck with straight shank with internal cooling



4206
quick change tapping chuck adaptors



4364
adjustment screw „plan“ for synchro tapping chuck with internal cooling



4308
tap collet



4335
sealing washer for retaining nuts



tap



tap

Product information

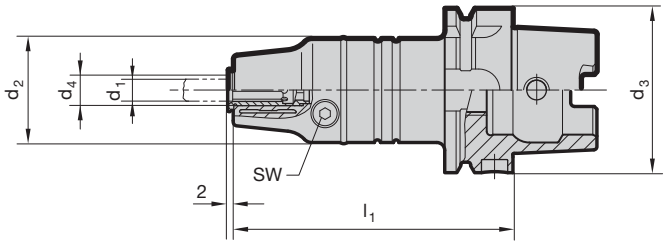
- HSK-A to ISO 12164-1/DIN 69893-1
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. adjustment key for adjustment screws

- order setting screw “face” Article no. 4364 separately
- order reduction bushes Article no. 4605 or 4606 separately
- for conventional cooling order coolant delivery set Article no. 4949 separately





GÜHROSync

Article no.	4601

HSK-A d_3	d_4 mm	for shank Ø d_1 x VKT	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12.063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20.063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12.100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20.100

Product information

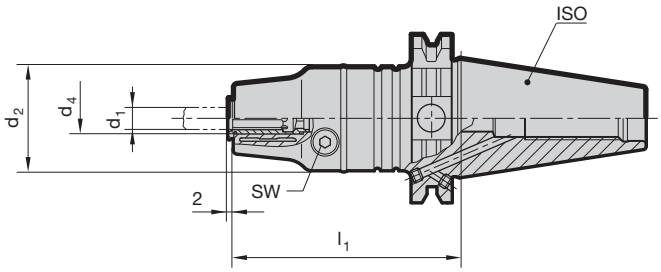
- SK30 to DIN ISO 7388-1 form AD without coolant supply over collar
- SK40 to DIN ISO 7388-1 form AD/AF (AD/B)
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. adjustment key for adjustment screws

- order setting screw “face” Article no. 4364 separately
- order reduction bushes Article no. 4605 or 4606 separately
- order pull studs, Article no. 4925 or 4926 separately





GÜHROSync

Article no. 4576

SK	d_4 mm	for shank Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
30	12.00	2.8-10	M3-M12	40	81	0.3	4	0.8	12,030
30	20.00	6-16	M8-M20	40	95	0.3	5	0.9	20,030
40	12.00	2.8-10	M3-M12	40	85	0.3	4	1.3	12,040
40	20.00	6-16	M8-M20	40	99	0.3	5	1.4	20,040

Product information

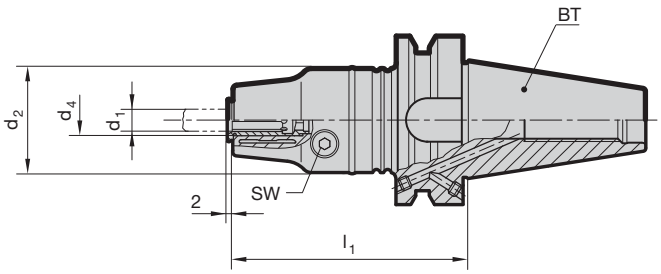
- MAS/BT30 to DIN ISO 7388-2 form JD without coolant supply over collar
- MAS/BT40 to DIN ISO 7388-2 form JD/JF (form AD/B)
- MAS/BT40 to JIS B 6339-2 form JD/JF (form AD/B)
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. adjustment key for adjustment screws

- order setting screw “face” Article no. 4364 separately
- order reduction bushes Article no. 4605 or 4606 separately
- order pull studs, Article no. 4927 or 4928 separately





GÜHROSync

Article no. 4577

BT	d_4 mm	for shank Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
30	12.00	2.8-10	M3-M12	40	81	0.3	4	0.8	12,030
30	20.00	6-16	M8-M20	40	95	0.3	5	0.9	20,030
40	12.00	2.8-10	M3-M12	40	85	0.3	4	1.3	12,040
40	20.00	6-16	M8-M20	40	99	0.3	5	1.4	20,040

Product information

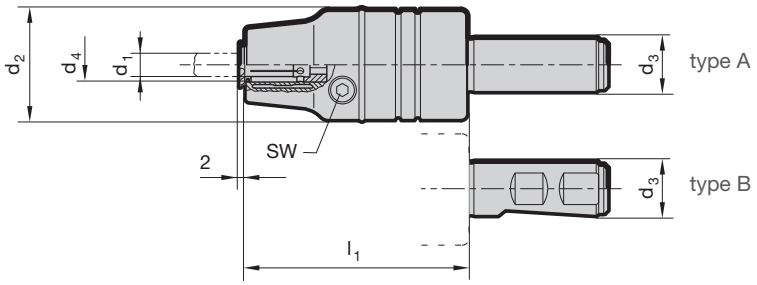
- compensates synchronisation errors
- guarantees best thread quality and optimal life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- holder shank similar DIN 1835 or holding in precision chucks (hydraulic, shrink fit or power clamping chucks)
- suitable for internal cooling identifiable by black coloured ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. adjustment key for adjustment screws

- order setting screw “face” Article no. 4364 separately
- order reduction bushes Article no. 4605 or 4606 separately





GÜHROSync

Article no.	4525

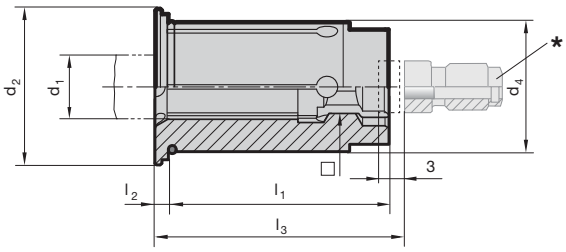
d_3 h6 mm	d_4 mm	type	for shank Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
20	12.00	A	2.8-10	M3-M12	40	80	0.3	4	0.7	12,020
20	20.00	A	6-16	M8-M20	40	94	0.3	5	0.8	20,020
25	12.00	B	2.8-10	M3-M12	40	80	0.3	4	0.7	12,025
25	20.00	B	6-16	M8-M20	40	94	0.3	5	0.8	20,025

Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw “face” Article no. 4364 separately
- order MQL setting screws Article no. 4305 separately





Article no.												4605
d_4 mm	d_1 mm	□ mm	Standard	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* for adjustment screw	for thread	Code no.
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2,812
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3,512
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4,012
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M6	4,512
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	26.00	4364 5.020	10-24 & 10-32	4,912
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4	5,012
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M5	5,512
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	26.00	4364 5.020	12-24 & 12-28	15,512
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M6	16,012
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	4364 6.020	M4.5 / M5 / M6 / M8	6,012
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M7 / M8	6,212
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	4364 6.020	1/4-20 & 1/4-28	6,412
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	4364 7.020	M7 / M9 / M10	7,012
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	4364 7.020	1/16-27	7,912
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	4364 8.020	M8 / M11	8,012
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M11	18,012
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	4364 7.020	5/16-18 & 5/16-24	28,012
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	4364 7.020	7/16-14 & 7/16-20	8,212
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M12	8,512
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	4364 9.020	M9 / M12	9,012
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	4364 9.020	1/2-13 & 1/2-20	9,312
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	4364 9.020	3/8-16 & 3/8-24	9,612
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	4364 10.020	M10	10,012

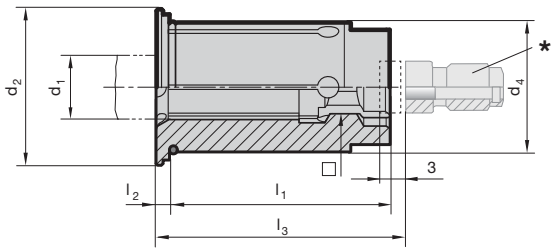
Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw “face” Article no. 4364 separately
- order MQL setting screws Article no. 4305 separately





Article no.												4605
d_4 mm	d_1 mm	□ mm	Standard	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* for adjustment screw	for thread	Code no.
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M6	26,020
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	4364 6.032	M4.5/M5/M6/M8	6,020
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M7 / M8	6,220
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	4364 6.032	1/4-20 & 1/4-28	6,420
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	4364 7.032	M7 / M9 / M10	7,020
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	4364 7.032	1/16-27	7,920
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	4364 8.032	M8 / M11	8,020
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M11	18,020
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	4364 8.032	5/16-18 & 5/16-24	28,020
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	4364 8.032	7/16-14 & 7/16-20	8,220
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M12	8,520
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	4364 9.032	M9 / M12	9,020
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	4364 8.032	1/2-13 & 1/2-20	9,320
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	4364 9.032	3/8-16 & 3/8-24	9,620
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	4364 10.032	M10	10,020
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	4364 10.032	M14	10,520
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	4364 10.032	9/16-12 & 9/16-18	10,820
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M14	11,020
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M12 / M16	12,020
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	4364 11.032	5/8-11 & 5/8-18	12,120
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M16	12,520
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M17	13,020
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	4364 11.032	M18	14,020
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	4364 11.032	1/4-18	14,220
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	4364 11.032	3/4-10 & 3/4-16	14,920
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	4364 16.032	M20	15,020
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	4364 16.032	M20	16,020

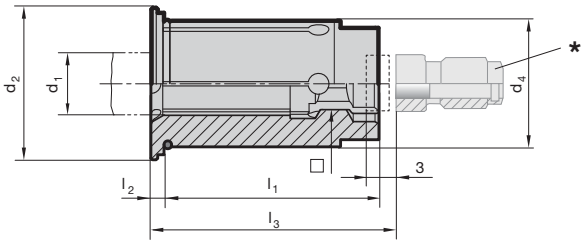
Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Guhrosync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order MQL setting screws Article no. 4305 separately
- order setting screw “face” Article no. 4364 separately





GÜHROJET

Article no. 4606

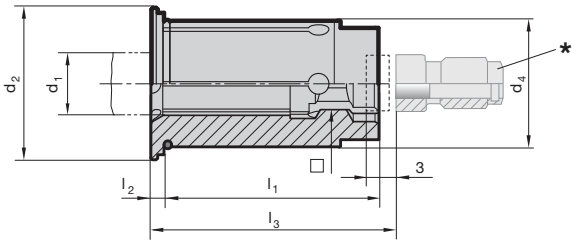
d_4 mm	d_1 mm	□ mm	Standard	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* for adjustment screw	for thread	Code no.
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2.812
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4.012
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	-	-	M4 / M6	4.512
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	-	-	10-24 & 10-32	4.912
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	-	-	M4	5.012
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	-	-	M5	5.512
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	-	-	12-24 & 12-28	15.512
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M6	16.012
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	6.020	M4.5 / M5 / M6 / M8	6.012
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M7 / M8	6.212
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	6.020	1/4-20 & 1/4-28	6.412
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	7.020	M7 / M9 / M10	7.012
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	7.020	1/16-27	7.912
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	8.020	M8 / M11	8.012
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M11	18.012
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	7.020	5/16-18 & 5/16-24	28.012
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	8.020	7/16-14 & 7/16-20	8.212
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M12	8.512
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	9.020	M9 / M12	9.012
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	9.020	1/2-13 & 1/2-20	9.312
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	9.020	3/8-16 & 3/8-24	9.612
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	10.020	M10	10.012

Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Guhrosync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order MQL setting screws Article no. 4305 separately
- order setting screw “face” Article no. 4364 separately





GÜHROJET

Article no. 4606

d_4 mm	d_1 mm	□ mm	Standard	d_1 inch	□ inch	d_2 mm	l_1 mm	l_2 mm	l_3 mm	* for adjustment screw	for thread	Code no.
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M6	26,020
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	6.032	M4.5/M5/M6/M8	6,020
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M7 / M8	6,220
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	6.032	1/4-20 & 1/4-28	6,420
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	7.032	M7 / M9 / M10	7,020
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	7.032	1/16-27	7,920
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	8.032	M8 / M11	8,020
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M11	18,020
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	8.032	5/16-18 & 5/16-24	28,020
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	8.032	7/16-14 & 7/16-20	8,220
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M12	8,520
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	9.032	M9 / M12	9,020
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	9.032	1/2-13 & 1/2-20	9,320
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	9.032	3/8-16 & 3/8-24	9,620
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	10.032	M10	10,020
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	10.032	M14	10,520
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	10.032	9/16-12 & 9/16-18	10,820
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M14	11,020
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M12 / M16	12,020
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	11.032	5/8-11 & 5/8-18	12,120
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M16	12,520
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M17	13,020
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	14.032	M18	14,020
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	11.032	1/4-18	14,220
20.00	14.986	11.227	ANSI	0.590	0.442	24.10	34.00	2.00	39.00	11.032	3/4-10 & 3/4-16	14,920
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	16.032	M20	15,020
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	16.032	M20	16,020

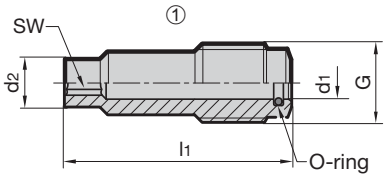
Product information

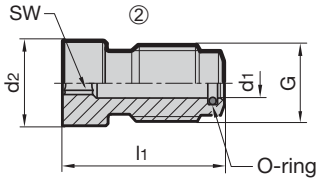
- for hydro-synchro tapping chucks Article no. 4601, 4576, 4577 and 4525
- for synchro tapping chucks Article no. 4326 and 4327
- for conventional internal cooling
- with facing stop for standard shank ends
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- with O-ring for secure seal







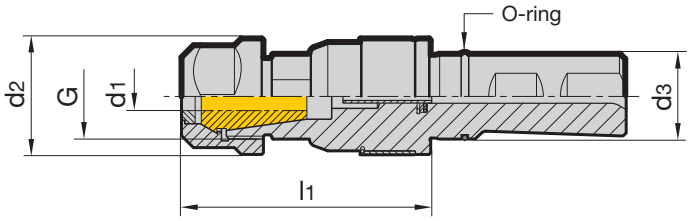
									Article no.	4364
for nominal size	for tap shank-Ø x □	G	d_1 mm	d_2 mm	l_1 mm	SW	O-ring	image	Code no.	
ER20 / Hydro12	< Ø6	M8x1	3.6	3.3	28.0	2.0	3.5x1	1	5,020	
ER20 / Hydro12	6x4.9	M8x1	3.6	4.8	26.0	2.5	3.5x1	1	6,020	
ER20 / Hydro12	7x5.5	M8x1	3.6	5.4	25.8	2.5	3.5x1	1	7,020	
ER20 / Hydro12	8x6.2	M8x1	3.6	6.1	20.9	2.5	3.5x1	1	8,020	
ER20 / Hydro12	9x7	M8x1	3.6	6.9	20.3	2.5	3.5x1	1	9,020	
ER20 / Hydro12	10x8	M8x1	3.6	7.8	15.8	2.5	3.5x1	2	10,020	
ER20 / Hydro12	11x9	M8x1	3.6	8.8	14.8	2.5	3.5x1	2	11,020	
ER32 / Hydro20	< Ø6	M10x1	4.1	3.3	33.0	2.0	4x1	1	5,032	
ER32 / Hydro20	6x4.9	M10x1	4.1	4.8	34.0	3.0	4x1	1	6,032	
ER32 / Hydro20	7x5.5	M10x1	4.1	5.4	33.8	3.0	4x1	1	7,032	
ER32 / Hydro20	8x6.2	M10x1	4.1	6.1	28.8	3.0	4x1	1	8,032	
ER32 / Hydro20	9x7	M10x1	4.1	6.9	28.3	3.0	4x1	1	9,032	
ER32 / Hydro20	10x8	M10x1	4.1	7.8	23.8	3.0	4x1	1	10,032	
ER32 / Hydro20	11x9 & 12x9	M10x1	4.1	8.8	22.9	3.0	4x1	1	11,032	
ER32 / Hydro20	14x11	M10x1	4.1	10.8	20.7	3.0	4x1	2	14,032	
ER32 / Hydro20	16x12	M10x1	4.1	11.8	19.7	3.0	4x1	2	16,032	
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.1	14.3	18.0	3.0	4x1	2	18,032	

Product information
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar

Scope of delivery
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for adjustment screws

- order adjustment screws „plan“ Article no. 4364, tapping collet, Article no. 4308, sealing washer, Article no. 4335 and clamping key, Article no. 4913 separately





Article no.	4326

d_3 ~DIN 1835 mm	nom. size	for thread	d_1 mm	d_2 mm	l_1 mm	tension/ compr. mm	torque* Nm	G	kg	Code no.
25	ER20	M3.5-M14	4-11.0	34	73	0.15	40	M25x1.5	0.50	20,025
25	ER32	M3.5-M28	4-20.0	50	88	0.15	170	M40x1.5	1.30	32,025

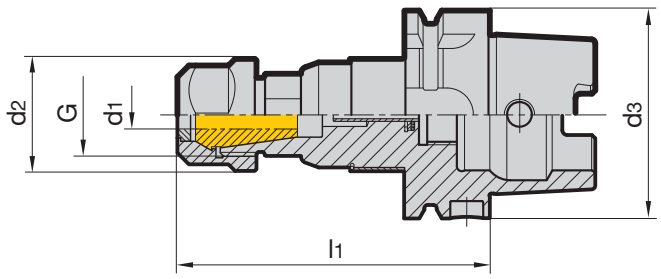
HSK-A SYNCHRO TAPPING CHUCKS

Product information
- compensate synchronisation errors
- guarantee high thread quality and optimal tool life with conventional taps
- minimal length compensation in tension and compression direction between synchronous spindle and tap reduces excessive thread flank friction
- reduces a possible increase in axial forces during the cutting cycle to a minimum
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar
- HSK-A to ISO 12164-1/DIN 69893-1

Scope of delivery
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for adjustment screws

- order adjustment screws „plan“ Article no. 4364, tapping collet, Article no. 4308, sealing washer, Article no. 4325 and clamping key, Article no. 4913 separately
- for conventional cooling order coolant supply set Article no. 4949 separately





Article no.	4327

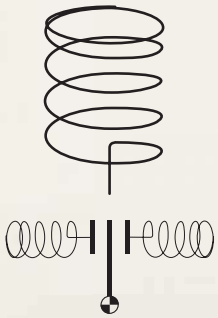
HSK-A d_3 mm	nom. size	for thread	d_1 mm	d_2 mm	l_1 mm	tension/ compr. mm	torque* Nm	G	kg	Code no.
63	ER20	M3.5-M14	4-11.0	34	95.5	0.15	40	M25x1.5	1.00	20,063
63	ER20	M3.5-M14	4-11.0	34	160.0	0.15	40	M25x1.5	1.50	20,163
63	ER32	M3.5-M28	4-20.0	50	109.0	0.15	170	M40x1.5	1.70	32,063
100	ER20	M3.5-M14	4-11.0	34	102.0	0.15	40	M25x1.5	2.50	20,100
100	ER32	M3.5-M28	4-20.0	50	115.5	0.15	170	M40x1.5	2.70	32,100

GUHROSync tapping chucks + VA taps

The easy way to the perfect thread

GUHROSync tapping chucks provide excellent chip evacuation and longer tool life thanks to optimal tool clamping in combination with VA taps.





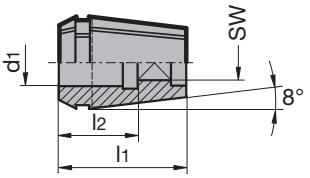
Made visible:
The spring symbol on the GUHROSync displays the effect of axial and radial force.

GÜHROSync

Product information

- for clamping taps with square shank in synchro tapping chucks or collet holders
- smaller Ø4mm are clamped with collet, Article no. 4307 without sq. drive
- tightening torque see clamping nuts Article no. 4306



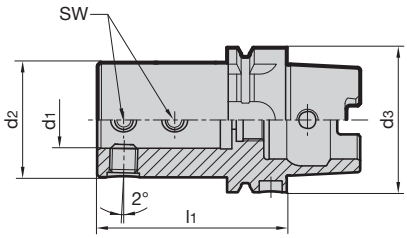


Article no.					4308
nom. size	for shank Ø d_1 mm	square SW	l_1 mm	l_2 mm	Code no.
ER16	4.5	3.4	27.5	18	4,516
ER16	5.5	4.3	27.5	18	5,516
ER16	6.0	4.9	27.5	18	6,016
ER16	7.0	5.5	27.5	18	7,016
ER16	8.0	6.2	27.5	22	8,016
ER20	4.0	3.0	31.5	15	4,020
ER20	4.5	3.4	31.5	18	4,520
ER20	5.5	4.3	31.5	18	5,520
ER20	6.0	4.9	31.5	18	6,020
ER20	7.0	5.5	31.5	18	7,020
ER20	8.0	6.2	31.5	22	8,020
ER20	9.0	7.0	31.5	22	9,020
ER20	10.0	8.0	31.5	25	10,020
ER20	11.0	9.0	31.5	25	11,020
ER25	4.5	3.4	34.0	18	4,525
ER25	5.5	4.3	34.0	18	5,525
ER25	6.0	4.9	34.0	18	6,025
ER25	7.0	5.5	34.0	18	7,025
ER25	8.0	6.2	34.0	22	8,025
ER25	9.0	7.0	34.0	22	9,025
ER25	10.0	8.0	34.0	25	10,025
ER25	11.0	9.0	34.0	25	11,025
ER25	12.0	9.0	34.0	25	12,025
ER32	4.0	3.0	40.0	15	4,032
ER32	4.5	3.4	40.0	18	4,532
ER32	5.5	4.3	40.0	18	5,532
ER32	6.0	4.9	40.0	18	6,032
ER32	7.0	5.5	40.0	18	7,032
ER32	8.0	6.2	40.0	22	8,032
ER32	9.0	7.0	40.0	22	9,032
ER32	10.0	8.0	40.0	25	10,032
ER32	11.0	9.0	40.0	25	11,032
ER32	12.0	9.0	40.0	25	12,032
ER32	14.0	11.0	40.0	25	14,032
ER32	16.0	12.0	40.0	25	16,032
ER32	18.0	14.5	40.0	25	18,032
ER32	20.0	16.0	40.0	28	20,032
ER40	7.0	5.5	46.0	18	7,040
ER40	8.0	6.2	46.0	22	8,040
ER40	9.0	7.0	46.0	22	9,040
ER40	10.0	8.0	46.0	25	10,040
ER40	11.0	9.0	46.0	25	11,040
ER40	12.0	9.0	46.0	25	12,040
ER40	14.0	11.0	46.0	25	14,040
ER40	16.0	12.0	46.0	25	16,040
ER40	18.0	14.5	46.0	25	18,040
ER40	20.0	16.0	46.0	28	20,040
ER40	22.0	18.0	46.0	28	22,040

Product information
- for quick change chucks and synchro tapping chucks with straight shank (except Article no. 4342)
- HSK-A to ISO 12164-1/DIN 69893-1

Scope of delivery
- incl. clamping screws Article no. 4903, code no. 12,001
- order coolant delivery set Article no. 4949 separately





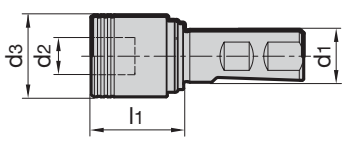
Article no. 4343

HSK-A d_3	d_1 mm	d_2 mm	l_1 mm	SW	kg	Code no.
50	25	50	80	6	0.89	25,050
63	25	50	82	6	1.26	25,063
80	25	50	87	6	3.10	25,080
100	25	50	89	6	4.08	25,100

QUICK CHANGE TAPPING CHUCKS WITHOUT INTERNAL COOLING

Product information
- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread





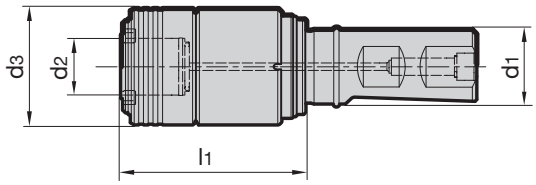
Article no. 4340

for thread	d_1 mm	d_2 mm	d_3 mm	l_1 mm	tension/ compression mm	kg	Code no.
M3-M12	25	19	36	39	± 7.5	0.4	19,025
M8-M20	25	31	53	63	±10.0	0.9	31,025

Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread
- provided with internal coolant supply feeding the coolant through the chuck and adaptor into the shank of the tap. All functional elements are sealed
- max. coolant pressure up to 50 bar





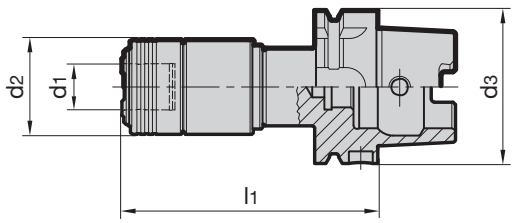
						Article no.	**4342**
for thread	d_1 mm	d_2 mm	d_3 mm	l_1 mm	tension/ compression mm	kg	**Code no.**
M3-M12	25	19	39	62	7.5/7.5	0.6	19,025
M8-M20	25	31	60	88	10/10	1.0	31,025

HSK-A QUICK CHANGE TAPPING CHUCKS WITH INTERNAL COOLING

Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread
- guarantee high thread quality and optimal tool life with conventional taps
- max. coolant pressure up to 50 bar.
- HSK-A to ISO 12164-1/DIN 69893-1



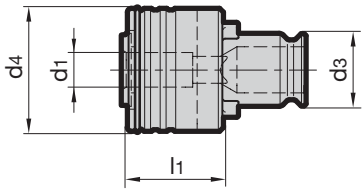


						Article no.	**4328**
HSK-A d_3 mm	for thread	d_1 mm	d_2 mm	l_1 mm	tension/ compression ± mm	kg	**Code no.**
63	M3-M12	19	39	105	7.5	1.13	19,063
63	M8-M20	31	60	140	10.0	2.28	31,063

Product information

- with safety clutch
- suitable for HSS taps
- for solid carbide taps a clamping groove is required on the shank to provide additional drive
- suitable for internal coolant supply max. 50 bar





for thread	shank Ø x sq. d_1 mm	d_3 mm	d_4 mm	l_1 mm	Article no. 4206 Code no.
M3-M12	2.2	19	32	25	19,022
M3-M12	2.5 x 2.1	19	32	25	19,025
M3-M12	2.8 x 2.1	19	32	25	19,028
M3-M12	3.5 x 2.7	19	32	25	19,035
M3-M12	4 x 3	19	32	25	19,040
M3-M12	4.5 x 3.4	19	32	25	19,045
M3-M12	5.5 x 4.5	19	32	25	19,055
M3-M12	6 x 4.9	19	32	25	19,060
M3-M12	7 x5.5	19	32	25	19,070
M3-M12	8 x 6.2	19	32	25	19,080
M3-M12	9 x 7	19	32	25	19,090
M3-M12	10 x 8	19	32	25	19,100
M8-M20	6 x 4.9	31	50	34	31,060
M8-M20	7 x 5.5	31	50	34	31,070
M8-M20	8 x 6.2	31	50	34	31,080
M8-M20	9 x 7	31	50	34	31,090
M8-M20	10 x 8	31	50	34	31,100
M8-M20	11 x 9	31	50	34	31,110
M8-M20	12 x 9	31	50	34	31,120
M8-M20	14 x 11	31	50	34	31,140
M8-M20	16 x 12	31	50	34	31,160

GUHRING MQL SYSTEMS

DELIVERING ONLY THE REQUIRED AMOUNT

As one of the pioneers of MQL technology we have an extensive knowlege of minimal quantity lubrication. Guhring standard MQL Chucks have been supplied a thousand fold throughout the world and are recognised by the automotive industry as ideal MQL solutions as either the one or two channel systems.

Higher cutting speeds and longer tool life are possible thanks to adapted cooling as well as highest surface qualities thanks to the pure lubricant. Workpieces and chips remain dry! Save the cost of de-greasing your workpieces as well as disposal of swarf and soluble oil.

1 MQL BY GÜHRING

Our products for the MQL 1-channel technology are identified by this symbol.

Visual feature of the 1-channel system is the gold coloured MQL length setting screw.



2 MQL BY GÜHRING

Our products for the MQL 2-channel technology are identified by this symbol.

Visual feature of the 2-channel system is the black coloured MQL length setting screw.



4508 MQL 1
MQL coolant delivery set
for single channel
HSK-A



4511 MQL 2
MQL coolant delivery set
for 2 channel systems
HSK-A



4513 MQL 1 / MQL 2
MQL coolant delivery set
HSK-A (filler)



MQL shrink fit chucks
HSK-A
auto. tool change

4741 MQL 1
4614 MQL 2
man. tool change

4735 MQL 1
4613 MQL 2

MQL hydraulic tapping chucks
HSK-A
auto. tool change

4210 MQL 1
4612 MQL 2
man. tool change

4209 MQL 1
4611 MQL 2

MQL HSK-A hydraulic
synchro tapping chucks for
single channel
auto. tool change

4602 MQL 1

MQL HSK-A hydraulic
synchro tapping chucks for
2 channel systems
auto. tool change

4603 MQL 2

MQL HSK-A hydraulic
synchro tapping chucks
man. tool change

4604 MQL 1 / MQL 2





4524 MQL 1 / MQL 2
MQL Hydro-Ø 12 / Ø 20
synchro tapping chucks with internal cooling Ø 20



4305
MQL setting screws with internal cone
for MQL synchro tapping chucks



4605
Reduction bushes, sealed

4606
GUHROJET reduction bushes



Threading tool with MQL shank:
shank diameter x square



MQL coolant delivery set
for manual tool change



Coolant delivery set
for automatic tool change



MQL coolant delivery set
for automatic tool change



4298

HSK-A synchro tapping chucks for manual tool change for MQL single and double channel systems



4330

HSK-A synchro tapping chucks for MQL single channel systems for automatic tool change



4341

HSK-A synchro tapping chucks for MQL double channel systems for automatic tool change



4305

MQL setting screw with internal taper for MQL synchro tapping chucks



4308

tap collet



4335

sealing washer
for retaining nuts



tap

Product information

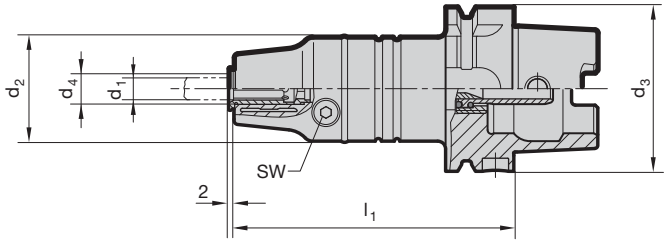
- for MQL single channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. MQL coolant delivery set for automatic tool change Article no. 4508
- incl. adjustment key for MQL adjustment screws

- order MQL adjustment screw Article no. 4305 separately
- order reduction bushes Article no. 4605 or 4606 separately





1 MQL BY GÜHRING

GÜHROSync

Article no.									4602
HSK-A d_3	d_4 mm	for shank-Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	**Code no.**
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12.063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20.063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12.100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20.100

Product information

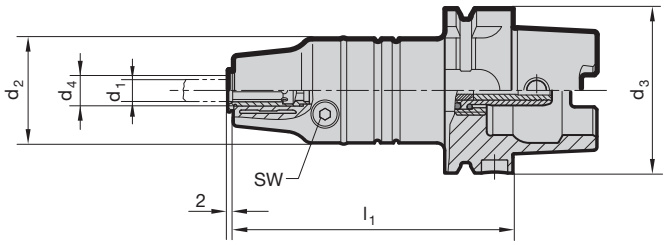
- for MQL 2 channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. MQL coolant delivery set for automatic tool change Article no. 4511
- incl. adjustment key for MQL adjustment screws

- order MQL adjustment screw Article no. 4305 separately
- order reduction bushes Article no. 4605 or 4606 separately





2 MQL BY GÜHRING

GÜHROSync

Article no. 4603

HSK-A d_3	d_4 mm	for shank-Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12,063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20,063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12,100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20,100

Product information

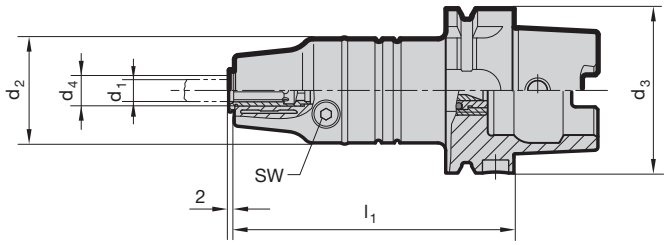
- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green coloured ring

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. MQL coolant delivery set for manual tool change (filler) Article no. 4513
- incl. adjustment key for MQL adjustment screws

- order MQL adjustment screw Article no. 4305 separately
- order reduction bushes Article no. 4605 or 4606 separately





1 MQL BY GÜHRING

2 MQL BY GÜHRING

GÜHROSync

	Article no.	4604

HSK-A d_3	d_4 mm	for shank-Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
63	12.00	2.8-10	M3-M12	40	106.5	0.3	4	1.5	12,063
63	20.00	6-16	M8-M20	40	120.5	0.3	5	1.6	20,063
100	12.00	2.8-10	M3-M12	40	113.0	0.3	4	2.8	12,100
100	20.00	6-16	M8-M20	40	127.0	0.3	5	2.9	20,100

Product information

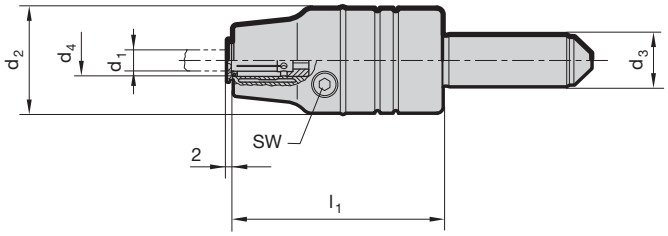
- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction bushes with active drive
- length-setting screw allows 3 mm readjustment
- holder shank to DIN 1835-A or holding in precision chucks (hydraulic, shrink fit or power clamping chucks)
- Guhring MQL identifiable by green coloured ring

Scope of delivery

- incl. hexagon clamping key Article no. 4912
- incl. adjustment key for MQL adjustment screws

- order MQL adjustment screw Article no. 4305 separately
- order reduction bushes Article no. 4605 or 4606 separately





1 MQL BY GÜHRING
2 MQL BY GÜHRING
GÜHROSync

Article no. 4524

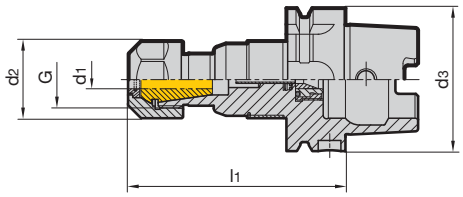
d_3 h6 mm	d_4 mm	for shank-Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Code no.
20	12.00	2.8-10	M3-M12	40	80	0.3	4	0.7	12,020
20	20.00	6-16	M8-M20	40	94	0.3	5	0.8	20,020

Product information
- for MQL single and double channel systems
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks and increase thread quality and tool life
- length-setting screw allows 2 to 3 mm readjustment
- MQL pressure up to max. 10 bar
- mounted MQL coolant supply pipe
- Guhring MQL identifiable by green coloured ring

Scope of delivery
- incl. MQL coolant delivery set for manual tool change (filler)
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for MQL adjustment screw

- order MQL adjustment screw Article no. 4305 separately
- order sealing washer Article no. 4335 separately
- order collet Article no. 4308 separately
- order chuck spanner Article no. 4913 for ER retaining nut separately





1 MQL BY GÜHRING 2 MQL BY GÜHRING

Article no. 4298

HSK-A d_3	nom. size	for thread	G	d_1 mm	d_2 mm	l_1 mm	tension/ compr. ± mm	torque* Nm	kg	Code no.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063

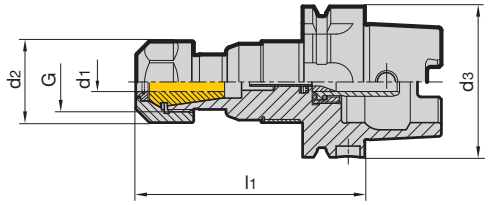
MQL 1-CHANNEL SYNCHRO TAPPING CHUCKS HSK-A FOR AUTOMATIC TOOL CHANGE

Product information
- for MQL single channel systems
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks and increase thread quality and tool life
- length-setting screw allows 2 to 3 mm readjustment
- MQL pressure up to max. 10 bar
- mounted MQL coolant supply pipe
- Guhring MQL identifiable by green coloured ring

Scope of delivery
- incl. MQL coolant delivery set for automatic tool change
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for MQL adjustment screw

- order MQL adjustment screw Article no. 4305 separately
- order sealing washer Article no. 4335 separately
- order collet Article no. 4308 separately
- order chuck spanner Article no. 4913 for ER retaining nut separately





1 MQL BY GÜHRING

Article no. 4330

HSK-A d_3	nom. size	for thread	G	d_1 mm	d_2 mm	l_1 mm	tension/ compr. ± mm	torque* Nm	kg	Code no.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063
100	ER20	M3.5-M14	M25x1.5	4.5-11	34	102.0	0.15	40	2.40	20,100
100	ER32	M3.5-M28	M40x1.5	4.5-20	50	115.5	0.15	170	3.00	32,100

Product information

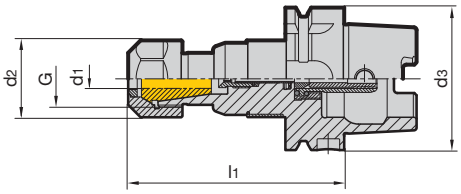
- for 2-channel-systems
- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks and increase thread quality and tool life
- length-setting screw allows 2 to 3 mm readjustment
- MQL pressure up to max. 10 bar
- mounted MQL coolant supply pipe
- Guhring MQL identifiable by green coloured ring

Scope of delivery

- incl. MQL coolant delivery set for automatic tool change
- incl. sealed IC/ER clamping nut Article no. 4306 (*see torque)
- incl. adjustment key for MQL adjustment screw

- order MQL adjustment screw Article no. 4305 separately
- order sealing washer Article no. 4335 separately
- order collet Article no. 4308 separately
- order chuck spanner Article no. 4913 for ER retaining nut separately





2 MQL BY GÜHRING

Article no.	4341

HSK-A d_3	nom. size	for thread	G	d_1 mm	d_2 mm	l_1 mm	tension/ compr. ± mm	torque* Nm	kg	Code no.
63	ER20	M3.5-M14	M25x1.5	4.5-11	34	95.5	0.15	40	1.00	20,063
63	ER32	M3.5-M28	M40x1.5	4.5-20	50	109.0	0.15	170	1.50	32,063
100	ER20	M3.5-M14	M25x1.5	4.5-11	34	102.0	0.15	40	2.40	20,100
100	ER32	M3.5-M28	M40x1.5	4.5-20	50	115.5	0.15	170	3.00	32,100

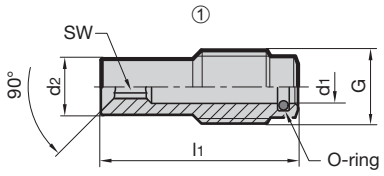
Product information

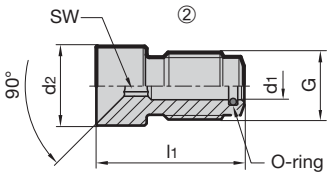
- MQL setting screws with internal cone
- for MQL single and double channel systems
- for MQL taps with external cone
- for MQL synchro tapping chucks Article no. 4602, 4603 and 4604
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- with O-ring for secure seal





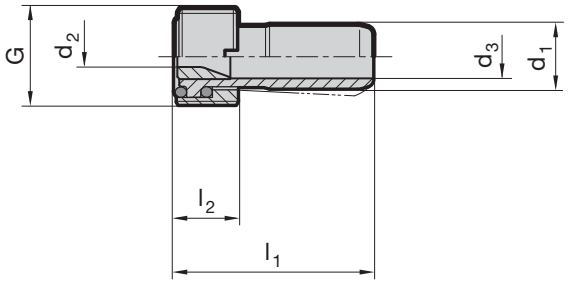


1 MQL BY GÜHRING

2 MQL BY GÜHRING

									Article no.	4305
for nom. size	for tap shank-Ø x □	G	d_1 mm	d_2 mm	l_1 mm	SW	O-ring	image		Code no.
ER20 / Hydro12	6x4.9	M8x1	3.6	4.8	26.5	2.5	3.5x1	1		6,020
ER20 / Hydro12	7x5.5	M8x1	3.6	5.4	26.5	2.5	3.5x1	1		7,020
ER20 / Hydro12	8x6.2	M8x1	3.6	6.1	21.5	2.5	3.5x1	1		8,020
ER20 / Hydro12	9x7	M8x1	3.6	6.9	21.0	2.5	3.5x1	1		9,020
ER20 / Hydro12	10x8	M8x1	3.6	7.8	17.0	2.5	3.5x1	2		10,020
ER20 / Hydro12	11x9	M8x1	3.6	8.8	16.0	2.5	3.5x1	2		11,020
ER32 / Hydro20	6x4.9	M10x1	4.1	4.8	34.5	3.0	4x1	1		6,032
ER32 / Hydro20	7x5.5	M10x1	4.1	5.4	34.5	3.0	4x1	1		7,032
ER32 / Hydro20	8x6.2	M10x1	4.1	6.1	29.5	3.0	4x1	1		8,032
ER32 / Hydro20	9x7	M10x1	4.1	6.9	29.0	3.0	4x1	1		9,032
ER32 / Hydro20	10x8	M10x1	4.1	7.8	25.0	3.0	4x1	1		10,032
ER32 / Hydro20	11x9 & 12x9	M10x1	4.1	8.8	24.0	3.0	4x1	1		11,032
ER32 / Hydro20	14x11	M10x1	4.1	10.8	22.5	3.0	4x1	2		14,032
ER32 / Hydro20	16x12	M10x1	4.1	11.8	22.0	3.0	4x1	2		16,032
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.1	14.3	20.5	3.0	4x1	2		18,032

Product information
- to MQL standard
- version sim. to DIN 69895
- for MQL 1-channel systems
- for tool holders with automatic tool clamping
- dimensions d_2 and l_1 based on installed condition





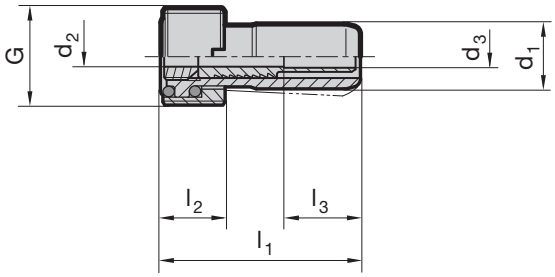
1 MQL BY GÜHRING

Article no. 4508

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	Code no.
32	6.00	3.00	4.00	26.00	5.50	M10x1	10,032
40	8.00	3.80	5.40	29.50	7.50	M12x1	12,040
50	10.00	3.80	6.40	33.00	9.50	M16x1	16,050
63	12.00	3.80	8.00	36.50	11.50	M18x1	18,063
80	14.00	3.80	10.00	40.00	13.50	M20x1.5	20,080
100	16.00	3.80	12.00	44.00	15.50	M24x1.5	24,100

MQL 2-CHANNEL COOLANT DELIVERY SET HSK-A

Product information
- to MQL standard
- version sim. to DIN 69895
- for MQL 2-channel systems
- for tool holders with automatic tool clamping
- „Crashsafe“ version similar to DIN 69090-2 neck design
- dimensions d_2 and l_1 based on installed condition





2 MQL BY GÜHRING

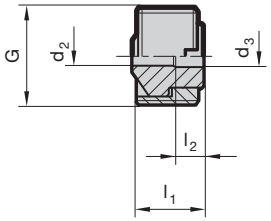
Article no. 4511

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	l_3 mm	G	Code no.
32	6.00	3.00	4.00	26.00	5.50	-	M10x1	10,032
40	8.00	3.80	5.40	29.50	7.50	-	M12x1	12,040
50	10.00	3.60	4.00	33.00	9.50	21.00	M16x1	16,050
63	12.00	3.60	4.00	36.50	11.50	13.80	M18x1	18,063
80	14.00	3.60	4.00	40.00	13.50	14.00	M20x1.5	20,080
100	16.00	3.60	4.00	44.00	15.50	14.00	M24x1.5	24,100

Product information

- to MQL standard
- for internal cooling MQL 1 and 2 channel systems
- for tool holders with manual tool clamping
- optimally sealed for MQL clamping set
- dimensions d_2 and l_1 based on installed condition





1 MQL BY GÜHRING

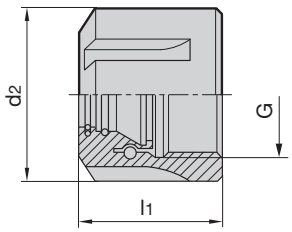
2 MQL BY GÜHRING

Article no.	4513

for HSK-A	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	Code no.
32	3.00	3.00	6.30	-	M10x1	10,032
40	3.60	4.00	8.30	5.00	M12x1	12,040
50	3.60	4.00	10.30	5.00	M16x1	16,050
50	5.00	5.00	10.30	-	M16x1	16,150
63	3.60	4.00	12.30	5.00	M18x1	18,063
63	6.00	6.00	12.30	-	M18x1	18,163
80	3.60	4.00	14.40	5.00	M20x1.5	20,080
80	8.00	8.00	14.40	-	M20x1.5	20,180
100	3.60	4.00	16.40	5.00	M24x1.5	24,100
100	8.00	8.00	16.40	-	M24x1.5	24,101

Product information
- for collets DIN ISO 15488
- for application with internal cooling IC/ER for sealing washer
- for increased clamping version ER or IC/ER with glide ring

Scope of delivery
- increased clamping force version: incl. glide ring
- version for internal cooling IC/ER: order sealing washer Article no. 4335 separately





							Article no.	4306
for sealing washer no. 4335	with glide ring	nom. size	d_2 mm	l_1 mm	G	max. torque		Code no.
–	–	ER16 mini	22	18.4	M19x1.0	55		16,200
–	–	ER20 mini	28	19.0	M24x1.0	75		20,200
–	–	ER25 mini	35	20.0	M30x1.0	100		25,200
–	–	ER11 (4008E)	19	11.3	M14x0.75	25		11,000
–	–	ER16 (426E)	28	17.5	M22x1.5	55		16,000
–	–	ER20 (428E)	34	19.0	M25x1.5	75		20,000
–	–	ER25 (430E)	42	20.0	M32x1.5	100		25,000
–	–	ER32 (470E)	50	22.5	M40x1.5	140		32,000
–	–	ER40 (472E)	63	25.5	M50x1.5	200		40,000
x	–	IC/ER16 mini	22	22.0	M19x1.0	55		16,300
x	–	IC/ER20 mini	28	24.0	M24x1.0	75		20,300
x	–	IC/ER25 mini	35	25.0	M30x1.0	100		25,300
x	–	IC/ER16	28	22.5	M22x1.5	55		16,600
x	–	IC/ER20	34	24.0	M25x1.5	75		20,600
x	–	IC/ER25	42	25.0	M32x1.5	100		25,600
x	–	IC/ER32	50	27.5	M40x1.5	140		32,600
x	–	IC/ER40	63	30.5	M50x1.5	200		40,600
–	x	ER16	28	20.3	M22x1.5	55		16,400
–	x	ER20	34	21.8	M25x1.5	75		20,400
–	x	ER25	42	22.4	M32x1.5	100		25,400
–	x	ER32	50	25.0	M40x1.5	140		32,400
–	x	ER40	63	28.3	M50x1.5	200		40,400
x	x	IC/ER16	28	22.7	M22x1.5	55		16,500
x	x	IC/ER20	34	24.2	M25x1.5	75		20,500
x	x	IC/ER25	42	25.2	M32x1.5	100		25,500
x	x	IC/ER32	50	27.4	M40x1.5	140		32,500
x	x	IC/ER40	63	30.7	M50x1.5	200		40,500

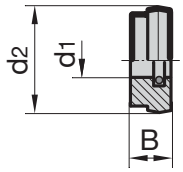
Product information

- the application range of sealing washer, Article no. 4325, is from nom.-Ø d1 to the next dimension below, i.e. for Ø 6.3 mm (nom. size ER20) order sealing washer d1 = 6.5 mm (code no. 06,520)

Ordering example

Ø d1	= 3.5
nom. size	= ER 20
Article no./Code no.	= 4335 03,520





Article no.	4335

nom. size	d_1 mm	d_2 mm	B mm	Code no.
ER16	3.0…10 um 0.5 mm stg.	13	4	3,016 - 10,016
ER20	3.0…13 um 0.5 mm stg.	16	4	3,020 - 13,020
ER25	3.0…16 um 0.5 mm stg.	21	4	3,025 - 16,025
ER32	3.0…20 um 0.5 mm stg.	27	4	3,032 - 20,032
ER40	3.5…26 um 0.5 mm stg.	33.5	4	3,540 - 26,040

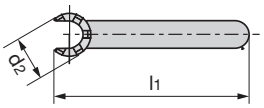
CLAMPING KEY

Product information

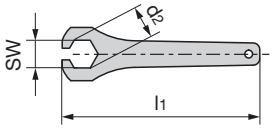
- for clamping nuts
- Type A with special hook key for clamping nuts system DIN 6499 mini design
- Type B for clamping nuts with hexagonal design
- Type C for clamping nuts for external slots



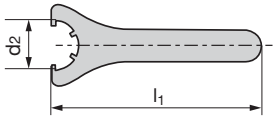
type A



type B



type C



Article no.	4913

nom. size mm	type	l_1 mm	for ER d_2 mm	SW	Code no.
ER16 mini	A	122	22	-	16,200
ER20 mini	A	139	28	-	20,200
ER25 mini	A	143	35	-	25,200
ER11	B	141	19	17	11,000
ER16	B	178	28	25	16,000
ER16	C	161	32	-	16,032
ER20	B	200	34	30	20,000
ER20	C	183	35	-	20,100
ER25	C	210	42	-	25,000
ER32	C	250	50	-	32,000
ER40	C	290	63	-	40,000

GÜHROSYNC




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CHNICAL SECTION



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Tapping size holes for thread cutting

Std. ISO metric threads DIN 13

nom. Ø	pitch P mm	tapping size hole Ø DIN 336 mm	core diameter of int. thread 6H* min. mm	core diameter of int. thread 6H* max. mm
M 1	0.25	**0.75**	0.729	0.785
M 1.1	0.25	**0.85**	0.829	0.885
M 1.2	0.25	**0.95**	0.929	0.985
M 1.4	0.30	**1.10**	1.075	1.142
M 1.6	0.35	**1.25**	1.221	1.321
M 1.8	0.35	**1.45**	1.421	1.521
M 2	0.40	**1.60**	1.567	1.679
M 2.2	0.45	**1.75**	1.713	1.838
M 2.5	0.45	**2.05**	2.013	2.138
M 3	0.50	**2.50**	2.459	2.599
M 3.5	0.60	**2.90**	2.850	3.010
M 4	0.70	**3.30**	3.242	3.422
M 4.5	0.75	**3.70**	3.688	3.878
M 5	0.80	**4.20**	4.134	4.334
M 6	1.00	**5.00**	4.917	5.153
M 7	1.00	**6.00**	5.917	6.153
M 8	1.25	**6.80**	6.647	6.912
M 9	1.25	**7.80**	7.647	7.912
M 10	1.50	**8.50**	8.376	8.676
M 11	1.50	**9.50**	9.376	9.676
M 12	1.75	**10.20**	10.106	10.441
M 14	2.00	**12.00**	11.835	12.210
M 16	2.00	**14.00**	13.835	14.210
M 18	2.50	**15.50**	15.294	15.744
M 20	2.50	**17.50**	17.294	17.744
M 22	2.50	**19.50**	19.294	19.744
M 24	3.00	**21.00**	20.752	21.252
M 27	3.00	**24.00**	23.752	24.252
M 30	3.50	**26.50**	26.211	26.771
M 33	3.50	**29.50**	29.211	29.771
M 36	4.00	**32.00**	31.670	32.270
M 39	4.00	**35.00**	34.670	35.270
M 42	4.50	**37.50**	37.129	37.799
M 45	4.50	**40.50**	40.129	40.799
M 48	5.00	**43.00**	42.587	43.297
M 52	5.00	**47.00**	46.587	47.297
M 56	5.50	**50.50**	50.046	50.796

ISO metric fine threads DIN 13

nom. x Ø	pitch P mm	tapping size hole Ø DIN 336 mm	core diameter of int. thread 6H min. mm	core diameter of int. thread 6H max. mm
M 2.5 x	0.35	**2.15**	2.121	2.221
M 3.0 x	0.35	**2.65**	2.621	2.721
M 3.5 x	0.35	**3.15**	3.121	3.221
M 4.0 x	0.50	**3.50**	3.459	3.599
M 4.5 x	0.50	**4.00**	3.959	4.099
M 5.0 x	0.50	**4.50**	4.459	4.599
M 5.5 x	0.50	**5.00**	4.959	5.099
M 6.0 x	0.75	**5.20**	5.188	5.378
M 7.0 x	0.75	**6.20**	6.188	6.378
M 8.0 x	0.50	**7.50**	7.459	7.599
M 8.0 x	0.75	**7.20**	7.188	7.378
M 8.0 x	1.00	**7.00**	6.917	7.153
M 9.0 x	0.75	**8.20**	8.188	8.378
M 9.0 x	1.00	**8.00**	7.917	8.153
M 10 x	0.75	**9.20**	9.188	9.378
M 10 x	1.00	**9.00**	8.917	9.153
M 10 x	1.25	**8.80**	8.647	8.912
M 11 x	0.75	**10.20**	10.188	10.378
M 11 x	1.00	**10.00**	9.917	10.153
M 12 x	1.00	**11.00**	10.917	11.153
M 12 x	1.25	**10.80**	10.647	10.912
M 12 x	1.50	**10.50**	10.376	10.676
M 14 x	1.00	**13.00**	12.917	13.153
M 14 x	1.25	**12.80**	12.647	12.912
M 14 x	1.50	**12.50**	12.376	12.676
M 15 x	1.00	**14.00**	13.917	14.153
M 15 x	1.50	**13.50**	13.376	13.676
M 16 x	1.00	**15.00**	14.917	15.153
M 16 x	1.25	**14.80**	14.647	14.912
M 16 x	1.50	**14.50**	14.376	14.676
M 17 x	1.00	**16.00**	15.917	16.153
M 17 x	1.50	**15.50**	15.376	15.676
M 18 x	1.00	**17.00**	16.917	17.153
M 18 x	1.50	**16.50**	16.376	16.676
M 20 x	1.00	**19.00**	18.917	19.153
M 20 x	1.50	**18.50**	18.376	18.676
M 20 x	2.00	**18.00**	17.835	18.210
M 22 x	1.00	**21.00**	20.917	21.153
M 22 x	1.50	**20.50**	20.376	20.676
M 22 x	2.00	**20.00**	19.835	20.210
M 24 x	1.00	**23.00**	22.917	23.153
M 24 x	1.50	**22.50**	22.376	22.676
M 24 x	2.00	**22.00**	21.835	22.210
M 25 x	1.00	**24.00**	23.917	24.153
M 25 x	1.50	**23.50**	23.376	23.676
M 25 x	2.00	**23.00**	22.835	23.210
M 27 x	1.00	**26.00**	25.917	26.153
M 27 x	1.50	**25.50**	25.376	25.676
M 27 x	2.00	**25.00**	24.835	25.210
M 28 x	1.00	**27.00**	26.917	27.153
M 28 x	1.50	**26.50**	26.376	26.676
M 28 x	2.00	**26.00**	25.835	26.210
M 30 x	1.00	**29.00**	28.917	29.153
M 30 x	1.50	**28.50**	28.376	28.676
M 30 x	2.00	**28.00**	27.835	28.210
M 30 x	3.00	**27.00**	26.752	27.252
M 32 x	1.50	**30.50**	30.376	30.676
M 32 x	2.00	**30.00**	29.835	30.210
M 33 x	1.50	**31.50**	31.376	31.676
M 33 x	2.00	**31.00**	30.835	31.210
M 33 x	3.00	**30.00**	29.752	30.252
M 35 x	1.50	**33.50**	33.376	33.676
M 36 x	1.50	**34.50**	34.376	34.676

UNC threads ASME B1.1

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread 2B min. mm	core diameter of int. thread 2B max. mm
Nr. 1 -	64	**1.55**	1.425	1.580
Nr. 2 -	56	**1.85**	1.694	1.872
Nr. 3 -	48	**2.10**	1.941	2.146
Nr. 4 -	40	**2.35**	2.157	2.385
Nr. 5 -	40	**2.65**	2.487	2.698
Nr. 6 -	32	**2.85**	2.642	2.896
Nr. 8 -	32	**3.50**	3.302	3.531
Nr. 10 -	24	**3.90**	3.683	3.937
Nr. 12 -	24	**4.50**	4.343	4.597
1/4 -	20	**5.10**	4.978	5.258
5/16 -	18	**6.60**	6.401	6.731
3/8 -	16	**8.00**	7.798	8.153
7/16 -	14	**9.40**	9.144	9.550
1/2 -	13	**10.80**	10.592	11.024
9/16 -	12	**12.20**	11.989	12.446
5/8 -	11	**13.50**	13.386	13.868
3/4 -	10	**16.50**	16.307	16.840
7/8 -	9	**19.50**	19.177	19.761
1 -	8	**22.25**	21.971	22.606
1 1/8 -	7	**25.00**	24.638	25.349
1 1/4 -	7	**28.00**	27.813	28.524
1 3/8 -	6	**30.75**	30.353	31.115
1 1/2 -	6	**34.00**	33.528	34.290
1 3/4 -	5	**39.50**	38.938	39.802
2 -	4.5	**45.00**	44.679	45.593

* M 1.1 up to M 1.4 tapping size hole of int. thread 5H

MJ threads DIN ISO 5855

nom. Ø	x	pitch P mm	tapping size hole Ø DIN 336 mm	core diameter of int. thread 5H* min. mm	core diameter of int. thread 5H* max. mm
MJ 3	x	0.50	**2.60**	2.513	2.653
MJ 4	x	0.70	**3.40**	3.318	3.498
MJ 5	x	0.80	**4.30**	4.221	4.421
MJ 6	x	0.50	**5.55**	5.513	5.625
MJ 6	x	0.75	**5.35**	5.269	5.419
MJ 6	x	1.00	**5.10**	5.026	5.216
MJ 8	x	0.50	**7.55**	7.513	7.625
MJ 8	x	0.75	**7.35**	7.269	7.419
MJ 8	x	1.00	**7.10**	7.026	7.216
MJ 8	x	1.25	**6.90**	6.782	6.994
MJ 10	x	1.00	**9.10**	9.026	9.216
MJ 10	x	1.25	**8.90**	8.782	8.994
MJ 10	x	1.50	**8.60**	8.539	8.775
MJ 12	x	1.75	**10.40**	10.295	10.560
MJ 16	x	2.00	**14.20**	14.051	14.351

* MJ3 x 0.50 up to MJ 5 x 0.80 tapping size hole of int. thread 6H

UNC threads ISO 3161

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread 3B min. mm	core diameter of int. thread 3B max. mm
Nr. 6 -	32	**2.85**	2.733	2.939
Nr. 8 -	32	**3.55**	3.393	3.599
Nr. 10 -	24	**4.00**	3.795	4.064
Nr. 12 -	24	**4.60**	4.455	4.704
1/4 -	20	**5.30**	5.113	5.387
5/16 -	18	**6.75**	6.563	6.833
3/8 -	16	**8.20**	7.978	8.255
7/16 -	14	**9.60**	9.346	9.639
1/2 -	13	**11.00**	10.798	11.095
9/16 -	12	**12.40**	12.228	12.482
5/8 -	11	**13.80**	13.627	13.904

UNF threads ISO 3161

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread 3B min. mm	core diameter of int. thread 3B max. mm
Nr. 6 -	40	**3.00**	2.888	3.053
Nr. 8 -	36	**3.60**	3.480	3.663
Nr. 10 -	32	**4.20**	4.054	4.255
Nr. 12 -	28	**4.75**	4.602	4.816
1/4 -	28	**5.60**	5.466	5.662
5/16 -	24	**7.00**	6.906	7.109
3/8 -	24	**8.60**	8.494	8.679
7/16 -	20	**10.00**	9.876	10.084
1/2 -	20	**11.60**	11.463	11.661
9/16 -	18	**13.00**	12.913	13.122
5/8 -	18	**14.60**	14.501	14.702

UNF threads ASME B1.1

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread 2B min. mm	core diameter of int. thread 2B max. mm
Nr. 1	72	**1.55**	1.473	1.610
Nr. 2	64	**1.85**	1.755	1.910
Nr. 3	56	**2.15**	2.024	2.197
Nr. 4	48	**2.40**	2.271	2.459
Nr. 5	44	**2.70**	2.550	2.741
Nr. 6	40	**2.95**	2.819	3.023
Nr. 8	36	**3.50**	3.404	3.607
Nr. 10	32	**4.10**	3.962	4.166
Nr. 12	28	**4.60**	4.496	4.724
1/4	28	**5.50**	5.359	5.588
5/16	24	**6.90**	6.782	7.036
3/8	24	**8.50**	8.382	8.636
7/16	20	**9.90**	9.728	10.033
1/2	20	**11.50**	11.328	11.608
9/16	18	**12.90**	12.751	13.081
5/8	18	**14.50**	14.351	14.681
3/4	16	**17.50**	17.323	17.678
7/8	14	**20.40**	20.269	20.650
1	12	**23.25**	23.114	23.571
1 1/8	12	**26.50**	26.289	26.746
1 1/4	12	**29.50**	29.464	29.921
1 3/8	12	**32.75**	32.639	33.096
1 1/2	12	**36.00**	35.814	36.271

BSW (Whitworth) threads BS84

nom. Ø inch	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	core diameter of int. thread max. mm
W 1/16	60	**1.20**	1.045	1.230
W 3/32	48	**1.80**	1.704	1.912
W 1/8	40	**2.50**	2.362	2.591
W 5/32	32	**3.20**	2.952	3.214
W 3/16	24	**3.60**	3.407	3.745
W 7/32	24	**4.50**	4.201	4.539
W 1/4	20	**5.10**	4.724	5.156
W 5/16	18	**6.50**	6.130	6.590
W 3/8	16	**7.90**	7.492	7.987
W 7/16	14	**9.20**	8.789	9.330
W 1/2	12	**10.50**	9.989	10.591
W 9/16	12	**12.00**	11.577	12.179
W 5/8	11	**13.50**	12.918	13.558
W 3/4	10	**16.25**	15.797	16.483
W 7/8	9	**19.25**	18.611	19.353
W 1	8	**22.00**	21.334	22.147
W 1 1/8	7	**24.50**	23.928	24.832
W 1 1/4	7	**27.75**	27.103	28.007
W 1 3/8	6	**30.50**	29.504	30.528
W 1 1/2	6	**33.50**	32.679	33.703
W 1 5/8	5	**35.50**	34.769	35.963
W 1 3/4	5	**39.00**	37.944	39.138
W 2	4.5	**44.50**	43.571	44.877

(Whitworth) threads (DIN-ISO 228-1)

nom. Ø inch	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	core diameter of int. thread max. mm
G 1/16	28	**6.80**	6.561	6.843
G 1/8	28	**8.80**	8.566	8.848
G 1/4	19	**11.80**	11.445	11.890
G 3/8	19	**15.25**	14.950	15.395
G 1/2	14	**19.00**	18.631	19.172
G 5/8	14	**21.00**	20.587	21.128
G 3/4	14	**24.50**	24.117	24.658
G 7/8	14	**28.25**	27.877	28.418
G 1	11	**30.75**	30.291	30.931
G 1 1/8	11	**35.50**	34.939	35.579
G 1 1/4	11	**39.50**	38.952	39.592
G 1 1/2	11	**45.25**	44.845	45.485
G 1 3/4	11	**51.00**	50.788	51.428
G 2	11	**57.00**	56.656	57.296

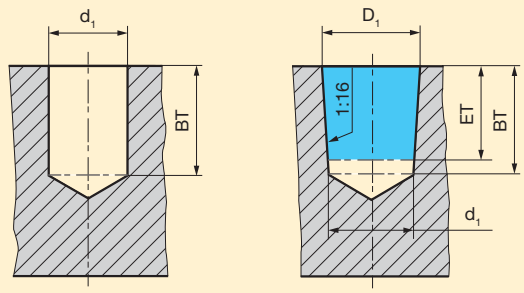
Steel armoured conduit threads to DIN 40430

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	core diameter of int. thread max. mm
Pg 7	20	**11.40**	11.280	11.430
Pg 9	18	**14.00**	13.860	14.010
Pg 11	18	**17.30**	17.260	17.410
Pg 13.5	18	**19.00**	19.060	19.210
Pg 16	18	**21.30**	21.160	21.310
Pg 21	16	**26.90**	26.780	27.030
Pg 29	16	**35.50**	35.480	35.730
Pg 36	16	**45.50**	45.480	45.730
Pg 42	16	**52.50**	52.480	52.730
Pg 48	16	**57.80**	57.780	58.030

NPT ANSI B 2.1
American tapered pipe thread 1:16

Version A (avoid if possible)

Version B



nom. Ø	threads per inch	tapp. size hole Ø cylindrical (A) d_1	tapp. size hole Ø conical (B) D_1	cutting depth ET mm	cutting depth BT (min) mm
1/16	- 27	**6.15**	6.39	9.29	10.7
1/8	- 27	**8.40**	8.74	9.32	10.8
1/4	- 18	**11.10**	**11.36**	13.52	15.6
3/8	- 18	**14.30**	**14.80**	13.83	16.0
1/2	- 14	**17.90**	**18.32**	18.07	20.8
3/4	- 14	**23.30**	**23.67**	18.55	21.3
1	- 11.5	**29.00**	**29.69**	22.29	25.6
1 1/4	- 11.5	**37.70**	**38.45**	22.80	26.1
1 1/2	- 11.5	**43.70**	**44.52**	22.80	26.1
2	- 11.5	**55.60**	**56.56**	23.20	26.5
2 1/2	- 8	**66.30**	**67.62**	31.75	36.3
3	- 8	**82.30**	**83.52**	33.74	38.5

Metric/metric fine EG-threads (EG M14 x 1.25) for wire thread inserts DIN 8140

nom. Ø	x pitch P mm	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	core diameter of int. thread max. mm
EG M 4	0.70	**4.20**	4.152	4.292
EG M 5	0.80	**5.25**	5.174	5.334
EG M 6	1.00	**6.30**	6.217	6.407
EG M 8	1.25	**8.40**	8.271	8.483
EG M10	1.50	**10.50**	10.324	10.560
EG M12	1.75	**12.50**	12.379	12.644
EG M14 x	1.25	**14.40**	14.271	14.483
EG M16	2.00	**16.50**	16.433	16.733

UNC (UNC-STI) EG-threads for wire thread inserts ASME B18.29.1

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	core diameter of int. thread max. mm
EG Nr. 6	- 32	**3.80**	3.678	3.879
EG Nr. 8	- 32	**4.40**	4.338	4.524
EG Nr. 10	- 24	**5.20**	5.055	5.283
EG Nr. 12	- 24	**5.80**	5.715	5.944
EG 1/4	- 20	**6.70**	6.624	6.868
EG 5/16	- 18	**8.40**	8.242	8.489
EG 3/8	- 16	**10.00**	9.868	10.127
EG 7/16	- 14	**11.60**	11.506	11.783
EG 1/2	- 13	**13.30**	13.122	13.393
EG 9/16	- 12	**14.90**	14.747	15.032
EG 5/8	- 11	**16.50**	16.375	16.673

UNF (UNF-STI) EG-threads for wire thread inserts ASME B18.29.1

nom. Ø	threads per inch	tapping size hole Ø DIN 336 mm	core diameter of int. thread min. mm	core diameter of int. thread max. mm
EG Nr. 6	- 40	**3.70**	3.644	3.818
EG Nr. 8	- 36	**4.40**	4.321	4.498
EG Nr. 10	- 32	**5.10**	4.999	5.184
EG Nr. 12	- 28	**5.70**	5.682	5.809
EG 1/4	- 28	**6.60**	6.546	6.721
EG 5/16	- 24	**8.25**	8.166	8.352
EG 3/8	- 24	**9.80**	9.754	9.931
EG 7/16	- 20	**11.50**	11.389	11.585
EG 1/2	- 20	**13.10**	12.974	13.172
EG 9/16	- 18	**14.70**	14.592	14.798
EG 5/8	- 18	**16.25**	16.180	16.386

Recommended tapping size holes for thread forming

Std. ISO metric threads DIN 13

nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 7H*	
mm		mm	min. mm	max. mm	min. mm	max. mm
M1	0.25	**0.90**	0.89	0.92	0.729	0.819
M1.2	0.25	**1.10**	1.09	1.12	0.929	1.019
M1.4	0.30	**1.28**	1.27	1.30	1.075	1.181
M1.6	0.35	**1.46**	1.45	1.48	1.221	1.346
M1.7	0.35	**1.56**	1.55	1.58	1.321	1.446
M1.8	0.35	**1.66**	1.65	1.68	1.421	1.546
M 2	0.40	**1.85**	1.84	1.88	1.567	1.679
M 2.2	0.45	**2.00**	2.01	2.05	1.713	1.838
M 2.5	0.45	**2.30**	2.28	2.32	2.013	2.138
M 3	0.50	**2.80**	2.78	2.85	2.459	2.639
M 3.5	0.60	**3.25**	3.23	3.30	2.850	3.050
M 4	0.70	**3.70**	3.68	3.76	3.242	3.466
M 4.5	0.75	**4.20**				
M 5	0.80	**4.65**	4.62	4.71	4.134	4.384
M 6	1.00	**5.55**	5.52	5.62	4.917	5.217
M 7	1.00	**6.55**	6.52	6.62	5.917	6.217
M 8	1.25	**7.40**	7.36	7.47	6.647	6.982
M 9	1.25	**8.40**	8.36	8.47	7.647	7.982
M 10	1.50	**9.30**	9.26	9.38	8.376	8.751
M 11	1.50	**10.30**	10.26	10.38	9.376	9.751
M 12	1.75	**11.20**	11.15	11.29	10.106	10.531
M 14	2.00	**13.10**	13.05	13.20	11.835	12.310
M 16	2.00	**15.10**	15.05	15.20	13.835	14.310
M 18	2.50	**16.90**	16.83	17.02	15.294	15.854
M 20	2.50	**18.90**	18.83	19.02	17.294	17.854
M 22	2.50	**20.90**	20.83	21.02	19.294	19.854
M 24	3.00	**22.70**	22.62	22.80	20.752	21.382
M 27	3.00	**25.70**	25.62	25.80	23.752	24.382
M 30	3.50	**28.50**	28.40	28.60	26.211	26.921
M 33	3.50	**31.50**	31.40	31.60	29.211	29.921
M 36	4.00	**34.30**	34.17	34.40	31.670	32.420
M 39	4.00	**37.30**	37.17	37.40	34.670	35.420
M 42	4.50	**40.10**	39.95	40.20	37.129	37.979

* M 2 up to M 2.5 tapping size hole of int. thread 6H

ISO metric fine threads DIN 13

nom. x Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 7H*	
mm		mm	min. mm	max. mm	min. mm	max. mm
M 2.5 x	0.35	**2.35**	2.35	2.38	2.121	2.221
M 3 x	0.35	**2.85**	2.85	2.88	2.621	2.721
M 4 x	0.35	**3.85**	3.85	3.88	3.621	3.721
M 4 x	0.50	**3.80**	3.78	3.83	3.459	3.639
M 5 x	0.50	**4.80**	4.78	4.83	4.459	4.639
M 5.5 x	0.50	**5.30**	5.28	5.33	4.959	5.139
M 6 x	0.75	**5.65**	5.62	5.70	5.188	5.424
M 7 x	0.75	**6.65**	6.62	6.70	6.188	6.424
M 8 x	0.75	**7.65**	7.62	7.70	7.188	7.424
M 8 x	1.00	**7.55**	7.52	7.62	6.917	7.217
M 9 x	0.75	**8.65**	8.62	8.70	8.188	8.424
M 9 x	1.00	**8.55**	8.52	8.62	7.917	8.217
M 10 x	0.75	**9.65**	9.62	9.70	9.188	9.424
M 10 x	1.00	**9.55**	9.52	9.62	8.917	9.217
M 10 x	1.25	**9.40**	9.36	9.47	8.647	8.982
M 11 x	0.75	**10.65**	10.62	10.70	10.188	10.424
M 11 x	1.00	**10.55**	10.52	10.62	9.917	10.217
M 12 x	1.00	**11.55**	11.52	11.62	10.917	11.217
M 12 x	1.25	**11.40**	11.36	11.47	10.647	10.982
M 12 x	1.50	**11.30**	11.26	11.38	10.376	10.751
M 14 x	1.00	**13.55**	13.52	13.62	12.917	13.217
M 14 x	1.25	**13.40**	13.36	13.47	12.647	12.982
M 14 x	1.50	**13.30**	13.26	13.38	12.376	12.751
M 15 x	1.00	**14.55**	14.52	14.62	13.917	14.217
M 15 x	1.50	**14.30**	14.26	14.38	13.376	13.751
M 16 x	1.00	**15.55**	15.52	15.62	14.917	15.217
M 16 x	1.50	**15.30**	15.26	15.38	14.376	14.751
M 17 x	1.00	**16.55**	16.52	16.62	15.917	16.217

* M 2.5 x 0.35 up to M 4 x 0.35 tapping size hole of int. thread 6H

nom. x Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 7H*	
mm		mm	min. mm	max. mm	min. mm	max. mm
M 17 x	1.50	**16.30**	16.26	16.38	15.376	15.751
M 18 x	1.00	**17.55**	17.52	17.62	16.917	17.217
M 18 x	1.50	**17.30**	17.26	17.38	16.376	16.751
M 18 x	2.00	**17.10**	17.05	17.20	15.835	16.310
M 20 x	1.00	**19.55**	19.52	19.62	18.917	19.217
M 20 x	1.50	**19.30**	19.26	19.38	18.376	19.751
M 24 x	1.00	**23.55**	23.52	23.62	22.917	23.217
M 24 x	1.50	**23.30**	23.26	23.38	22.376	22.751
M 24 x	2.00	**23.10**	23.05	23.20	21.835	22.310
M 27 x	1.50	**26.30**	26.26	26.38	25.376	25.751
M 30 x	1.50	**29.30**	29.26	29.38	28.376	28.751
M 33 x	1.50	**32.30**	32.26	32.38	31.376	31.751
M 36 x	1.50	**35.30**	35.26	35.38	34.376	34.751
M 39 x	1.50	**38.30**	38.26	38.38	37.376	37.751
M 42 x	1.50	**41.30**	41.26	41.38	42.376	42.751

Tapping size hole diameter tolerance zone for thread forming (to DIN 13, section 50)
Due to the tensile strength it is not necessary to adhere to the tapping size hole diameter tolerance class 6H; tolerance class 7H satisfies the requirement that the flank coverage of external and internal threads should not fall below 0.32 x P. In addition, formed threads generally possess a higher tensile strength in comparison to cut threads thanks to an uninterrupted grain flow and subsequent work hardening.

UNC-threads ASME B1.1

nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 2B	
	per inch	mm	min. mm	max. mm	min. mm	max. mm
Nr. 1 -	64	**1.68**	1.67	1.70	1.425	1.580
Nr. 2 -	56	**1.98**	1.97	2.01	1.694	1.872
Nr. 3 -	48	**2.28**	2.27	2.32	1.941	2.146
Nr. 4 -	40	**2.55**	2.54	2.59	2.157	2.385
Nr. 5 -	40	**2.90**	2.89	2.94	2.487	2.698
Nr. 6 -	32	**3.15**	3.14	3.19	2.642	2.896
Nr. 8 -	32	**3.80**	3.78	3.82	3.302	3.531
Nr. 10 -	24	**4.35**	4.33	4.39	3.683	3.937
Nr. 12 -	24	**5.00**	4.97	5.03	4.343	4.597
1/4 -	20	**5.75**	5.72	5.80	4.978	5.258
5/16 -	18	**7.30**	7.26	7.37	6.401	6.731
3/8 -	16	**8.80**	8.77	8.88	7.798	8.153
7/16 -	14	**10.30**	10.27	10.37	9.144	9.550
1/2 -	13	**11.80**	11.77	11.88	10.592	11.024
9/16 -	12	**13.30**	13.28	13.39	11.989	12.446
5/8 -	11	**14.80**	14.78	14.90	13.386	13.868
3/4 -	10	**17.90**	17.85	17.97	16.307	16.840
7/8 -	9	**21.00**	20.95	21.10	19.177	19.761
1 -	8	**24.00**	23.95	24.12	21.971	22.606

UNF-threads ASME B1.1

nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread 2B	
	per inch	mm	min. mm	max. mm	min. mm	max. mm
Nr. 1 -	72	**1.70**	1.69	1.72	1.473	1.610
Nr. 2 -	64	**2.00**	1.99	2.03	1.755	1.910
Nr. 3 -	56	**2.30**	2.29	2.34	2.024	2.197
Nr. 4 -	48	**2.60**	2.59	2.63	2.271	2.459
Nr. 5 -	44	**2.90**	2.89	2.93	2.550	2.741
Nr. 6 -	40	**3.20**	3.19	3.24	2.819	3.023
Nr. 8 -	36	**3.85**	3.83	3.88	3.404	3.607
Nr. 10 -	32	**4.45**	3.43	4.49	3.962	4.166
Nr. 12 -	28	**5.10**	5.07	5.13	4.496	4.724
1/4 -	28	**5.95**	5.92	5.99	5.359	5.588
5/16 -	24	**7.45**	7.42	7.50	6.782	7.036
3/8 -	24	**9.05**	9.02	9.10	8.838	8.636
7/16 -	20	**10.55**	10.48	10.58	9.728	10.033
1/2 -	20	**12.10**	12.08	12.18	11.328	11.608
9/16 -	18	**13.65**	13.61	13.72	12.751	13.081
5/8 -	18	**15.25**	15.21	15.32	14.351	14.681
3/4 -	16	**18.35**	15.30	18.41	17.323	17.678
7/8 -	14	**21.40**	21.35	21.49	20.269	20.650
1 -	12	**24.45**	24.40	24.54	23.114	23.571

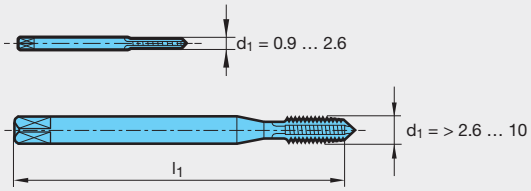
(Whitworth-) pipe thread G DIN EN ISO 228-1

nom. Ø	pitch	tapp. size hole Ø	tapp. size hole Ø		core Ø of int. thread	
inch	per inch	mm	min. mm	max. mm	min. mm	max. mm
G 1/16	28	**7.30**	7.28	7.35	6.561	6.843
G 1/8	28	**9.30**	9.28	9.35	8.566	8.848
G 1/4	19	**12.50**	12.48	12.55	11.445	11.890
G 3/8	19	**16.00**	15.98	16.05	14.950	15.395
G 1/2	14	**20.00**	19.98	20.12	18.631	19.172
G 5/8	14	**22.00**	21.98	22.12	20.587	21.128
G 3/4	14	**25.50**	25.48	25.62	24.117	24.658
G 7/8	14	**29.25**	29.23	29.37	27.877	28.418
G 1	11	**32.00**	31.98	32.15	30.291	30.931
G 1 1/4	11	**40.75**	40.70	40.85	38.952	39.592

Characteristic features of the individual standards

DIN 371

in the master standard
DIN 2184-**1**



Standard for machine taps with reinforced shank for standard ISO metric threads and ISO metric fine threads. Long design.
Shank design in accordance with diameter ranges shown above (mm).

DIN 376

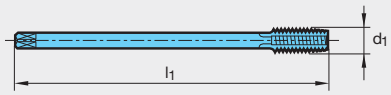
in the master standard
DIN 2184-**1**



Standard for machine taps with reduced shank for standard ISO metric threads. Long design.
Diameter range d_1 = 1.6 … 68 mm
(≤ Ø M3, shank without square)

DIN 374

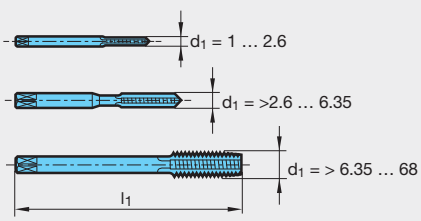
in the master standard
DIN 2184-**1**



Standard for machine taps with reduced shank for ISO metric fine threads. Long design.
Diameter range d_1 = 3 … 52 mm

DIN 352

in the master standard
DIN 2184-**2**

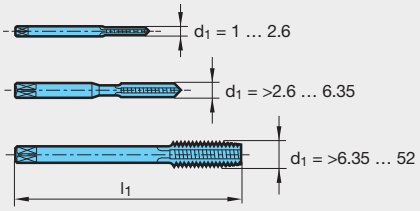


Standard for hand and machine taps for standard ISO metric threads. Short design.
Shank design in accordance with diameter ranges shown opposite (mm).

Characteristic features of the individual standards

DIN 2181

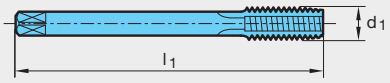
in the master standard
DIN 2184-**2**



Standard for hand and machine taps for standard ISO metric threads. Short design. Shank design in accordance with diameter ranges shown opposite (mm).

DIN 5156

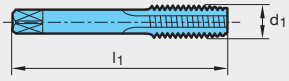
in the master standard
DIN 2184-**1**



Standard for machine taps for BSP threads to DIN ISO 228 and for BSW threads to DIN 2999. Long design.
Diameter ranges:
BSP threads G $^{1}/_{16}$“ ... G 4“
BSW threads W $^{1}/_{16}$“... W 4“

DIN 5157

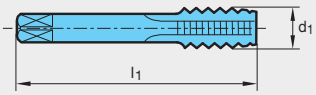
in the master standard
DIN 2184-**2**



Standard for machine taps for BSP threads to DIN ISO 228 and for BSW threads to DIN EN 10 226-1. Short design.
Diameter ranges:
BSP threads G $^{1}/_{16}$“ ... G 4“
BSW threads W $^{1}/_{16}$“...W 4“

DIN 40 432

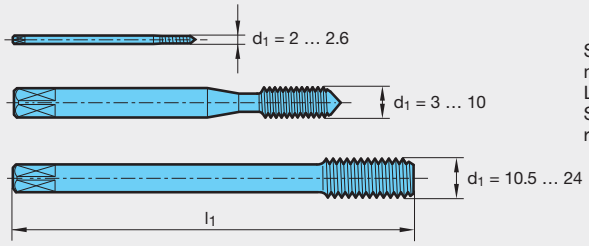
in the master standard
DIN 2184-**2**



Standard for machine taps for steel armoured conduit threads to DIN 40 430. Short design.
Diameter range:
Pg 7 (12.5 mm) ... Pg 48 (59.3 mm)
Will be replaced by DIN 374 ISO 3 6G.

DIN 2174

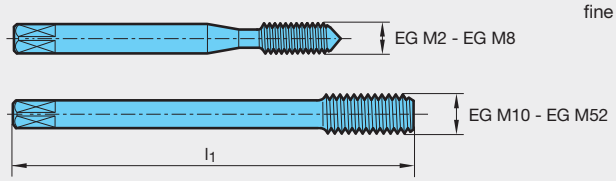
in the master standard
DIN 2184-**1**



Standard for fluteless taps for standard ISO metric threads and ISO metric fine threads.
Long design.
Shank design in accordance with diameter ranges shown opposite (mm).

DIN 40 435

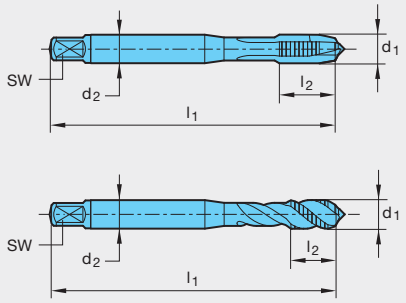
in the master standard
DIN 2184-**1**



Standard for machine taps for tapped holes (EG) for wire thread inserts as in DIN 8140 for ISO metric threads.
Standard thread tapped holes EG M2 to EG M52 and fine thread tapped holes EG M8 x1 to EG M48 x 3

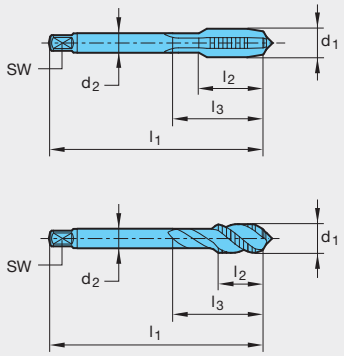
DIN - International Standards

DIN 2184-1
DIN 2184-2

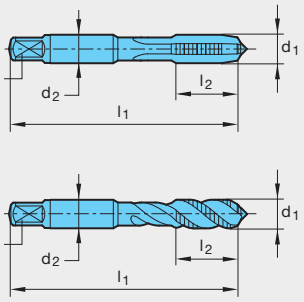


JIS B 4430

Japan Industrial Standard

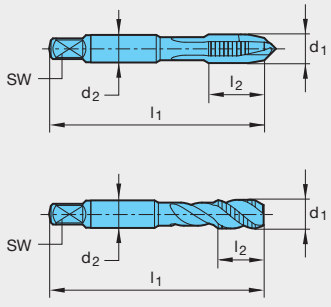


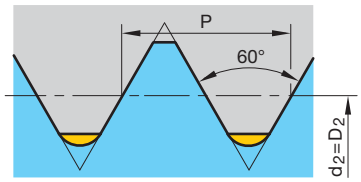
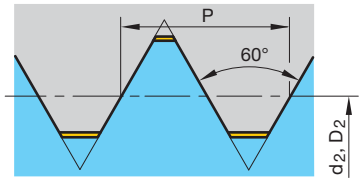
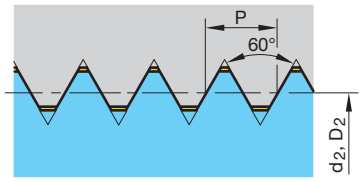
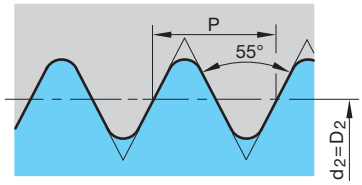
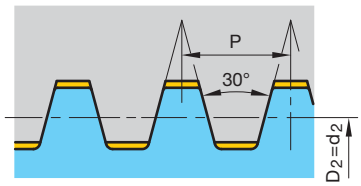
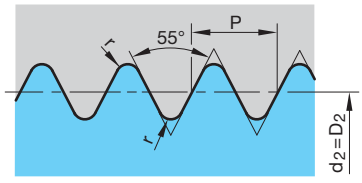
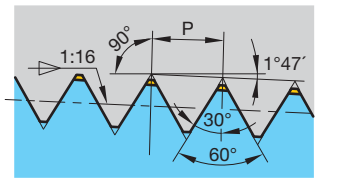
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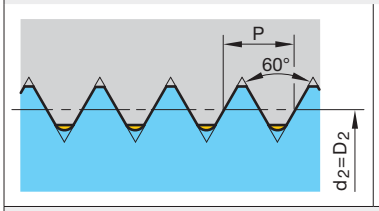
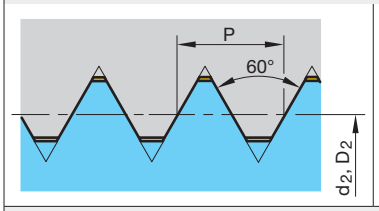
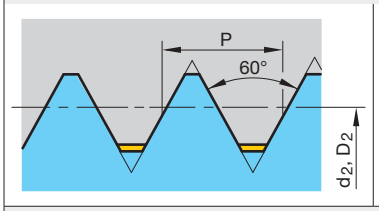
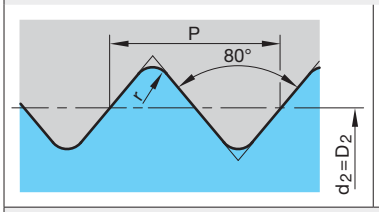
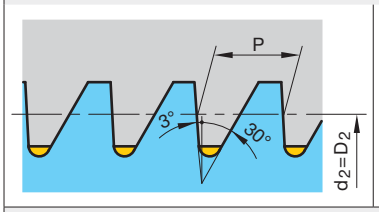
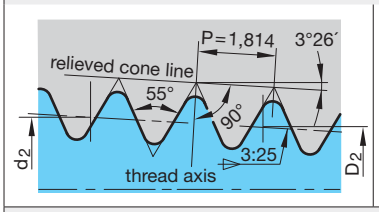
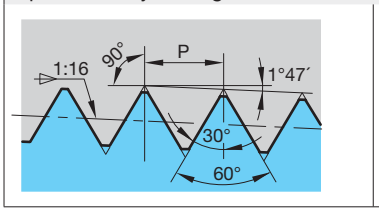


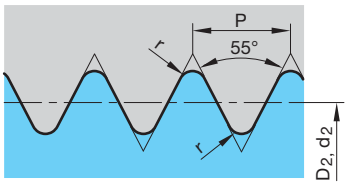
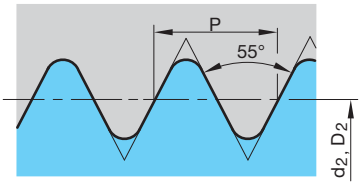
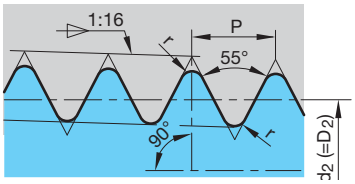
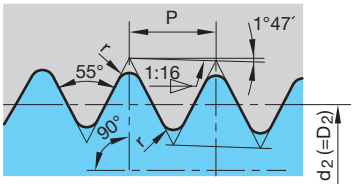
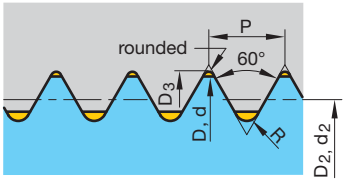
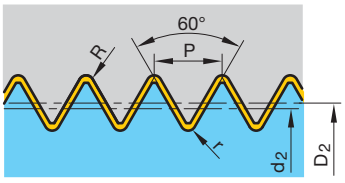
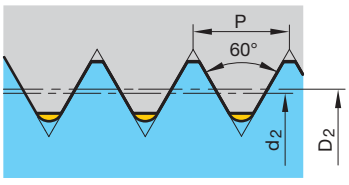
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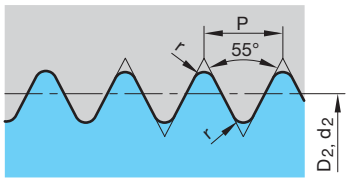
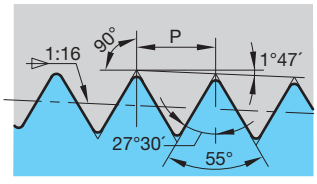
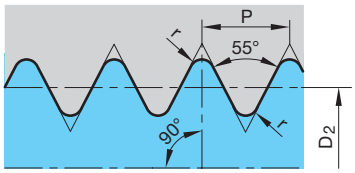
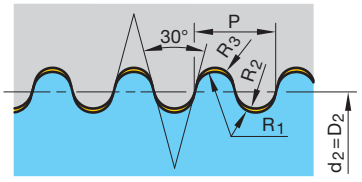
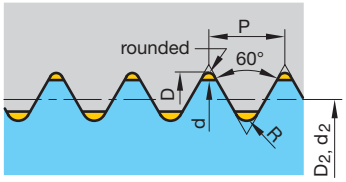
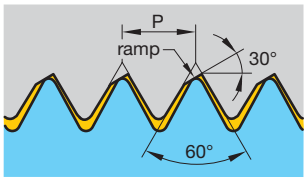
The American Society of Mechanical Engineers



geometry drawing	Standard	application
M ISO-metric thread		
	DIN 13-1	General standard thread
UNC Unified National Coarse Thread		
	ASME B1.1	General UN standard thread
UNEF Unified National Extra Fine Thread		
	ASME B1.1	General UN Extra Fine Thread
G Cylindrical Pipe Thread without thread sealing connections		
	DIN EN ISO 228-1	Threads for pipes, pipe connections and fittings
TR ISO-metric trapezoidal thread		
	DIN 103	General, draw collets, rolling stock
W Cylindrical Whitworth Thread		
	DIN 477	Side connector and accessories for gas bottle valves
NPT American Standard Pipe Threads tapered for sealing		
	ANSI/ ASME B1.20.1	pipe threads and fittings

geometry drawing	Standard	application
MF ISO-metric fine thread		
	DIN 13-2 to DIN 13-11	General fine thread
UNF Unified National Fine Thread		
	ASME B1.1 ISO-metric trapezoidal thread	General UN Fine Thread
UNS Unified Special Thread		
	ASME B1.1	General UN Special Thread
PG steel conduit thread		
	DIN 40430 cylindrical round thread	electrical engineering
S metric saw thread		
	DIN 513	when absorbing uni-directional forces
W Whitworth Taper Thread		
	DIN 477	Threaded connection in gas cylinder bottles for valves
NPTF American Standard Pipe Thread tapered for dry sealing		
	ANSI B1.20.3	pipe threads and fittings

geometry drawing	Standard	application
BSW cylindrical Whitworth thread		
	B.S. 84 British Standard	Threads for pipes, pipe connections and fittings
BSP pipe thread cylindrical (identical to G)		
	B.S. 93 British Standard	Threads for pipes, pipe connections and fittings
R Whitworth pie thread tapered external thread		
	DIN EN 10226-1 (based on ISO 7-1) replace-ment for DIN 2999-1	External thread for pipe threads and fittings (for in the thread sealing connections)
Rc Whitworth pipe thread tapered internal thread		
	DIN ISO 10226-2 (hardly used in Europe, replaceable with pipe threads to ISO 7-1)	Internal thread for pipe threads and fittings (for in the thread sealing connections)
MJ thread metric thread		
	DIN ISO 5855-1	For the aero-space industry
Vg valve thread		
	DIN 7756	Valves for car tyres manifold block
MFS		
	DIN 8141	Interference fits in Aluminium-cast alloys

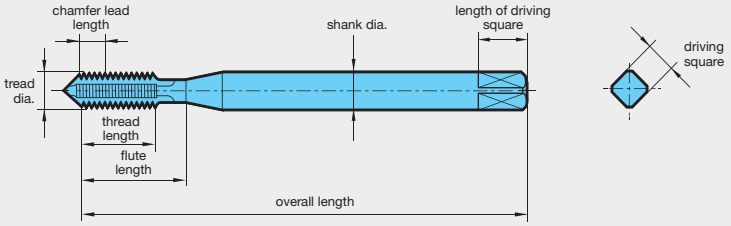
geometry drawing	Standard	application
BSF Whitworth fine thread cylindrical		
	B.S. 84 British Standard Fine	Threads for pipes, pipe con-nections and fittings
BSPT pipe thread tapered (identical to Rc)		
	B.S. 93 British Standard	Internal thread for pipe threads and fittings
Rp Whitworth pipe thread cylindrical internal thread		
	DIN EN 10226-1 (based on ISO 7-1) Replace-ment for DIN 2999-1	Internal thread for pipe threads and fittings (for in the thread sealing connections)
RD cylindrical round thread		
	DIN 405	General, load hook, mining, food industry
UNJ inch thread		
	ISO 3161	For the aero-space industry
MSG lock nut thread		
	Guhring standard	Self-locking thread transmission housing etc.

external thread

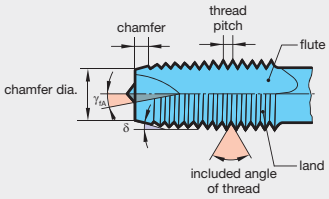
internal thread

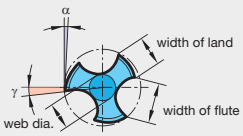
play

Definitions and angles, centres and flute forms



δ = try square
γ fA = spiral point angle
α = clearance angle
γ = rake angle





Flute forms



straight fluted, form C
without spiral point



straight fluted, form B
with spiral point

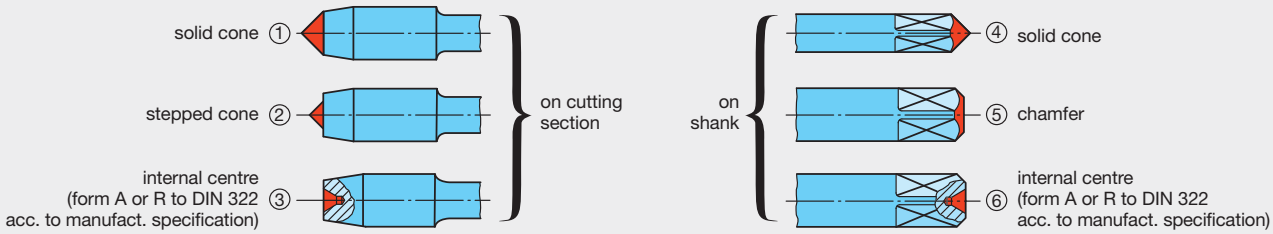


helix angle
15°



helix angle
40°

Types of centres (standard, to DIN 2197/DIN 2175)



Thread dia. range mm	Centre on cutting section		Centre on shank
	with chamfer forms A, C, D, E	with chamfer form B	
≤ 4.2	①	①	④⑤⑥
> 4.2 … 5.6	①②	①	④⑤⑥
> 5.6 … 10.0	①②③	①②③	④⑤⑥
> 10.0	③	③	⑥

Coolant duct geometries



axial coolant delivery with axial coolant duct exit



axial coolant delivery with radial coolant duct exit in the flutes at the chamfer

Chamfer forms, selection and application

When cutting internal threads, all the machining is carried out by the cutting teeth of the chamfer. Therefore, a decision on the best type of chamfer form has to be carefully made as both tool life and quality of thread are thereby greatly affected.

Generally speaking, the form and length of chamfer depend on the type of hole to be tapped. The tapping of through holes does not normally give rise to any difficulties whereas the production of blind holes can create certain problems associated with the need to evacuate swarf in the reverse direction to the feed, i.e. up to the flutes of the tap and then cut off such swarf when the tap is reversed out of the hole.

The length of chamfer is determined by taking into account various conflicting factors. To avoid overloading, premature bluntness and oversize threads the number of chamfer cutting threads must not be kept too low. A too long chamfer lead, however, increases the torque and thus the danger of breakage. The spiral point with form B ensures a chip removal always in the direction of feed.



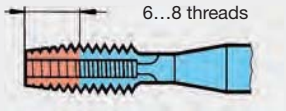
through hole



blind hole

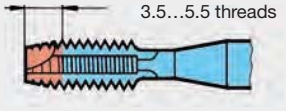
Chamfer forms to DIN 2197

Form A



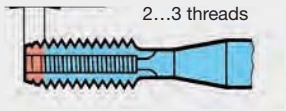
long, 6 - 8 threads
for short
through holes

Form B



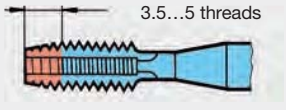
medium, 3.5 - 5.5 threads,
with spiral point,
for all through holes
and deep tapping holes in medium
and long-chipping materials

Form C



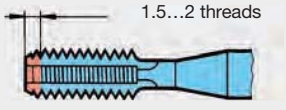
short, 2 - 3 threads
for blind holes
and generally for
aluminium, grey cast iron
and brass

Form D



medium, 3.5 - 5 threads
for short
through holes

Form E



extremely short, 1.5-2 threads,
for blind holes with
little run-out depth.

Form F

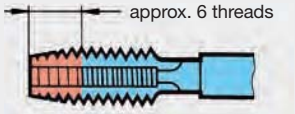


extremely short, 1-1.5 threads,
for blind holes with
little run-out depth.
Avoid use if possible.

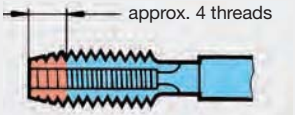
Chamfer forms, selection and application

Chamfer lead length for sets of 3 taps

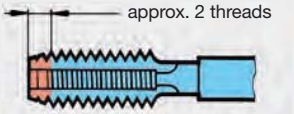
Form A
first tap



Form D
second tap

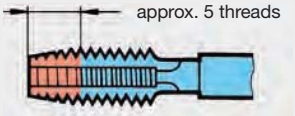


Form C
bottoming tap

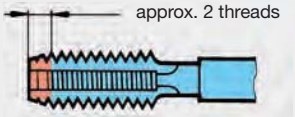


Chamfer lead length for sets of 2 taps

Form D
first tap



Form C
bottoming tap



Application recommendations

While in the first instance, the type of tapped hole required determines the chamfer, generally the tap geometry - i.e. form, number and direction of flutes, cutting angle, etc. - depend on the material to be machined and on the application. Basically, taps up to M16 for tapping ISO metric threads or for the engineering industry in general, have 3 flutes, and above this size 4 or more flutes.

Taps with left-hand flutes and taps with spiral points remove the chips in the cutting direction or direction of feed and are therefore especially suitable for tapping through holes. Taps with straight flutes and long chamfer lead (form D) also give good results.

As far as blind holes are concerned we recommend taps with right-hand spiral flutes or straight fluted taps with a short chamfer lead length. Tools with right-hand spiral flutes have the chip flow in the backward direction, i.e. up the flutes. The chamfer lead length is designed in such a way so that during the return movement chips do not jam and are reliably sheared off.

The tapping of aluminium, grey cast iron and brass requires taps with a short chamfer lead length, regardless of whether through or blind holes are required. In these materials a long chamfer lead length would act as a core drill with chip breaker grooves and would only drill the tapping size hole to the major diameter instead of cutting a thread.

Straight fluted taps without spiral point are general purpose tools and have the disadvantage of not showing optimum results in particular materials. It's well worth the effort to take the trouble of ascertaining the most suitable tool for any given metal-cutting task.



through hole



Straight fluted tap with spiral point



Left-hand spiral fluted tap



Straight fluted tap with long chamfer lead



blind hole



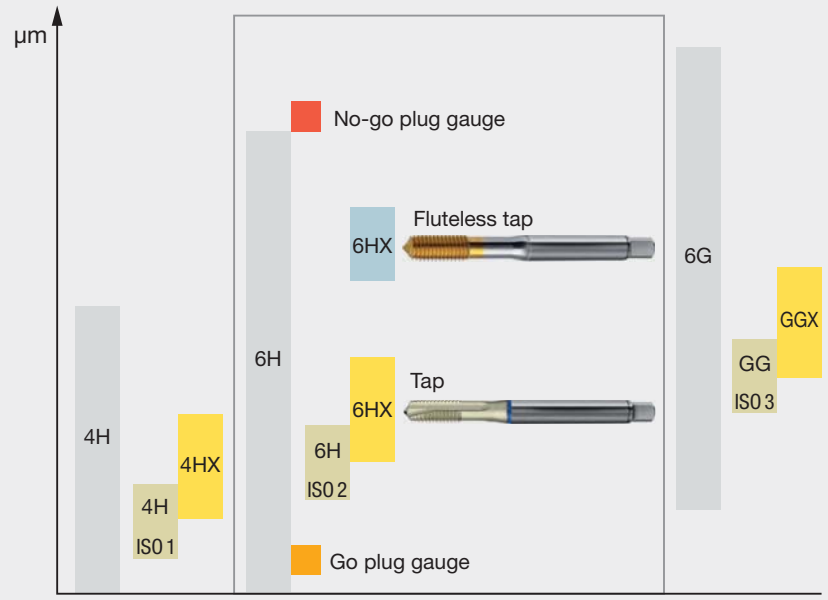
Right-hand spiral fluted tap



Straight fluted tap with short chamfer lead

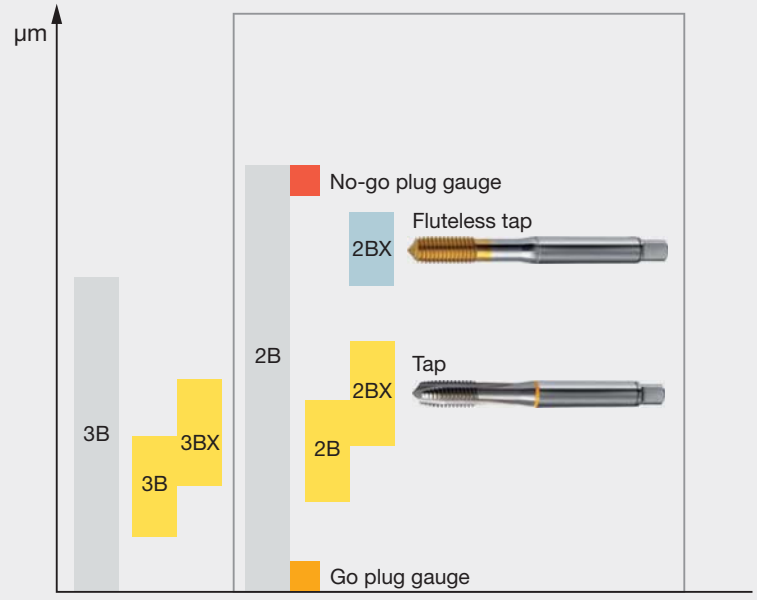
Tolerance fields to DIN EN 22857

Metric threads



- Tolerance field internal threads to DIN ISO 965-1
- Tolerance class taps to DIN EN 22857
- Tolerance class taps to Guhring standard
- Tolerance class fluteless taps to Guhring standard
- Tolerance class no-go plug gauge to DIN ISO 1502
- Tolerance class go plug gauge to DIN ISO 1502

Unified threads



- Tolerance field internal threads to ASME B1.1
- Tolerance class taps to Gühring standard
- Tolerance class fluteless taps to Guhring standard
- Tolerance class no-go plug gauge to ANSI/ASME B1.2
- Tolerance class go plug gauge to ANSI/ASME B1.2

Taps for ISO metric threads DIN EN 22857 (extract)

Thread clearances and fits
Fits between internal and external threads are separated by a diagonal stroke, as for example 6H/6g (internal/external thread). The fit has to be selected in conjunction with the appropriate thread connection.
The tolerance zones of the tolerance classes fine, medium and coarse are allocated to three screw-in lengths short S), normal (N) and long (L). Generally, the following rules apply for selecting a tolerance class:

Fine tolerance zone (S):
For precision threads, when only a small variation in the fit is permitted.

Medium tolerance zone (N):
General application

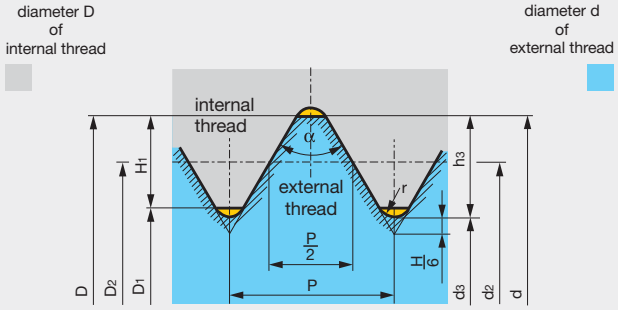
Coarse tolerance zone (L):
There are no special precision requirements and in cases where production difficulties may occur, e.g. thread production in hot-rolled rods, deep blind holes or plastic components.

Screw-in lengths
The quality of thread connection is also affected by the screw-in length. The ISO tolerance system was, especially as regards the pitch diameter, divided into three groups, i.e.

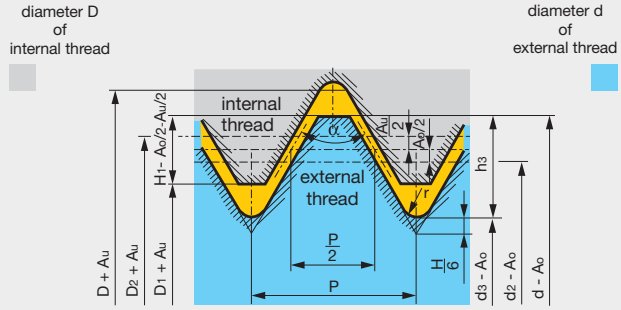
S	(Short)	= short screw-in length
N	(Normal)	= normal screw-in length
L	(Long)	= long screw-in length

The following fit should be selected for normal screw-in length N:
To ensure a tighter fit of thread connections, we recommend for short screw-in lengths a narrower fit. As far as long screw-in lengths are concerned, fits with a larger tolerance must be used to compensate for pitch deviations.

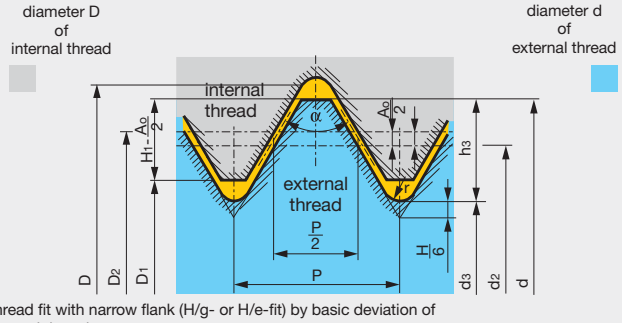
Thread fits with different flank clearance



Zero profile of thread fit without flank clearance (H/h-fit).



Thread fit with wide flank clearance (G/g-fit or G/e-fit) in external and internal thread.



Thread fit with narrow flank (H/g- or H/e-fit) by basic deviation of external thread.

Explanation of symbols

D	=	Ø nom. of internal thread
D_1	=	Tapping size hole Ø of internal thread
D_2	=	Basic pitch Ø of internal thread
d	=	Ø nom. of external thread
d_2	=	Basic pitch Ø of external thread
d_3	=	Tapping size hole Ø of external thread
P	=	Pitch
α	=	Included angle of thread
H	=	Height of peak to peak thread profile
A_o	=	Upper tolerance limit
A_u	=	Lower tolerance limit

Hard machining taps for hardened steel (45 - 55 HRC)

For tapping operations in materials with a tensile strength in excess of 1200 N/mm² we have developed a HSS-E-PM tap with TiCN coating.

The special design makes the process reliable production of threads in hard materials possible and provides excellent tool life.

Suitable for applications in the mold and die industry as well as for various machine or automotive components following heat treatment.

Recommended cutting speed vc = 2 –8 m/min
dependent on the hardness of the component.



Process reliable thread production thanks to short chips

In order to achieve absolute process reliability and a long tool life in series production of high tensile strength steels (850-1250 N/mm²), as for example a crankshaft, short chips are essential. This is only possible in combination with bright flutes / corrections. For this, Guhring provides the ideal solution in the standard range with Guhring nos. 1188, 1194 and 1200.





Universal taps with coolant ducts for short-chipping materials (GG, Al, steel)

Usually, with a tap the chips are evacuated from a blind hole via the spiral flutes. Cast iron, AlSi-alloys, brass and copper alloys are short-chipping materials. Straight-fluted taps are applied for such materials. With taps with coolant ducts, the coolant evacuates the short chips from the blind hole.

Our new straight-fluted M taps (Guhring no. 4448) and MF taps (Guhring no. 4472) with coolant ducts are especially suitable for short-chipping materials.

Evacuating long chips from steel components via the spiral flutes is an increasing problem.
Consequently, the aim is to produce short chips with straight-fluted taps and evacuate them from the blind hole with the cooling lubricant.

The tap with IC in the machine spindle achieves an improved tool life and surface quality of the thread.

Typical applications are the machining of gearboxes, cylinder blocks and heads, crankshafts, pump housings, hydraulic components etc.



Bright surface finish



Our high speed steel or own carbide production tools offer good basic characteristics for the machining of various materials.

Steam tempered surface finish



When steam tempering, the border zones of steel surfaces are chemically modified in the µm range, thereby developing a crystalline iron oxide coating (3-10 µmm). These surfaces improve the reactional behaviour of the tools. Thanks to this surface transition the lubricant / coolant adheres better to the tool. This procedure is normally applied for the machining of carbon steel that tends to develop built up edges and cold welding at low cutting speeds. An additional nitriding of bright tools ensures an increased hardness of the surface thanks to the incorporation of nitrogen which also makes abrasive applications possible.

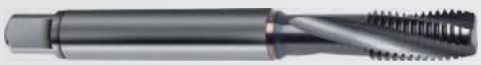
TiN-coating



Max. application temperature: < 600° C
Colour: Yellow gold
Hardness: 2300 HV0.05

The TiN-coating, introduced by Guhring in the early 1980's displays, especially in thread production, good performance characteristics, in this area it is applied as proven broad band coating.

TiCN-coating



Max. application temperature: < 600° C
Colour: Grey violet
Hardness: 3000 HV0.05

An additional incorporation of carbon increases the toughness and hardness of TiCN and possesses a lower friction coefficient than the TiN-coating. Thanks to its wear-resistance it is especially suitable for abrasive applications.

TiAlN-coating



Max. application temperature: < 800° C
Colour: Violet
Hardness: 3300 HV0.05

The classic TiAlN-coating provides higher hardness values and at the same time a better thermal resistance in comparison to the TiN and TiCN-coating, in addition it is very well suited for applications in cast iron and for the general machining of steel.

SIRIUS-coating



Max. application temperature: < 900° C
Colour: Pale gold
Hardness: 3400 HV0.05

Sirius is a multi-layer coating. Due to its TiAlN component it displays a higher wear resistance and at the same time a lower tendency to built up edges. It is especially suitable for the machining of through hole threads in stainless steel.

Carbo-coating



Max. application temperature: < 500° C
Colour: Grey black
Hardness: 5000 HV0.05

The carbon (CARBO) coating (ta-C) opens a broad field of application the range of non-ferrous metals. Carbo can be applied for tapping, fluteless tapping and for the machining of aluminium cast iron (<12% Si) and aluminium wrought alloys, copper, brass and bronze.

AlCrN-coating



Max. application temperature: < 1100° C
Colour: Grey blue
Hardness: 3200 HV0.05

AlCrN can be an alternative to the TiN-/TiCN-coating in the fluteless tapping of steels sector. The Ti free coating excels thanks to its excellent wear resitance and high oxidation hardness resistance.

	Tapping			Thread milling		Fluteless tapping		
	Carbide		HSS	Carbide		Carbide		HSS
	conventional	MQL		conventional	MQL	conventional	MQL	
C-steels	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
Free-cutting steels	-	-	TiAlN	-	-	TiN	TiN	TiN
Mn-steels	-	-	TiN	-	-	-	-	-
Steel, low-alloyed	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	AlCrN
Steel, alloyed	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	AlCrN
Steel, hardened < 55 HRC	-	-	TiCN	TiAlN	TiAlN	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Steel, hardened 55-65 HRC	TiCN	-	-	TiAlN	TiAlN	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Steel, stainless and acid resistant	-	-	Sirius[1]/TiAlN[2]	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiN	-	-	TiN	-	TiN
	-	-	-	-	-	-	-	-
Cast iron	TiAlN	TiAlN	TiAlN	TiCN	TiCN	TiCN	TiCN	TiCN
	TiCN	-	TiCN	-	-	TiN	TiN	TiN
	-	-	TiN	-	-	-	-	-
Aluminium wrought alloys	bright	bright	bright	bright	bright	Carbo	Carbo	Carbo
	Carbo	Carbo	Carbo	-	-	-	-	-
	-	-	-	-	-	-	-	-
Aluminium cast alloys (< 12% silicon)	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	-	bright	bright	Carbo	Carbo	Carbo
	-	-	-	-	-	-	-	-
Aluminium cast alloys (≥ 12% silicon)	TiCN	TiCN	TiCN	TiCN	TiCN	-	-	-
	Cristall	-	-	Cristall	-	-	-	-
	-	-	-	-	-	-	-	-
Nickel based alloys (i.e. Inconel)	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	-	-	-
	-	-	-	-	-	-	-	-
Titanium / titanium alloys	-	-	TiCN	TiCN	TiCN	TiCN	TiCN	TiCN
	-	-	TiAlN	-	-	-	-	-
Copper / bronze / brass	bright	bright	bright	bright	-	Carbo	Carbo	Carbo
	Carbo	Carbo	Carbo	-	-	-	-	-
Cobalt chrome alloys	bright	-	bright	TiCN	TiCN	-	-	-
	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-
Precious metals	-	-	-	-	-	-	-	-
Ceramic	-	-	-	-	-	-	-	-
Plastics, non-reinforced	bright	-	bright	bright	bright	-	-	-
Plastics, fibre-reinforced	TiCN	TiCN	-	TiCN	TiCN	-	-	-
	-	-	-	-	-	-	-	-

[1]... for through holes [2]... for blind holes

Note:

The overview shows the general application recommendations for Guhring coatings. Prioritisation is from top to bottom.

Application problems with new taps

Problem	Possible causes	Solution
1. Thread surface not according to requirements 	cutting edge geometry not suitable for the application	apply “correct” tap for the material to be machined
	cutting speed too high	reduce cutting speed optimise lubrication
	insufficient coolant (concentration and supply)	ensure suitable coolant and sufficient volume
	chip congestion	apply suitable tap type
	tapping size hole too small	observe tapping size hole diameter specifications to DIN 336 or respective standards. Observe table for fluteless taps
	with tough, hard materials loading on tool too much or pitch too steep	apply hand tap sets
	built-up edge	apply coated tap
	cold welding	improve coolant supply
2. Tool life insufficient	surface hardening of tappinge size hole	check drill (cutting edge) for wear heat or surface treatment following thread production
	reasons listed under: “thread surface not according to requirements“	reasons listed under: thread surface “not according to requirements“
	chip congestion	apply correct tap
3. Tool breakage during advance or return 	tapping size hole too small	observe tapping size hole dia. acc. to DIN 336 or respective standards
	teeth of chamfer lead overloaded	longer chamfer lead (blind or through hole) increase no. of teeth of chamfer lead by increasing no. of flutes apply tap sets
	tap hits bottom of tapping size hole	check hole depth apply tension/compression tap chuck
	lack of or incorrect chamfer of tapping size hole postional or angle error of tapping size hole	correct chamfer angle of tapping size hole ensure correct tool clamping apply floating tap holder check core drill
	tool hardness not suitable for the application cutting edge geometry not suitable for the application	apply suitable tap for the individual application

Errors and difficulties with reground taps

Problem	Possible causes	Solution
1. Thread produced is too large	burrs	remove burrs
	cutting edge geometry (chamfer lead, rake-, chamfer-, spiral point angle) not retained	observe technical specifications when regrinding observe regrinding instruction
2. Thread produced is too small	worn section has not been reground correctly	regrind again or apply new tool observe max. regrinding limits
	tap too small due to no. of regrinds	max. regrinding limit reached apply new tap
3. Thread produced not according to requirements	burrs	remove burrs
	cutting edge geometry (chamfer lead, rake-, chamfer-,spiral point angle) not retained	observe technical specifications when regrinding observe regrinding instruction
	peak-to-valley height of the reground tap too large	regrind again or apply new tool observe max. regrinding limits
	cold welding at the flanks	remove cold welding marks
4. Tool life insufficient	cutting edge geometry (chamfer lead, rake-, chamfer-, spiral point angle) not retained	check quality of grinding wheel check coolant supply
	loss of tap hardness due to heat development during the regrinding process	check quality of grinding wheel check coolant supply
	loss of coating	recoat check coating of the material to be machined

Thread production by pressure deformation

Fluteless taps are used for the forming of internal threads without chip removal. In contrast to conventional tapping where material is cut from the workpiece, thread forming is a pressure deformation process without chip removal for the production of internal threads. During the process the material is cold formed without interrupting the grain flow.

According to DIN 8583, thread forming is described as “pressing the thread into the workpiece with a tool possessing a spiral working area”. The spiral threaded, polygonal portion of the fluteless tap is “screwed” into the pre-drilled workpiece with an appropriate constant feed rate equal to the thread pitch. Hereby the thread profile is pressed gradually via the forming lead into the material of the workpiece so to speak. Subsequently, the pressure in the deformation zone exceeds the compression limit, the workpiece becomes ductile and is deformed. The material yields radially, “flows” along the thread profile in the unoccupied base of the tool and forms the minor diameter of the nut thread. The flow process creates the process specific form pockets (claws).

The tapping size hole diameter is heavily dependent on the formability of the material, the workpiece geometry and the required effective depth of the thread. In comparison to conventional tapping, a larger diameter tapping size hole should be selected. With a larger diameter tapping size hole the load on the tool is reduced whilst increasing the tool life. Thanks to the uninterrupted grain flow, the loading capacity of the thread remains sufficient with a 50% effective thread depth.

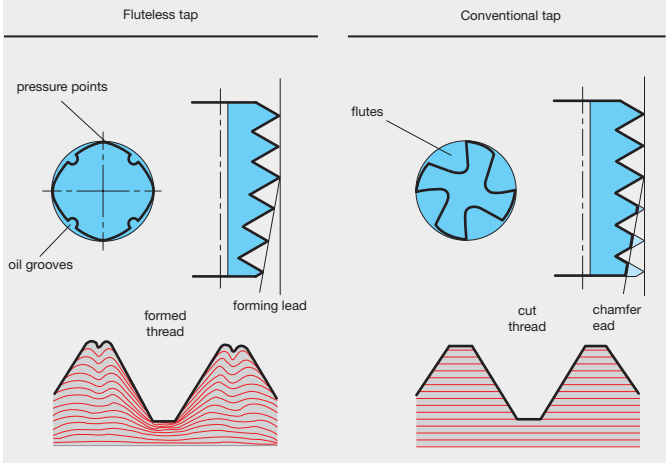
The partially formed crests of the thread with decreasing effective thread depth are a typical characteristic of threads produced by the thread forming process. With the flanks of the thread fully formed, they have no influence on the tensile strength of the thread. If necessary, the required deformation level of the thread should be determinded by performing a test.

Lubrication is of significant importance. The lubrication prevents material from building up on the thread flanks and ensures that the necessary torque for the forming process is not too high. Therefore, under no circumstances should there ever be a break-down in lubrication! Preference should be given to lubricants such as cooling agents of oils containing graphite such as those used in rolling processes. Always follow the rule: “The better the lubrication the easier the thread forming process!”

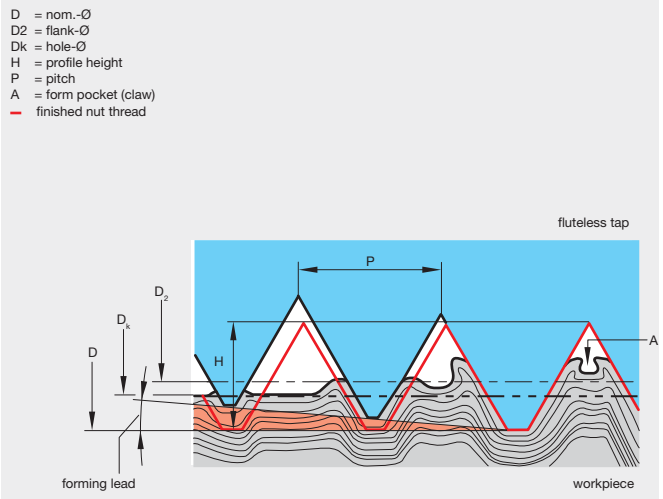
It offers the following advantages:

- no chip formation.
- one tool for the production of threads in through and blind holes.
- application in wide range of materials.
- no cutting errors.
- pitch and angle of thread errors that can occur with thread cutting are eliminated.
- internal threads produced by thread forming possess a higher tensile strength particularly at the thread flanks thanks to the so-called “uninterrupted grain flow” and the cold forming process.
- the surface of the thread is improved.
- fluteless taps can be applied at higher speeds because the formability of many materials increases with the forming speed. This does not have a negative effect on the tool life.
- reduced danger of breakage through rigid design

Process
The production of internal threads without chip removal (thread forming) in comparison to conventional tapping



Flow characteristics of the material during thread forming and the deformation process



“Profile“- Guhring’s new fluteless tap generation Characteristics and advantages

Conventional fluteless taps, produced by a grinding process only, show traces of microscopic, very fine grinding marks on the surface of the tool. This also applies to the threaded portion of the tool required to perform the thread forming operation.

This surface topography (structure) has a negative effect on the friction between the tool and the material to be re-formed as well as on the herewith associated heat development, on the necessary torque and last but not least on the wear of the pressure points of the fluteless tap. In addition, the “grinding marks” encourage the build-up of the material to be re-formed in the thread flanks of the fluteless tap. This is also called cold welding.

Thanks to a special process to improve the surface topography (structure), Guhring’s new Profile fluteless taps no longer possess these “grinding marks”. This has been confirmed in research and tool life studies in varying materials under production conditions.

For the user, a longer tool life and increased cutting speeds are the benefits of this special process. The tool life can be increased considerably depending on the material to be machined and the application condi-tions. A 100% increase in tool life is not unusual.

The improved surface topography is not only of benefit to tools with bright finish. Particularly coated tools also benefit from the new process. Outer contour and forming lead greatly determine the performance of the fluteless tap. Numerous tests have shown that fluteless taps with optimal pressure point geometry and quantity achieve increased tool life and dimensional accuracy.

Further improvements in quality are achieved when the fluteless tap is produced completely in one setting and with one grinding wheel - set-up with a special roll. Pitch errors between the thread crests and former lead transition area do not occur as with the conventional grinding process.

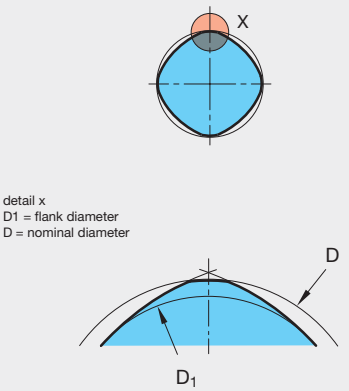


Surface of a conventional fluteless tap

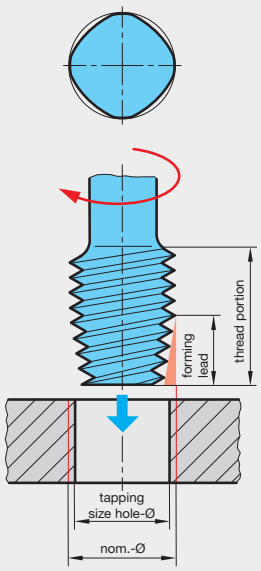


Optimised surface of a Guhring Profile fluteless tap

Cross section of fluteless tap



The principle



Types of tapping size hole

with fluteless taps without oil grooves for thread depth ≤ 1 x D



for thread depth ≥ 1 x D

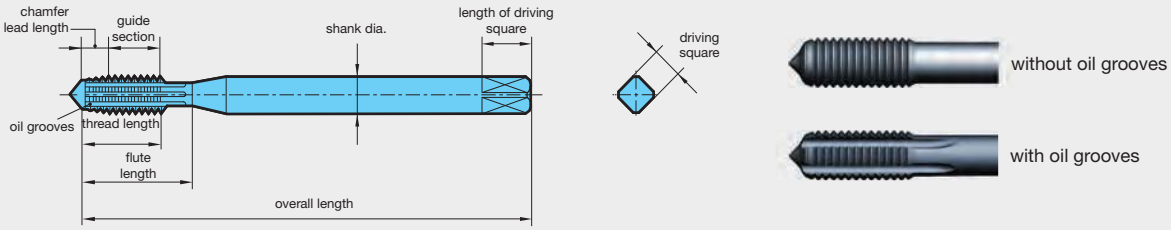


with fluteless taps with oil grooves for all thread depths

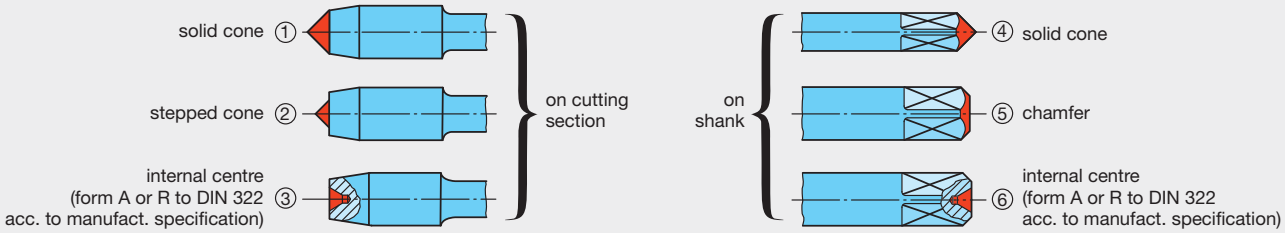


Definitions, angles, centres, thread tolerances and fits

Thread portion



Types of centres (standard, to DIN 2197/DIN 2175)



Thread dia. range mm	Centre on cutting section		Centre on shank
	with chamfer forms A, C, D, E	with chamfer form B	
≤ 5.6	①	①	④⑤⑥
> 5.6 … 12.8	①②③	①②③	④⑤⑥
> 12.8	③	③	⑥

Thread tolerances and fits

Fits between internal and external threads are separated by a diagonal stroke, as for example 6H/6g (internal/external thread). The fit has to be selected in conjunction with the appropriate thread connection.
The tolerance zones of the tolerance classes fine, medium and coarse are allocated to three screw-in lengths short S), normal (N) and long (L). Generally, the following rules apply for selecting a tolerance class:

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General application

Coarse tolerance zone (L):
There are no special precision requirements and in cases where production difficulties may occur, e.g. thread production in hot-rolled rods, deep blind holes or plastic components.

Screw-in lengths
The quality of thread connection is also affected by the screw-in length. The ISO tolerance system was, especially as regards the pitch diameter, divided into three groups, i.e.

S (Short) = short screw-in length
N (Normal) = normal screw-in length
L (Long) = long screw-in length

The following fit should be selected for normal screw-in length N:
To ensure a tighter fit of thread connections, we recommend for short screw-in lengths a narrower fit.

Tapping size hole diameter

With fluteless tapping, the tapping size hole diameter influences the distinction of the formed thread. A too small tapping size hole diameter results in an over-forming of the thread which must definitely be prevented because this can lead to tool breakage. A too large tapping size hole is acceptable with certain tolerances because formed threads have a sufficient loading capacity from a 50% bearing depth.

The thread M18x1.5 mm example clearly shows the influence of the tapping size hole diameter selection:

M 18 x 1.00	**17.55**	**17.52**	**17.62**	**16.917**	**17.217**
M 18 x 1.50	**17.30**	**17.26**	**17.38**	**16.376**	**16.751**
M 18 x 2.00	**17.10**	**17.05**	**17.20**	**15.835**	**16.310**

Pre-drilling Ø 17.1 mm



Pre-drilling Ø 17.3 mm



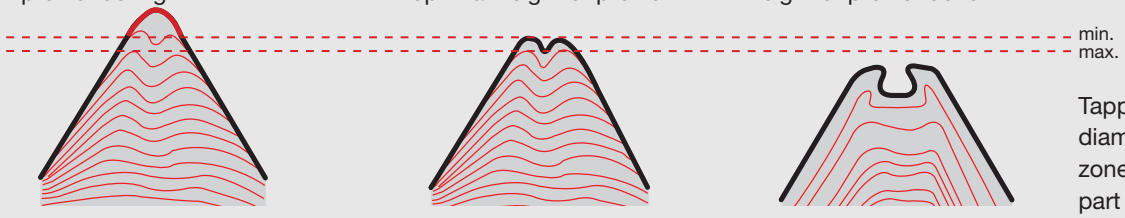
Pre-drilling Ø 17.4 mm



Tapping size hole diameter is too small:
- thread over-formed
- no form pocket (claw)
- profile too high

Optimal tapping size hole diameter:
- thread fully formed
- small form pocket (claw)
- optimal height of profile

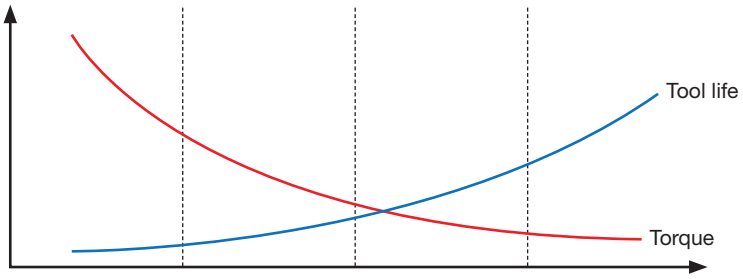
Tapping size hole diameter is too large:
- thread not formed
- large form pocket (claw)
- height of profile too low



Tapping size hole diameter tolerance zone to DIN 13, part 50

Influence of the tapping size hole on tool life, torque and process reliability

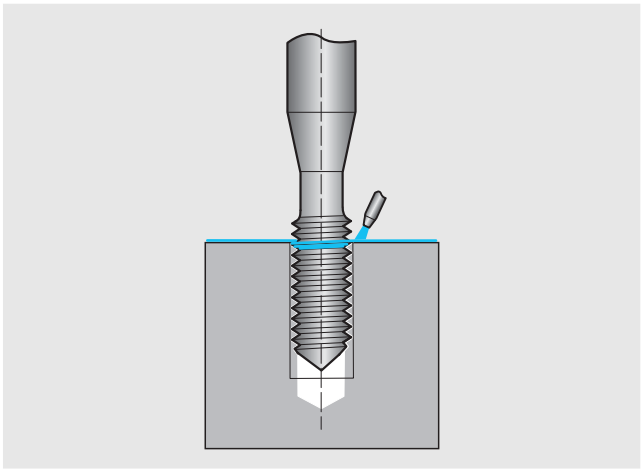
The optimisation of the pre-drilling diameter is especially worthwhile in mass production.
The larger it is, the longer the tool life and the less the required torque is. The graphic clearly shows the relationship



Lubrication for thread forming

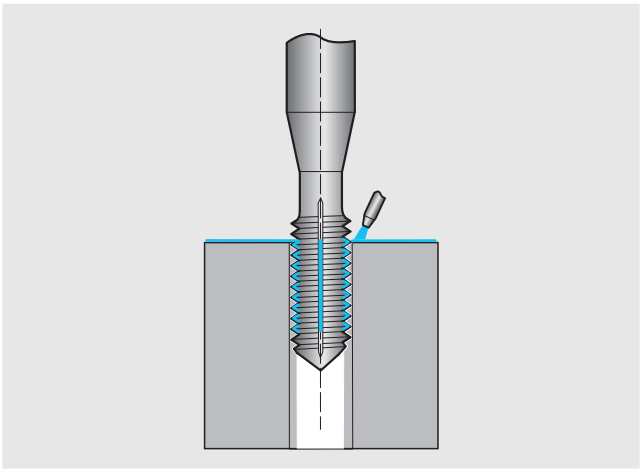
For tool design four different cases should be differentiated between

Vertical machining of a blind hole



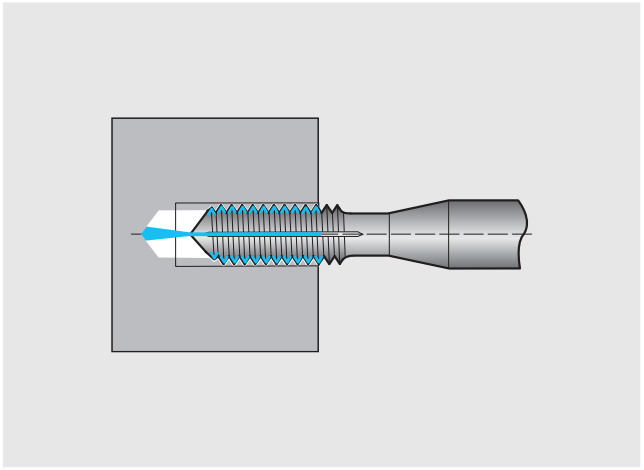
Lubrication grooves and internal coolant delivery is not necessary; external coolant delivery is sufficient
(Axial coolant is recommended for very deep threads).

Vertical machining of a through hole (> 1,5xD_N)



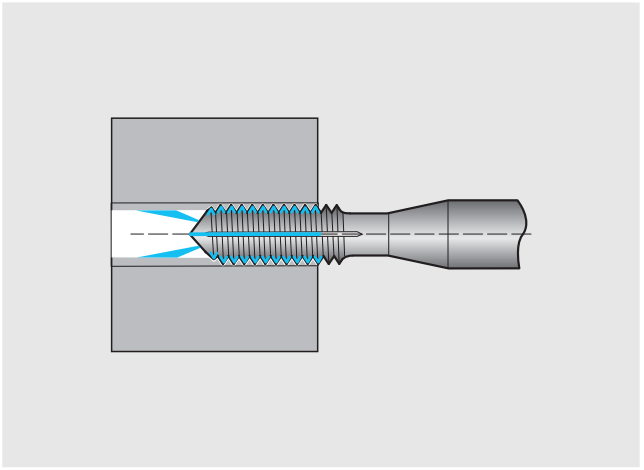
Lubrication grooves are required; internal coolant delivery is not necessary. Via the lubrication grooves the externally delivered coolant can advance to the form edges
(Radial coolant is recommended for very deep threads).

Horizontal machining of blind hole



Lubrication grooves and internal coolant delivery is necessary. Axial coolant exit is sufficient.

Horizontal machining of through hole



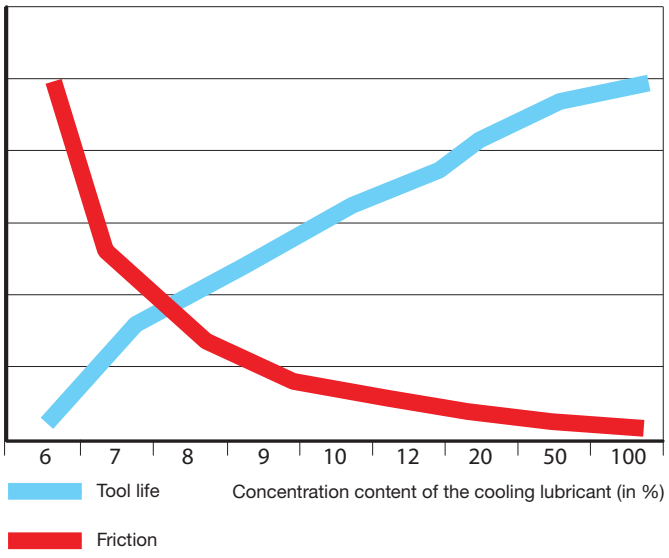
Lubrication grooves are required. Internal coolant delivery with radial exit is recommended.

Cooling lubricants with fluteless taps

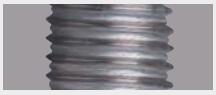
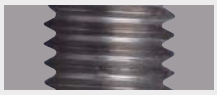
With fluteless taps the main task of the coolant is lubrication. The better the lubrication with the maximum concentration, the longer the tool life.
There are two different types of lubricant:

Oil based lubricants
These are mineral oils with the best lubricating characteristics. They reduce friction and achieve optimal life.

Soluble lubricants
These soluble lubricants are a concentrate thinned to an emulsion prior to the use with water. The concentration must not be below 6%. A content more than 12% is ideal in order to achieve a long life thanks to a good lubrication effect



Application problems with new fluteless taps

Problem	Possible causes	Solution
1 **Thread produced is too small** 	Tapping size hole diameter too large	Select correct tapping size hole diameter according to table
2 **Thread overformed** 	Tapping size hole diameter too small	Select correct tapping size hole diameter according to table
3 **Thread surface not according to requirements** 	Cold welding on the tool Lubricant with too little oil content	Increase oil content in lubricant or apply neat oil Increase oil content in lubricant or apply neat oil
4 **Tool life insufficient**	Lubricant with too little oil content Tapping size hole diameter too small Cutting speed too high Lubricant soiled	Increase oil content in lubricant or apply neat oil Select correct tapping size hole diameter according to table Adjust cutting speed Check filtration
5 **Tool breakage** 	Lubricant with too little oil content Tapping size hole diameter too small Incorrect tool clamping	Increase oil content in lubricant or apply neat oil Select correct tapping size hole diameter according to table Check tool clamping

What are the advantages of thread milling compared to tapping and fluteless tapping?

- Different materials can be machined with one tool (aluminium, steel, cast iron, stainless steel, titanium, Inconel, max. HRC 65 and much more)
- Various diameters and tolerances are possible with one tool (i.e. 6H+0.1, 7G, EG and much more).
- One tool for through and blind holes as well as right- and left-hand threads
- Thread depth possible up to the base of the hole (0.5xP).
- No axial cross-cutting
- Saving tool locations (type TMC, type DTMC).
- Problem-free chips because short milling chips are produced.
- Reduced tooling costs with the same pitch and large threads (type TMU)
- Short cycle times thanks to high cutting speed and feed rate.
- High process reliability even in the event of tool breakage as the thread milling cutter can be completely removed from the workpiece and the machine.
- High economic efficiency thanks to Guhring's re-grind and re-coating service.



The Guhring thread milling cutter types

TM SP – thread milling cutter w/o countersink step



- Simple and cost-efficient tool for the milling of internal threads
- 2-3 thread sizes with the same pitch can be produced over the specified nominal dimension
- Application in materials ≤ 1000 N/mm²
- Available with or without internal cooling

Thread types: M, MF, UNC, UNF, G, NPT, NPTF

TMCP SP – Thread milling cutter with 45° countersinking step



- Countersinking and thread milling with only one tool
- Very smooth running and low lateral forces
- Designed for the application of difficult-to-machine materials also available w/o countersinking step
- 2-3 thread sizes with the same pitch can be produced over the specified nominal dimension
- Only available with internal cooling

Thread types: M, MF,UNC, UNF,G, NPT, NPTF

TMU SP – universal milling cutter with collar recess



- Universal application possibilities
- For various thread sizes with the same pitch, i.e. thread M30x1.5 with milling cutter Ø 12xM1.5, Ø 16xM1.5 or Ø 20xM1.5
- Only available with internal cooling

Thread types: M, MF, G, UN, NPT, NPTF and external thread M, MF, G

DTMC SP – drill/thread milling cutter with 2 cutting edges and 45° chamfer



- Drilling, countersinking and thread milling with only one tool
- Resulting in reduced machining times and tool costs as well as reduced space requirements
- Application only in aluminium, cast materials, brass and plastics
- Available with or without internal cooling

Thread types: M, MF, UNC, UNF

MTM 3 SP – micro-thread milling cutter (3-tooth type)



- Thread size and pitch are predetermined
- Excellent characteristics with high-tensile materials such as titanium, stainless steel etc.
- Suitable for the machining of hardened steel 45HRC-65HRC
- Threads up to 3xD
- Available with or without internal cooling

Thread types: M, MF, G, UNC, UNF, MJ, UNJC, UNJF

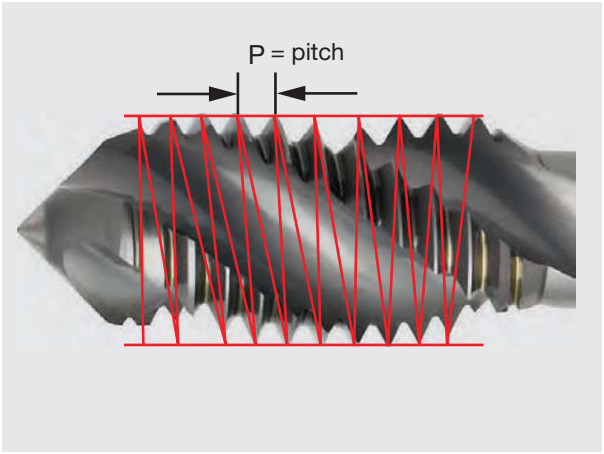
MTM 1 SP – micro-thread milling cutter (1-tooth type)



- Universal production of nominal thread diameters up to a maximum pitch
- Only available with internal cooling

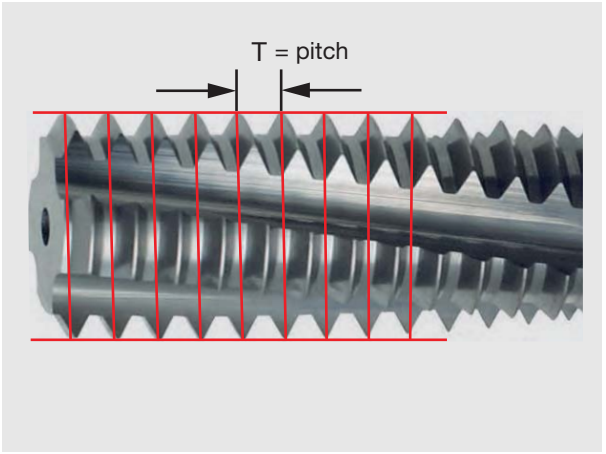
Thread types: M, MF

Taps/fluteless taps



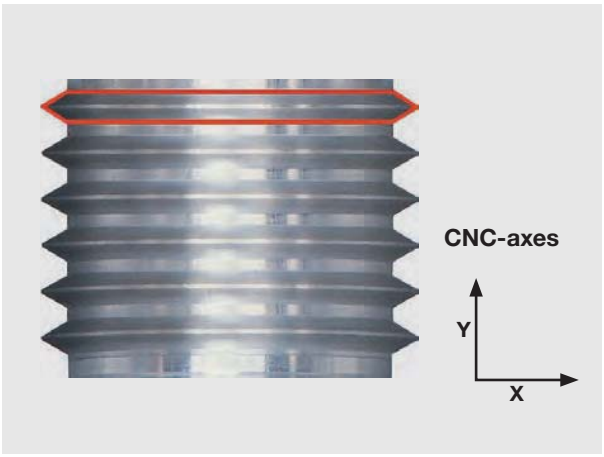
The red lines show the pitch angle of the thread that is ground into the tool. This means the pitch is cut into the workpiece by the tool.

Thread milling cutters

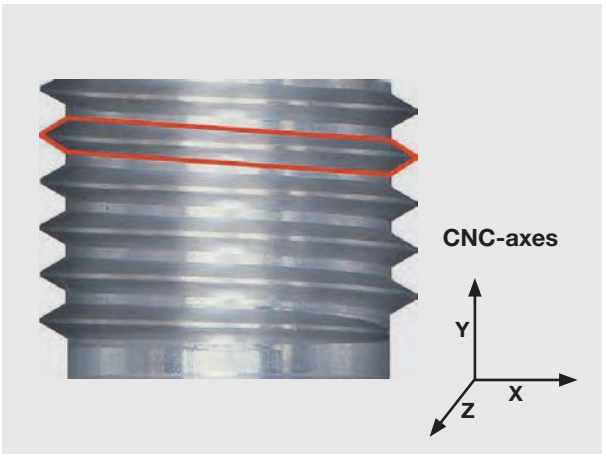


The red lines show that the tool does not possess a pitch angle. The pitch is produced by the Z-axis of a CNC machine.

Creation of the thread with thread milling



Thread profile without axial feed (Z-axis) of the machine. A groove profile is created without pitch. A functioning thread is not created

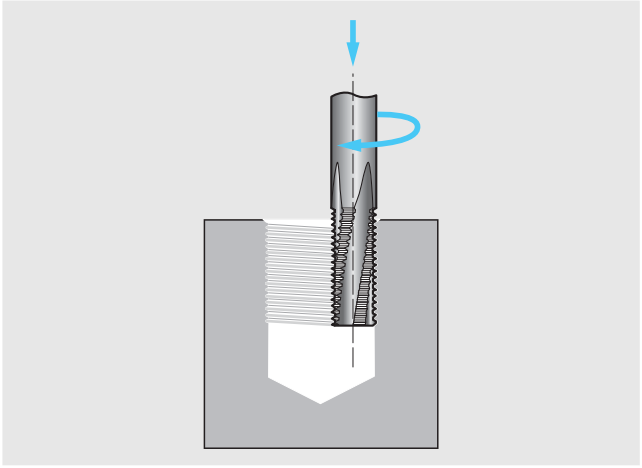


Through the additional programming of the Z-axis the necessary pitch is produced.

Note:
Due to diagonal milling in the pitch angle **(Z-axis)** the thread profile of the tool is **transferred onto the component distorted.**
The more the milling cutter diameter (80% of nom. Ø) approaches the nominal thread diameter and the higher the thread pitch the more pronounced the profile distortion is.

Reverse rotation milling

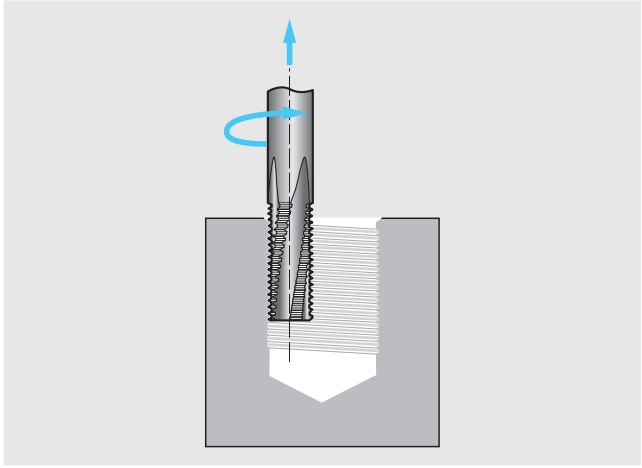
clockwise, with G02



Reverse rotation milling is preferentially applied for the machining of harder materials or to remedy taper threads.

Synchronous milling

anticlockwise, with G03

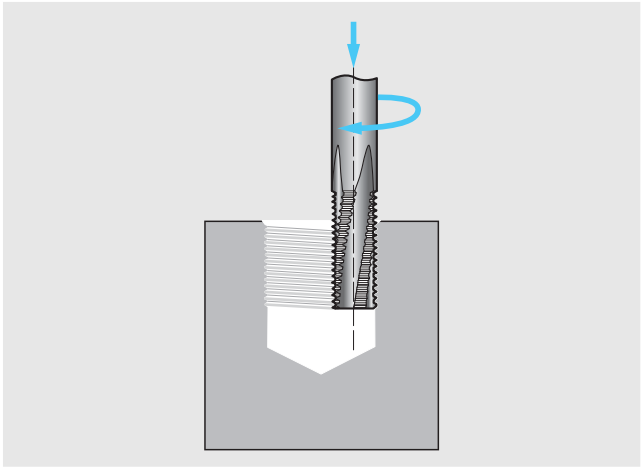


Synchronous milling is applied with thread depths smaller than 1.5xD.
Advantage: A better surface finish is achieved.

Thread production with one tool

Right-hand thread

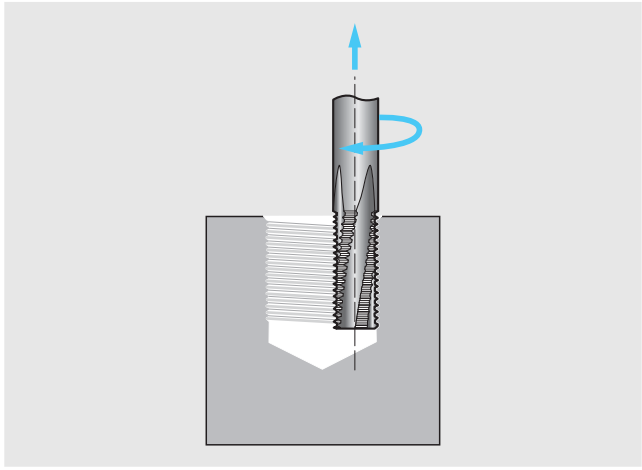
Reverse rotation milling



Tool rotates clockwise from top to bottom

Left-hand thread

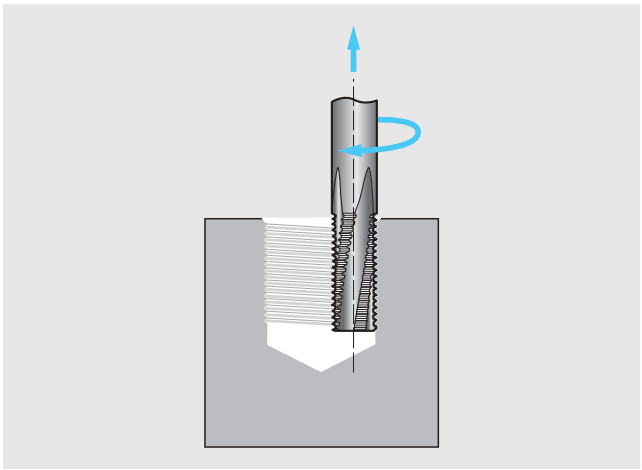
Reverse rotation milling



Tool rotates clockwise from bottom to top

Right-hand thread

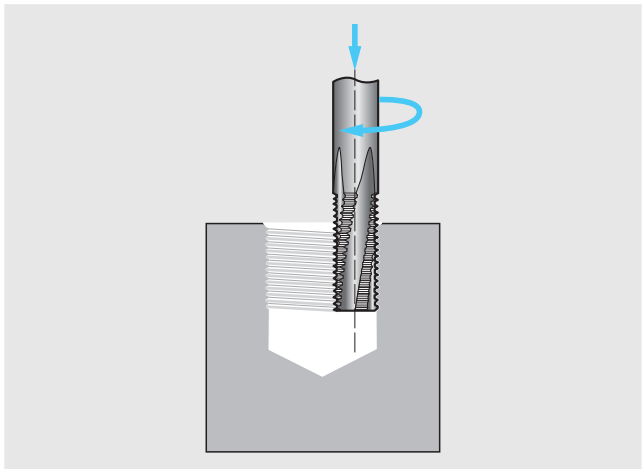
Synchronous milling



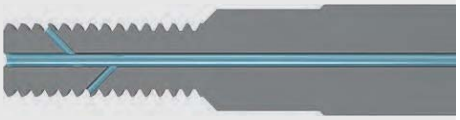
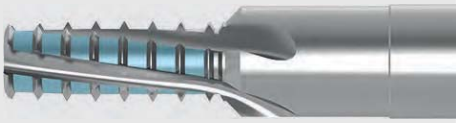
Tool rotates clockwise from bottom to top

Left-hand thread

Synchronous milling



Tool rotates clockwise from top to bottom

Illustration	Modification	Effect
	Cooling slots on shank	Targeted cooling, without weakening the tool cross-section in the cutting edge area
	Radial coolant exits	Targeted cooling with through hole threads
	Threads removed	Reduced cutting forces but longer machining time because two cycles are required
	De-burring cutting edge	Removing the incomplete threads at the thread run-in without additional operating step.
	First thread profile lengthened at the face	Chamfering a tapping size hole
	Grinding collar	Enables axial distribution of cuts – useful for deep threads

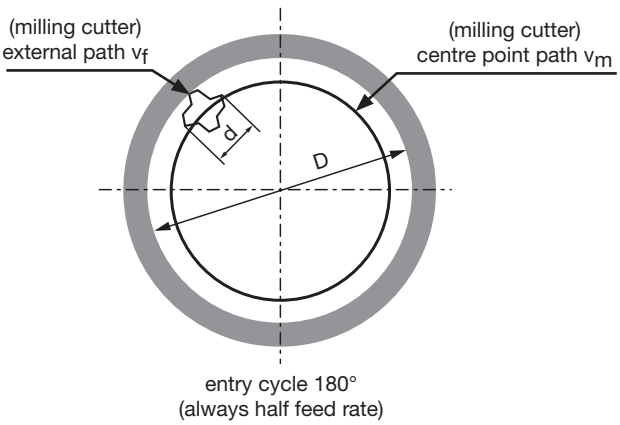
Program specifications

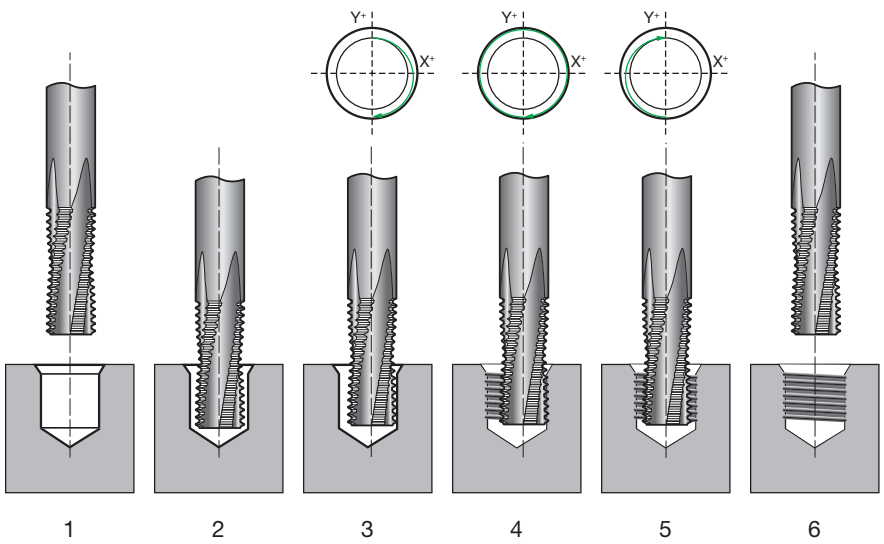
Thread milling functions

G00	Rapid movement	**G90**	Absolute dimension
G01	Feed	**G91**	Incremental dimension
G02	Circular interpolation (clockwise)	**M03**	Spindle on (clockwise rotation)
G03	Circular interpolation (anti-clockwise)	**M05**	Spindle stop
G17	Layer selection x-y axis	**M08**	Coolant on
G18	Layer selection z-x axis	**X**	Axis
G19	Layer selection y-z axis	**Y**	Axis
G40	Cancel tool correction	**Z**	Axis
G41	Tool path correction (left of contour)	**I**	Thread pitch parallel to X-axis
G42	Tool path correction (right of contour)	**J**	Thread pitch parallel to Y-axis
G43	Tool length compensation (call-up)	**S**	Spindle speed
G49	Tool length compensation (deselect)	**F**	Feed
G54	Work offset		

CNC internal thread milling

1. Moving to start position
2. Moving to thread depth in bore
3. 180° descending loop to contour
4. 360° full circular movement of thread milling cutter
5. 180° exit loop to centre of bore
6. Rapid movement from bore to start position





Formula of calculation

$$v_c = \frac{d \cdot \pi \cdot n}{1000}$$

$$n = \frac{v_c \cdot 1000}{d \cdot \pi}$$

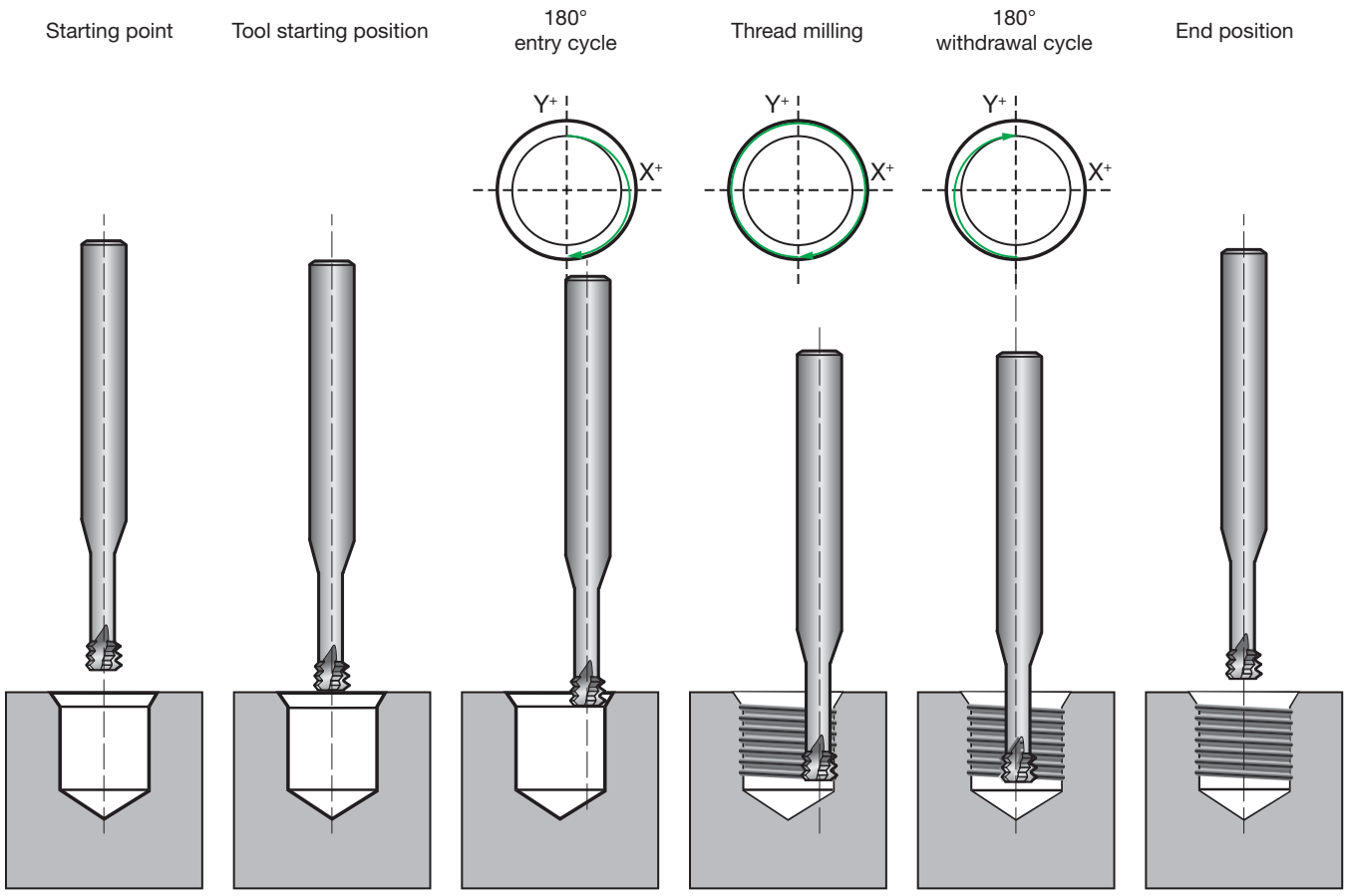
$$v_f = n \cdot z \cdot f_z$$

$$v_m = \frac{v_f \cdot (D - d)}{D}$$

$$v_b = n \cdot f_b$$

v_c = cutting speed
v_f = contour feed
v_m = centre point path feed
n = revolutions
z = number of teeth
f_z = feed per tooth
f_b = feed per drill per revolution*
v_b = drill feed rate*
D = Ø nom. of thread [mm]
d = milling cutter nom. Ø [mm]
* for drill/thread milling

Programming process for micro-thread milling (right-hand thread in reverse rotation)



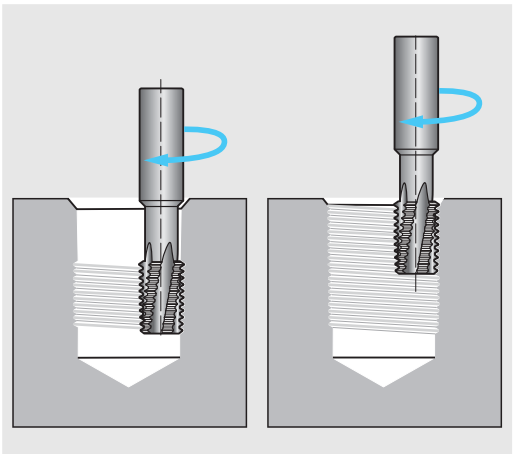
Possibilities to reduce radial forces

To reduce radial forces cut distribution can be undertaken:

Advantage:
- for larger thread depths
- counteracts taper threads
- for unstable clamping conditions

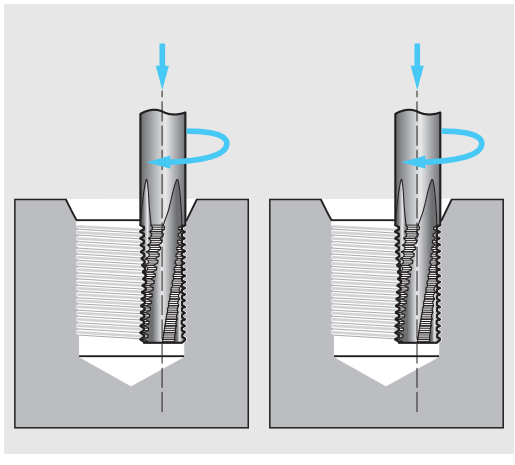
Disadvantage:
- increased tool wear
- longer production time

Axial distribution of cut

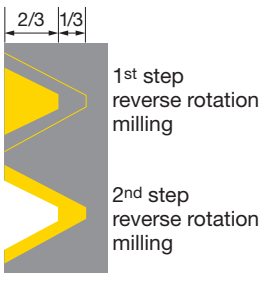


1st step 2nd step

Radial distribution of cut



1st step 2nd step



Selecting the correct clamping chuck

Correct tool clamping also plays a essential role with thread milling. Thread milling cutters should as a rule be clamped as short as possible. A compact and mechanical clamping force is preferable. The error in concentricity should not exceed 0.02 millimetres.

Power chucks



max. permissible error in concentricity: 0.003 mm

A power chuck excels thanks to extremely accurate concentricity. The high clamping forces and optimal smooth running are a perfect prerequisite for the production of threads in all materials including a high pitch.

Side lock holders



max. permissible error in concentricity: 0.002 mm

A side lock holder for HB and HE shanks is a robust, cost-efficient clamping chuck with a maximum clamping force. The clamping surface prevents the tool twisting or being pulled out during machining. Therefore, side lock holders are suitable for the production in all materials including a high pitch.

Shrink fit chucks



max. permissible error in concentricity: 0.005 mm

A shrink fit chuck creates a rigid connection with the shrink fitted tool. Incorrect shrink fitting or older shrink fit chucks can result in the pulling out of the tool. Tool breakage and possible loss of the component would be the consequence. Therefore, the shrink fit chuck is only suitable for a thread pitch < P=1.5 mm.

Hydraulic chucks



max. permissible error in concentricity: 0.005 mm

A hydraulic chuck, similar to the shrink fit chuck, has only limited suitability for thread milling. Especially with high radial forces this clamping chuck reaches its limits. Therefore, the hydraulic chuck is recommended for softer materials such as aluminium and a thread pitch < P=1.5 mm.

Collet holders



max. permissible error in concentricity: 0.01 mm

Collet chucks are very well suited for micro-thread milling because only axial stresses are created. The low clamping forces omly permit the milling of softer materials. Consequently, collet holders are not suitable for conventional thread milling.

Practical application of thread milling cutters

1.) Tool clamping:
good concentricity is important, therefore clamping as short and rigid as possible

2.) Enter tool data in machine memory
1.) Tool length from the front face, take drill/thread milling cutters (DTMC) rom point.
2.) Measure tool radius with tool pre-setting equipment. General rule: measured radius - 0.022 x pitch provides the input value in machine memory.

3.) Input of CNC program in control
(preferably integrated as sub-program at corresponding positions)
a.) Call-up of a self-controlling cycle (procedures should be known)
b.) Integration of data file from our threadmill-software (DIN or Haidenhain).

4.) Trial run over workpiece
a) Tool length dimension in memory extending by an approximate value dependent on contact length (i.e. 30 mm) or offset zero point.
b) Run program in single set, visual check of travel path.
c) Allow program to run in automatic mode.

Attention:
With controls where it is not definitely clear what milling path is assigned it it must be clarified if the feed is positioned on the external path vf or at the centre path vm. As a rule we specify the milling centre point path vm.

5.) Application in workpiece
Re-set the tool extension or the zero point. Then allow the program to run in the workpiece the feed regulation must be 100% selected. Should the thread not be true to gauge, the tool radius requires correction in the tool memory:
Example:
- thread too tight: Radius correction - input
- thread too large: Radius correction + input



TM SP – Thread milling cutters without chamfer



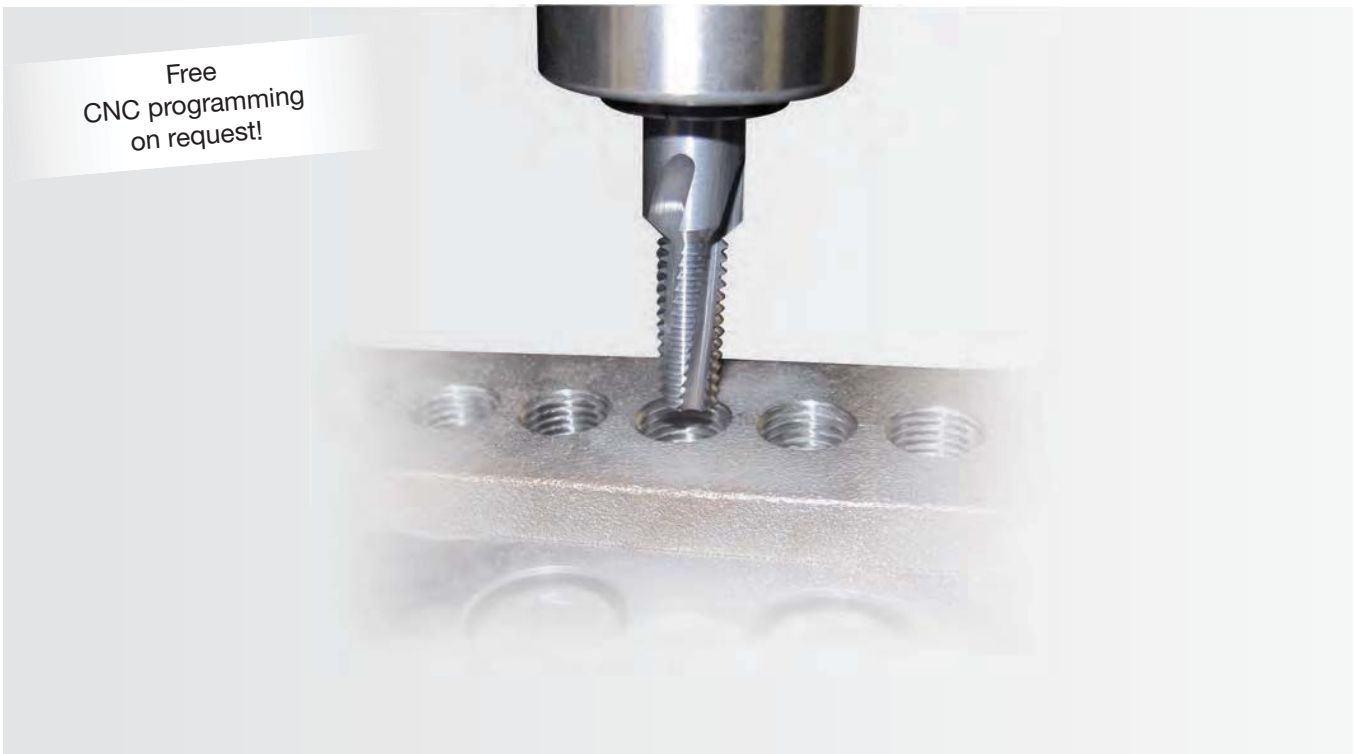


Processing example type TM			
Guhring no.:	3737 TiCN	**Cutting speed [v_c]:**	80 m/min
Thread size:	M10x(1)	**Feed per tooth:**	0.05 mm
Thread depth:	20 mm / blind hole	**Processing sequence:**	reverse rotation milling
Material:	St- 37	**Processing time:**	6.9 sec.

CNC program	
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S3203 M3 M8	position over workpiece
N40 Z-18.70	position for thread depth
N50 G91	incremental
N60 G42 G01 X0 Y3.975 F50	radius compensation
N70 G02 X0 Y-9.005 I0 J-4.503 Z-0.150	entry cycle 180°
N80 G02 X0 Y0 I0 J5.030 Z-1.000 F101	thread pitch 360°
N90 G02 X0 Y9.005 I0 J4.503 Z-0.150	withdrawal cycle 180°
N100 G40 G01 X0 Y-3.975	radius compensation off
N110 G90	switch to absolute
N120 G00 Z2 M9	rapid movement to start position
N130 M30	

TMC SP – Thread milling cutters with 45° chamfer





Processing example type TMC			
Guhring no.:	3528 TiCN	**Cutting speed [v_c]:**	100 m/min
Thread size:	M12x(1.5)	**Feed per tooth:**	0.075 mm
Thread depth:	18 mm / blind hole	**Processing sequence:**	reverse rotation milling
Material:	42CrMo4	**Processing time:**	4.15 sec.

CNC program	
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S1600 M3 M8	position over workpiece
N40 Z-26.20	position for 45° countersinking
N50 G01 Z-27.57 F85	chamfering 45°
N60 G00 Z-16.05 S3199	position for thread depth
N70 G91	incremental
N80 G42 G01 X0 Y4.975 F85	radius compensation
N90 G02 X0 Y-11.015 I0 J-5.508 Z-0.225	entry cycle 180°
N100 G02 X0 Y0 I0 J6.040 Z-1.5 F169	thread pitch 360°
N110 G02 X0 Y11.015 I0 J5.508 Z-0.225	withdrawal cycle 180°
N120 G40 G01 X0 Y-4.975	radius compensation off
N130 G90	switch to absolute
N140 G00 Z2 M9	rapid movement to start position
N150 M30	

TMU SP – Universal thread milling cutters



Free
CNC programming
on request!



Processing example type TMU			
Guhring no.:	3541 Ø 12xM1 TiCN	**Cutting speed [v_c]:**	60 m/min
Thread size:	M28x1	**Feed per tooth:**	0.05 mm
Thread depth:	12 mm / blind hole	**Processing sequence:**	reverse rotation milling
Material:	VA [1.4301]	**Processing time:**	28.96 sec.

CNC program	
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S1598 M3 M8	position over workpiece
N40 Z-10.70	position for thread depth
N50 G91	incremental
N60 G42 G01 X0 Y5.975 F92	radius compensation
N70 G02 X0 Y-20.015 I0 J-10.008 Z-0.150	entry cycle 180°
N80 G02 X0 Y0 I0 J14.040 Z-1.000 F184	thread pitch 360°
N90 G02 X0 Y20.015 I0 J10.008 Z-0.150	withdrawal cycle 180°
N100 G40 G01 X0 Y-5.975	radius compensation off
N110 G90	switch to absolute
N120 G00 Z2 M9	rapid movement to start position
N130 M30	

DTMC SP – Drill thread milling cutters





Processing example type DTMC			
Guhring no.:	3779 bright	**Cutting speed [v_c]:**	230 m/min
Thread size:	M8x(1,25)	**Drill feed:**	0.1 mm / rev.
Thread depth:	15 mm / blind hole	**Feed per tooth:**	0.05 mm
Material:	AlSi 10%	**Processing sequence:**	reverse rotation milling
		Processing time:	3.44 sec.

CNC program	
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S11529 M3 M8	position over workpiece
N40 G01 Z-1 F577	boring (improved centering)
N50 G01 Z-19.86 F1153	drilling to tapping size hole depth with 45° countersink
N60 G00 Z2 S11529	rapid movement from hole to flush out chips
N70 Z-13.38	position for thread depth
N80 G91	incremental
N90 G42 G01 X0 Y3.175 F122	radius compensation
N100 G02 X0 Y-7.205 I0 J-3.603 Z-0.188	entry cycle 180°
N110 G02 X0 Y0 I0 J4.030 Z-1.250 F245	thread pitch 360°
N120 G02 X0 Y7.205 I0 J3.603 Z-0.188	withdrawal cycle 180°
N130 G40 G01 X0 Y-3.175	radius compensation off
N140 G90	switch to absolute
N150 G00 Z2 M9	rapid movement to start position
N160 M30	

TMU SP – Universal thread milling cutters for external threads



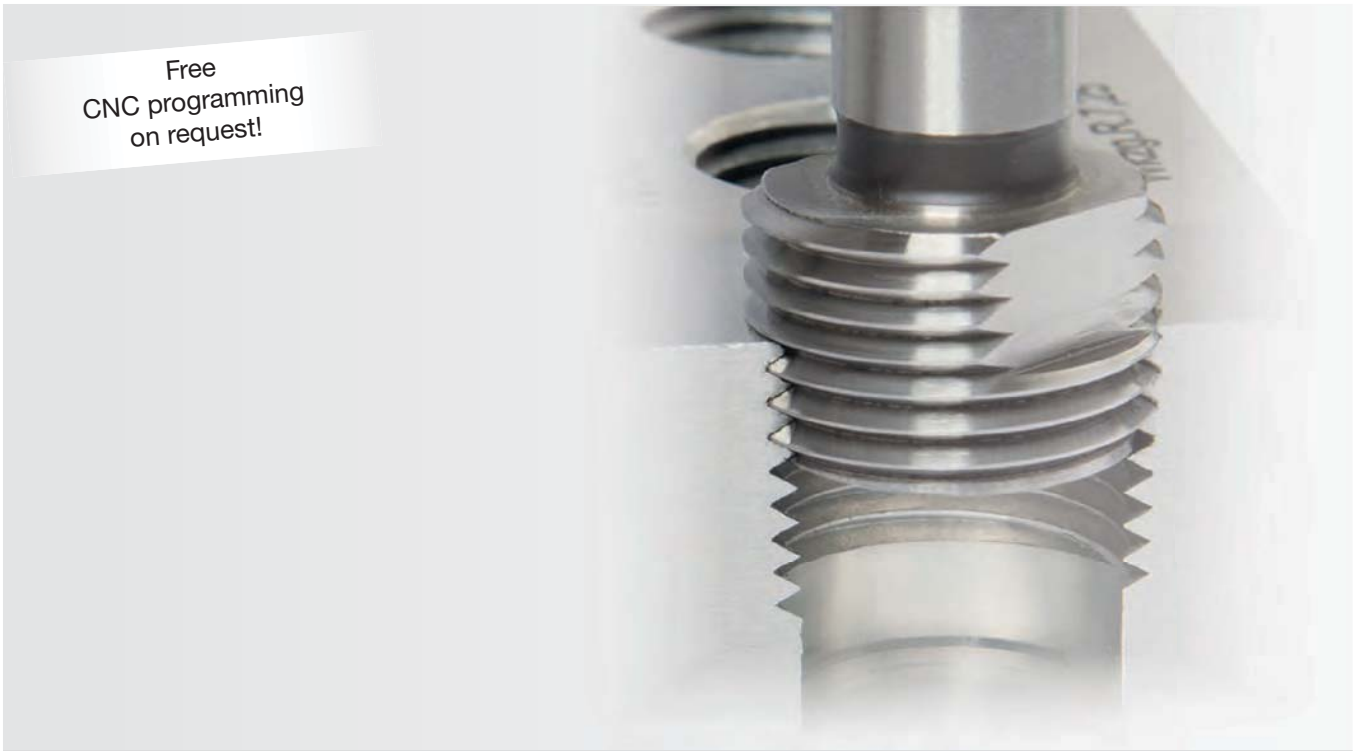
Free
CNC programming
on request!



Programming example M14x1.5 – 6g (external thread)		
Tool type:	TMU D12x20xM1.5-A TiCN Z=4 (tool-Ø 11.95 mm)	
	(alternatively TMU D16x25xM1.5 A TiCN Z=5 can be applied)	
Material:	38MnSiV5	
Parameter:	v_c = 130 m/min, f_z = 0.06 (reverse rotation milling) v_f = 831 mm/min, v_m = 1548 mm/min	
N10 M6 T1		
N20 G90 G54 G00 X0 Y0		
N30 Z2 S3463 M3 M8		travel centrally over bolt
N40 G91		incremental
N50 X7.033 Y11.99		starting position lateral to bolt
N60 G01 Z-14.5		travel to starting depth
N70 G42 G01 X0 Y-5.975		radius compensation
N80 G01 X-7.033 Y0.000 F774		linear approach path
N90 G03 X0.000 Y0.000 Z1.5 I0 J-6.015 F1548		thread pitch 360°
N100 G01 X-7.033 Y0.000		linear exit path
N110 G40 G01 X0.000 Y5.975		radius compensation off
N120 G90		switch to absolute
N130 G80 G00 Z2 M9		end position over bolt
N140 M30		

Type TM SP – für NPT threads (conical, taper 1:16)





Programming example NPT ¼-18: (conical, taper 1:16)	
Tool type:	TM D 9.95x19,05xNPT18 IK (4-fluted)
Tool Ø:	d1 = 9.95 mm (measured on the first tooth)
Tool length:	Measured at the face
Tapping size Ø:	Ø 11.10 mm cylindrical (conical pre-machining preferred D1 = 11.36 mm / d1 = 11.10 mm)
Material:	16 Mn Cr 5
Parameter:	v_c = 70 m/min, f_z = 0.05 (reverse rotation milling) v_f = 447 mm/min, v_m = 102 mm/min
N10 M6 T1	
N20 G90 G54 G00 X0.000 Y0.000	
N30 Z2.000 S2239 M3 D1	position over workpiece
N40 G00 Z-10.016	drive tool into bore
N50 G91	incremental
N60 G42 G01 X0.000 Y4.975 F1000	radius compensation
N70 G02 X0.000 Y-11.432 I0.000 J-5.716 Z-0.212 F51	entry cycle 180°
N80 G02 X-6.457 Y6.457 I0.000 J6.457 Z-0.353 F102	¼ thread, without correction
N90 G02 X6.445 Y6.445 I6.445 J0.000 Z-0.353	¼ thread, with correction
N100 G02 X6.434 Y-6.434 I0.000 J-6.434 Z-0.353	¼ thread, with correction
N110 G02 X-6.423 Y-6.423 I-6.423 J0.000 Z-0.353	¼ thread, with correction
N120 G02 X0.000 Y11.387 I0.000 J5.694 Z-0.212	withdrawal cycle 180°
N130 G40 G01 X0.000 Y-4.975 F1000	radius compensation off
N140 G90	switch to absolute
N150 G53 G00 Z2.000	rapid movement to start position
N160 M30	

MTM 3 SP Micro-thread milling cutters





Free
CNC programming
on request!



Micro-thread milling cutters

Solid carbide micro-thread milling cutters have been specially developed for the production of threads in small holes:

- excellent characteristics in higher-strength materials (i.e. titanium alloys, stainless steels, …..)
- blind holes and through holes up to 3xD
- minimum cutting force
- very good thread quality
- short machining times
- also suitable for softer materials (e.g. aluminium or plastics)

Programming example: M3x(0.5) MTM 3 SP	
Material:	TiAl6V4
Thread:	M3, depth 7.0 mm / blind hole
Tool:	MTM 3 SP M3x(0.5) tool Ø 2.4 mm Z=3
Parameter:	v_c = 40 m/min, f_z = 0.025 (reverse rotation milling) v_f = 398 mm/min, v_m = 84 mm/min
N10 M6 T1	
N20 G90 G54 G00 X0 Y0	
N30 Z2 S5305 M3 M8	
N40 Z0.1	
N50 G91	
N60 G42 G01 X0 Y1.200 F42	
N70 G02 X0 Y-2.720 I0 J-1.360 Z-0.075	
N80 G02 X0 Y0 I0 J1.520 Z-0.500 F84	
Number of repeats of set N80 =15	
N90 G02 X0 Y2.720 I0 J1.360 Z-0.075	
N100 G40 G01 X0 Y-1.200	
N110 G90	
N120 G00 Z2 M9	
N130 M30	

Application recommendations thread milling cutters

Type	TM	TMC	TMU
			

ISO	Material group	Cutting speed v_c (m/min)	Feed mm / per tooth fz for Ø (**up-cut milling**) Milling part diameter															
			Ø2 mm	Ø3 mm	Ø4 mm	Ø5 mm	Ø6 mm	Ø7 mm	Ø8 mm	Ø9 mm	Ø10 mm	Ø12 mm	Ø14 mm	Ø16 mm	Ø18 mm	Ø20 mm			
P	Common structural steels Free-cutting steels Unalloyed case hardened steels Unalloyed heat-treatable steels	110	0.02	0.02	0.025	0.03	0.035	0.045	0.05	0.055	0.06	0.06	0.065	0.065	0.07	0.08	++	++	++
P	Alloyed case hardened steels Alloyed heat-treatable steels Alloyed tool steels	90	0.015	0.015	0.02	0.025	0.03	0.035	0.04	0.045	0.05	0.05	0.05	0.055	0.06	0.07	+	++	++
M	Stainless and acid-resit. steel Steels, sulfured austenitic martensitic	60	0.01	0.01	0.015	0.02	0.025	0.03	0.03	0.035	0.04	0.045	0.05	0.05	0.055	0.06	+	++	++
K	Grey cast iron, cast iron Spher. graph. iron mall. cast iron	120	0.02	0.02	0.025	0.03	0.035	0.045	0.05	0.055	0.06	0.06	0.065	0.07	0.08	0.1	++	++	++
N	Non-ferrous metals: Aluminium and other non-ferrous met., copper alloys	250	0.03	0.035	0.04	0.045	0.05	0.055	0.06	0.065	0.07	0.08	0.085	0.09	0.1	0.12	++	++	++
N	Plastics	350	0.03	0.04	0.045	0.05	0.055	0.055	0.06	0.07	0.075	0.085	0.09	0.1	0.12	0.15	++	++	++
S	Special alloys and Titanium	35	0.01	0.01	0.015	0.02	0.025	0.03	0.03	0.035	0.04	0.045	0.05	0.05	0.055	0.06	+	++	++
H	Hardened steel [max. 55 HRC]	25	-	0.005	0.005	0.01	0.012	0.014	0.018	0.02	0.02	0.022	0.025	0.03	0.035	0.04	+	++	+

Note: In hardened steels up to max. 55HRC diameter must be programmed in 3 passes!

Application recommendations drill thread milling cutters 2xD, 2,5xD

Type	DTMC
	

ISO	Material group	Cutting speed v_c (m/min)	Feed mm / per tooth fz for Ø (**up-cut milling**) Milling part diameter														
			M3		M4		M5		M6		M8		M10		M12		
			fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	fb mm/U	fz mm	
K	Grey cast iron, cast iron Spher. graph. iron mall. cast iron	100	0.05	0.01	0.06	0.02	0.07	0.025	0.08	0.035	0.1	0.04	0.12	0.055	0.14	0.065	+
N	Non-ferrous metals: Aluminium and other non-ferrous met., copper alloys	230	0.06	0.015	0.07	0.025	0.08	0.03	0.1	0.04	0.12	0.05	0.15	0.07	0.18	0.08	++
N	Plastics	300	0.07	0.02	0.08	0.03	0.09	0.04	0.12	0.05	0.13	0.06	0.18	0.09	0.2	0.12	++

Application recommendations micro-thread milling cutters

Type	MTM 3	MTM 1	MTMH 3
			

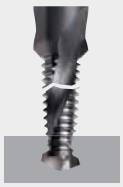
ISO	Material group	Cutting speed v_c (m/min)	Feed mm / per tooth fz for Ø (**up-cut milling**) Milling part diameter															
			Ø1 mm	Ø1.5 mm	Ø2 mm	Ø3 mm	Ø4 mm	Ø5 mm	Ø6 mm	Ø7 mm	Ø8 mm	Ø9 mm	Ø10 mm	Ø12 mm	Ø14 mm			
P	Common structural steels Free-cutting steels Unalloyed case hardened steels Unalloyed heat-treatable steels	70 - 120	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.12	++	++	-
P	Alloyed case hardened steels Alloyed heat-treatable steels Alloyed tool steels	60-90	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	++	++	-
M	Stainless and acid-resit. steel Steels, sulfured austenitic	40-80	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	++	++	-
M	martensitic	40-80	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.07	0.07	0.08	0.09	++	++	-
K	Grey cast iron, cast iron Spher. graph. iron mall. cast iron	60-80	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.12	++	++	-
N	Non-ferrous metals: Aluminium and other non-ferrous met., copper alloys	80 - 150	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.1	0.11	0.12	0.14	++	++	-
N	Plastics	60 - 200	0.05	0.05	0.06	0.07	0.07	0.08	0.09	0.09	0.1	0.11	0.12	0.13	0.15	++	++	-
S	Special alloys and Titanium	20-40	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.07	++	++	+
H	Hardened steel (max. 65 HRC)	40-50	0.01	0.02	0.02	0.03	0.03	0.035	0.035	0.04	0.045	0.045	0.05	0.055	0.06	-	-	++

Please note:
The cutting values specified in the respective columns are guide values, they have to be adapted according to application conditions (material, lubrication, tool clamping, machine etc.)
Depending on the machining task the optimal cutting values can differ from those in the table by up to +- 30%!

++ optimally suited + suited

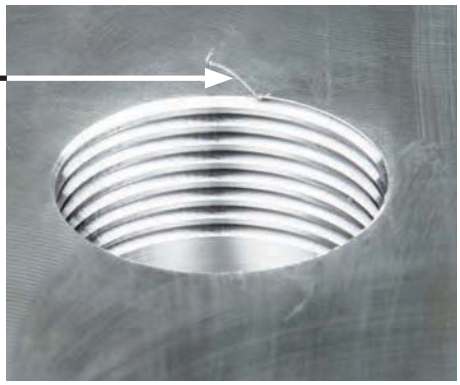
GuhroThreadmill
(CNC-programming made easy) Guhring's Threadmill software considerably simplifies CNC programming. With the assistance of a clear input mask, the user enters all the necessary data such as, for example, type of thread milling cutter, thread type,diameter, machine parameters etc.and immediately obtains the appropriate CNC program based on the data.
The sotware is free of cost on request, for DIN or Heidenhain control.

Application problems with new thread milling cutters

Problem	Possible causes	Solution
1. Thread produced is too large or too small 	Incorrect radius in CNC program and therefore milling of incorrect circle	Correct milling radius until thread is dimensionally correct
2. Thread not cylindrical 	Feed rate too high Synchronous milling path with long threads	Reduce feed rate Modify milling direction to opposite direction
3. Thread surface not according to requirements, chatter marks 	Cutting speed too high Insufficient tool or workpiece clamping	Adjust cutting speed Check tool and workpiece clamping
4. Tool breakage 	CNC program error Cutting rates too high	Check CNC program Adjust cutting rates
5. Tool life insufficient	Cutting rates too high Tool applied uncoated Insufficient lubrication and chip evacuation	Adjust cutting rates Apply coated tool Improve lubrication, coolant delivery via the spindle
6. Tool breakage with drill/milling cutter 	Chip problems when drilling Feed rates too high when drilling	Apply tool with IC Incorporate pecking cycles

Burr-free thread machining at the thread intake - no problem for Guhring‘s thread milling cutters

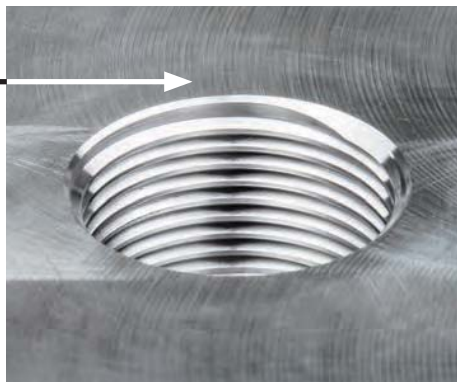
Problem:
Burr-formation at the thread entry



Solution:
Special tool
with relief-ground de-burring edge



Result:
When thread milling to the relevant plunging depth the incomplete, burr afflicted thread entry is milled



Our technical know-how is at your disposal to develop special solutions at any time.

Special thread milling cutters

You cannot find a suitable tool in our diverse thread milling cutter range?

Then we are more than happy to provide a tool optimally adapted to your machining task as a special solution.

Please contact us!



Re-grinding and re-coating

Guhring provides a life-long re-grind and re-coating service for thread milling cutters.
By professionally re-grinding and re-coating with original geometries and original coatings
Guhring re-produces the 100 per cent tool efficiency.



Re-grind service

In our service centres, tools are re-ground on the front rake face according to the degree of wear.
According to width of wear marks the re-grind service is possible two or three times (from milling part diameter d1 > 5.0 mm).

In order to re-define the milling portion diameter, the number of re-grinds is indicated by a notch on the end of the shank. This means every notch is assigned to a diameter and re-etched.



Re-coating

If a thread mill was enhanced with a coating, the tool is re-coated following the re-grind. This way, not only the wear- and corrosion-protection as well as the glide characteristics are re-produced but also the tool life prolonged.



CO

CONTENTS

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 800							WN	N	D	ISO2/6H	HSS-E	○	M3 - M12	1839	18	87
≤ 800							WN	N	B	ISO2/6H	HSS-E	○	M3 - M20	998	19	86
≤ 800							WN	N R40	C	ISO2/6H	HSS-E	○	M3 - M20	888	23	88
≤ 1000	○	○					WN	N R40	C	6HX	HSS-E	S	M3 - M20	4153	25	67
≤ 800							DIN 352	N	C	ISO2/6H	HSS-E	○	M2.2 - M16	995	22	53
≤ 800							DIN 352	N	B	ISO2/6H	HSS-E	○	M2 - M24	991	19	35
≤ 800							DIN 352	N R15	C	ISO2/6H	HSS-E	○	M3 - M20	992	22	58
≤ 800							DIN 352	N R40	C	ISO2/6H	HSS-E	○	M2 - M22	993	23	65
≤ 800							DIN 357	N		ISO2/6H	HSS-E	○	M3 - M30	851	18	85
		•					DIN 371	GGT	C	ISO2/6H	HSS-E	S	M3 - M10	1875	349	357
≤ 800							DIN 371	N	C	ISO2/6H	HSS-E	○	M1 - M10	806	18	50
≤ 800							DIN 371	N	C	ISO3/6G	HSS-E	○	M2 - M10	795	22	52
≤ 800							DIN 371	N	D	ISO2/6H	HSS-E	○	M2 - M10	801	18	49
≤ 800							DIN 371	N	B	ISO1/4H	HSS-E	○	M2 - M10	794	18	36
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	S	M2 - M10	313	20	33
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M2 - M10	802	19	55
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1 - M10	803	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1.2 - M10	838	19	54
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	○	M1.2 - M10	839	19	54
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	S	M1 - M10	912	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	●	M1 - M10	945	19	30
≤ 800							DIN 371	N	B	ISO2/6H	HSS-E	C	M1 - M10	1246	19	30
≤ 1000	•		•				DIN 371	N	B	ISO2/6H	HSS-E	○	M2 - M10	1870	229	236
≤ 1000	•						DIN 371	N	B	ISO2/6H	HSS-E	S	M2 - M10	2086	229	236

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	A	M2 - M10	2427	20	33
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E	A	M5 - M10	2517	20	34
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E		M2 - M10	2876	20	33
≤ 1000	●		○				DIN 371	N	B	ISO2/6H	HSS-E-PM	○	M2 - M10	877	229	237
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E-PM	S	M2 - M10	1285	20	39
≤ 1000	○						DIN 371	N	B	ISO2/6H	HSS-E-PM	C	M3 - M20	1287	20	40
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M2 - M10	796	19	56
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M2 - M10	797	19	56
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M1.4 - M10	837	19	37
≤ 800							DIN 371	N	B	ISO3/6G	HSS-E	○	M2 - M10	869	19	56
≤ 1000	○						DIN 371	N	B	ISO3/6G	HSS-E		M2 - M10	2990	20	41
≤ 1000	○						DIN 371	N	B	ISO3/6G	HSS-E	S	M2 - M10	2991	20	41
≤ 800							DIN 371	N-LH	B	ISO2/6H	HSS-E	○	M3 - M10	789	19	32
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	○	M2 - M10	809	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	S	M2 - M10	913	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E		M2 - M10	946	22	57
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	○	M5 - M10	1891	22	59
≤ 800							DIN 371	N R15	C	ISO2/6H	HSS-E	S	M5 - M10	2436	23	59
		○	≥ 7				DIN 371	N R15	C	6HX	VHM	○	M3 - M10	971	465	478
		●					DIN 371	N R15	C	6HX	VHM	A	M3 - M10	2510	-	364
≤ 800							DIN 371	N R15	C	ISO3/6G	HSS-E	○	M2 - M10	799	22	52
≤ 800							DIN 371	N L15	D	ISO2/6H	HSS-E	○	M3 - M10	808	19	89
≤ 1000	○	○	○				DIN 371	N R40	E	ISO2/6H	HSS-E	○	M3 - M10	2790	24	69
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	S	M5 - M10	174	25	70

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	783	23	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	810	23	60
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	836	24	66
≤ 1000	○	○	○				DIN 371	N R40	C	ISO2/6H	HSS-E		M2 - M10	889	24	66
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	S	M2 - M10	914	23	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	C	M2 - M10	1252	24	60
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E		M5 - M10	1893	24	63
≤ 1000	○	○					DIN 371	○ N R40	C	ISO2/6H	HSS-E	A	M2 - M10	2425	-	66
≤ 800							DIN 371	N R40	C	ISO2/6H	HSS-E	S	M5 - M10	2438	24	64
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	S	M2 - M10	2440	24	66
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E	A	M5 - M10	2514	-	68
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E-PM	S	M2 - M10	1288	25	72
≤ 1000	○	○					DIN 371	N R40	C	ISO2/6H	HSS-E-PM	C	M2 - M20	1290	25	73
≤ 800							DIN 371	N R40	C	ISO3/6G	HSS-E		M3 - M10	844	23	61
≤ 1000	○	○					DIN 371	N R40	C	ISO3/6G	HSS-E		M2 - M20	2994	24	73
≤ 1000	○	○					DIN 371	N R40	C	ISO3/6G	HSS-E	S	M2 - M20	2995	24	73
≤ 800							DIN 371	N L40 LH	C	ISO2/6H	HSS-E		M3 - M10	786	24	62
•	•	○	•	○			DIN 371	N R50	C	ISO2/6H	HSS-E-PM	S	M3 - M10	767	25	74
•	•	○	•	○			DIN 371	N R50	C	ISO2/6H	HSS-E-PM	C	M3 - M10	1152	25	74
≤ 1200		•	≥ 7				DIN 371	H	E	6HX	HSS-E-PM	C	M5 - M10	1091	23	78
		•	≥ 7				DIN 371	H	E	6HX	VHM		M3 - M10	1008	351	364
≤ 1200		•	≥ 7				DIN 371	H	C	6HX	HSS-E-PM	C	M5 - M10	302	23	78
		•	≥ 7				DIN 371	H	C	6HX	VHM		M3 - M10	969	351	362
		•	≥ 7				DIN 371	H	C	6HX	VHM		M3 - M10	1858	349	362

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
		•			45/55		DIN 371	H	C	6HX	VHM	A	M3 - M10	2311	349	364
		•					DIN 371	H	C	6HX	VHM	A	M5 - M10	2506	351	363
							DIN 371	H	D	6HX	HSS-E-PM	C	M3 - M16	1201	676	680
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E		M2 - M10	733	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E	○	M2 - M10	804	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E	C	M2 - M10	1914	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E	●	M2 - M10	2941	21	43
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E-PM	S	M3 - M10	57	21	47
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E-PM	○	M3 - M10	875	21	46
≤ 1200							DIN 371	H	B	ISO2/6H	HSS-E-PM	A	M3 - M10	1575	21	47
≤ 1200							DIN 371	H	B	ISO3/6G	HSS-E	○	M2 - M10	2465	21	45
≤ 1200							DIN 371	H	B	ISO3/6G	HSS-E	S	M2 - M10	2710	21	45
≤ 1200							DIN 371	H R15	C	ISO2/6H	HSS-E-PM	○	M3 - M10	872	23	76
≤ 1200							DIN 371	H R15	C	ISO2/6H	HSS-E-PM	A	M3 - M10	1577	23	76
≤ 1200							DIN 371	H R15	C	6HX	HSS-E-PM	C	M6 - M10	1188	23	77
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	S	M2 - M10	361	25	82
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	○	M2 - M10	811	25	81
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	●	M2 - M10	947	25	81
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	○	M5 - M10	1894	25	83
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	C	M2 - M10	1916	25	82
≤ 1200							DIN 371	H R40	C	ISO2/6H	HSS-E	●	M2 - M10	2850	25	81
≤ 1200							DIN 371	H R40	C	ISO3/6G	HSS-E	●	M2 - M10	2985	25	84
≤ 1200							DIN 371	H R40	C	ISO3/6G	HSS-E	S	M2 - M10	2986	25	84
			○				DIN 371	H AZ	C	ISO2/6H	HSS-E	●	M2 - M10	788	-	483

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 1200							DIN 371	H AZ	B	ISO2/6H	HSS-E	○	M2 - M10	791	21	44
≤ 1000	•						DIN 371	VA	B	ISO2/6H	HSS-E	●	M2 - M10	2869	229	236
	•						DIN 371	VA R15	C	ISO2/6H	HSS-E	●	M2 - M10	843	230	241
	•						DIN 371	VA R15	C	ISO2/6H	HSS-E	S	M2 - M10	2896	230	241
	•		•				DIN 371	VA R40	C	ISO2/6H	HSS-E	○	M3 - M10	814	231	243
	•		•				DIN 371	VA R40	C	ISO2/6H	HSS-E	○	M3 - M10	1892	231	243
	•						DIN 371	VA R40	C	ISO2/6H	HSS-E	●	M3 - M10	2862	231	243
	•						DIN 371	VA R40	C	ISO2/6H	HSS-E-PM	S	M3 - M10	59	231	246
	•		○				DIN 371	VA R40	C	ISO2/6H	HSS-E-PM	○	M3 - M10	909	231	246
•	•	○	•	○			DIN 371	VA R50	C	6HX	HSS-E-PM	S	M3 - M10	761	25	75
•	•	○	•	○			DIN 371	VA R50	C	6HX	HSS-E-PM	C	M3 - M10	1139	25	75
≤ 1000	•		○				DIN 371	VA AZ	B	ISO2/6H	HSS-E	○	M3 - M10	1871	229	240
			•				DIN 371	AI	B	ISO2/6H	HSS-E	○	M2 - M10	805	463	472
			•				DIN 371	AI R45	C	ISO2/6H	HSS-E	○	M1.6 - M10	812	464	474
		•					DIN 371	GG	C	6HX	HSS-E	A	M5 - M10	318	350	358
		•					DIN 371	GG	C	6HX	HSS-E	●	M3 - M10	807	349	356
		•					DIN 371	GG	C	6HX	HSS-E	S	M3 - M10	930	349	356
		•					DIN 371	GG	C	6HX	HSS-E	●	M5 - M10	1890	350	358
		•					DIN 371	GG	C	6HX	HSS-E	A	M3 - M10	1918	349	356
		○	≥ 7				DIN 371	Ms	E	ISO2/6H	HSS-E	○	M3 - M10	800	463	482
		○	≥ 7				DIN 371	Ms	E	ISO3/6G	HSS-E	○	M3 - M10	1084	463	482
≤ 1000							~DIN 371	N	B	6HX	VHM	C	M5 - M12	942	21	42
					≤ 62		~DIN 371	H	D	ISO2/6H	VHM	C	M3 - M16	2944	676	681
		•					DIN 376	GGT	C	ISO2/6H	HSS-E	S	M3 - M16	1876	349	357

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
≤ 800							DIN 376	N	C	ISO2/6H	HSS-E	○	M1.6 - M48	818	22	51
≤ 800							DIN 376	N	D	ISO2/6H	HSS-E	○	M2 - M30	813	18	49
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	S	M3 - M36	315	20	33
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M1.6 - M52	815	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M16	846	19	54
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M16	847	19	54
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	S	M1.6 - M52	915	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	●	M1.6 - M52	948	19	31
≤ 800							DIN 376	N	B	ISO2/6H	HSS-E	C	M1.6 - M52	1249	19	31
≤ 1000	●		●				DIN 376	N	B	ISO2/6H	HSS-E	○	M3 - M30	1872	229	236
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	A	M3 - M36	2428	20	33
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E	●	M3 - M36	2877	20	33
≤ 1000	●		○				DIN 376	N	B	ISO2/6H	HSS-E-PM	○	M12 - M20	879	229	237
≤ 1000	○						DIN 376	N	B	ISO2/6H	HSS-E-PM	S	M12 - M20	1286	20	39
≤ 1000	●						DIN 376	N	B	6HX	HSS-E	S	M3 - M30	2087	229	236
≤ 800							DIN 376	N	B	ISO3/6G	HSS-E	○	M2 - M20	845	19	37
≤ 800							DIN 376	N-LH	B	ISO2/6H	HSS-E	○	M12 - M20	790	19	32
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	○	M3 - M30	821	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	S	M3 - M30	916	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	●	M3 - M30	949	22	57
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	○	M12 - M20	1898	22	59
≤ 800							DIN 376	N R15	C	ISO2/6H	HSS-E	S	M12 - M20	2437	23	59
≤ 800							DIN 376	N L15	D	ISO2/6H	HSS-E	○	M3 - M16	820	19	89
≤ 1000	○	○	○				DIN 376	N R40	E	ISO2/6H	HSS-E	○	M4 - M16	2791	24	69

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	S	M5 - M30	196	25	70
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	●	M3 - M30	784	23	60
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	○	M3 - M30	822	23	60
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	●	M3 - M36	826	24	66
≤ 1000	○	○	○				DIN 376	N R40	C	ISO2/6H	HSS-E	○	M3 - M36	890	24	66
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	S	M3 - M30	917	23	60
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	C	M3 - M30	1254	24	60
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E	A	M3 - M36	2426	-	66
≤ 800							DIN 376	N R40	C	ISO2/6H	HSS-E	S	M12 - M20	2439	24	64
≤ 1000	○	○					DIN 376	N R40	C	ISO2/6H	HSS-E-PM	S	M12 - M20	1289	25	72
≤ 1000	○	○					DIN 376	N R40	C	6HX	HSS-E	S	M3 - M36	2441	24	66
≤ 800							DIN 376	N R40	C	ISO3/6G	HSS-E	○	M3 - M24	848	23	61
≤ 800							DIN 376	N L40 LH	C	ISO2/6H	HSS-E	○	M12 - M20	787	24	62
●	●	○	○	○			DIN 376	N R50	C	ISO2/6H	HSS-E-PM	S	M12 - M20	1098	25	74
●	●	○	●	○			DIN 376	N R50	C	ISO2/6H	HSS-E-PM	C	M12 - M20	1293	25	74
			○				DIN 376	N AZ	E	ISO2/6H	HSS-E	A	M5 - M12	2899	464	484
≤ 1200		●	≥ 7				DIN 376	H	E	6HX	HSS-E-PM	C	M10 - M20	4165	351	359
≤ 1200		●	≥ 7				DIN 376	H	C	6HX	HSS-E	C	M16 - M39	778	23	79
≤ 1200		●	≥ 7				DIN 376	H	C	6HX	HSS-E-PM	C	M10 - M20	297	23	78
		●	≥ 7				DIN 376	H	C	6HX	VHM	○	M12 - M20	1859	349	362
		●	≥ 7				DIN 376	H	C	6HX	VHM	○	M12 - M20	1883	351	362
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	734	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	○	M3 - M24	816	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	C	M3 - M24	1915	21	43

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E	●	M3 - M24	2942	21	43
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E-PM	S	M12 - M30	58	21	47
≤ 1200							DIN 376	H	B	ISO2/6H	HSS-E-PM	A	M12 - M30	1576	21	47
≤ 1200							DIN 376	H R15	C	ISO2/6H	HSS-E-PM	○	M12 - M20	935	23	76
≤ 1200							DIN 376	H R15	C	ISO2/6H	HSS-E-PM	A	M12 - M20	1578	23	76
≤ 1200							DIN 376	H R15	C	6HX	HSS-E-PM	C	M12 - M24	1194	23	77
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	S	M3 - M30	362	25	82
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	○	M3 - M30	823	25	81
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	●	M3 - M30	950	25	81
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	○	M12 - M20	1901	25	83
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	C	M3 - M30	1917	25	82
≤ 1200							DIN 376	H R40	C	ISO2/6H	HSS-E	◍	M3 - M30	2851	25	81
≤ 1200							DIN 376	H AZ	B	ISO2/6H	HSS-E	○	M12 - M16	849	21	44
≤ 1000	●						DIN 376	VA	B	ISO2/6H	HSS-E	◍	M3 - M30	2870	229	236
	●						DIN 376	VA R15	C	ISO2/6H	HSS-E	◍	M12 - M24	785	230	241
	●						DIN 376	VA R15	C	ISO2/6H	HSS-E	S	M12 - M24	2895	230	241
	●		●				DIN 376	VA R40	C	ISO2/6H	HSS-E	○	M12 - M30	825	231	243
	●		●				DIN 376	VA R40	C	ISO2/6H	HSS-E	○	M12 - M30	1899	231	243
	●						DIN 376	VA R40	C	ISO2/6H	HSS-E	◍	M12 - M30	2863	231	243
	●						DIN 376	VA R40	C	ISO2/6H	HSS-E-PM	S	M12 - M24	60	231	246
	●		●				DIN 376	VA R40	C	ISO2/6H	HSS-E-PM	○	M12 - M24	910	231	246
●	●	○	●	○			DIN 376	VA R50	C	6HX	HSS-E-PM	S	M12 - M20	763	25	75
●	●	○	●	○			DIN 376	VA R50	C	6HX	HSS-E-PM	C	M12 - M20	1142	25	75
≤ 1000	●		○				DIN 376	VA AZ	B	ISO2/6H	HSS-E	○	M12 - M16	792	229	240

Machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
			•				DIN 376	Al	B	ISO2/6H	HSS-E	○	M12 - M24	817	463	472
			•				DIN 376	Al R45	C	ISO2/6H	HSS-E	○	M3 - M24	824	464	474
		•					DIN 376	GG	C	6HX	HSS-E	A	M12 - M20	319	350	358
		•					DIN 376	GG	C	6HX	HSS-E	●	M3 - M30	819	349	356
		•					DIN 376	GG	C	6HX	HSS-E	S	M3 - M30	931	349	356
		•					DIN 376	GG	C	6HX	HSS-E	●	M12 - M20	1897	350	358
		•					DIN 376	GG	C	6HX	HSS-E	A	M3 - M30	1919	349	356
≤ 1200		•	≥ 7				~DIN 376	H	C	6HX	HSS-E	C	M16 - M39	779	23	80
≤ 1000	•						DIN 371/376	N	B	ISO2/6H	HSS-E-PM	S	M2 - M12	1002	229	238
•	•	○	○	○			DIN 371/376	N	B	6HX	HSS-E	S	M2 - M30	4218	21	38
≤ 1000	○	○					DIN 371/376	N R15	E	ISO2/6H	HSS-E	C	M3 - M20	4155	23	48
≤ 1000	○	○					DIN 371/376	N R15	C	ISO2/6H	HSS-E	C	M3 - M20	4154	23	48
•	•	○	○	○			DIN 371/376	VA R45	C	6HX	HSS-E	A	M2 - M30	393	25	71
				•			DIN 371/376	Ti R15	C	4HX	HSS-E-PM	C	MJ3 x 0.5 - M16	1061	597	605
				•			DIN 371/376	Ti R15	C	6HX	HSS-E-PM	C	M3 - M16	2909	597	604
				•			DIN 371/376	Ni R10	C	4HX	HSS-E-PM	A	MJ3 x 0.5 - M16	1065	597	605
				•			DIN 371/376	Ni R10	C	6HX	HSS-E-PM	A	M3 - M16	2920	597	604
				•			DIN 371/376	Ti Ni	B	4HX	HSS-E-PM	C	MJ3 x 0.5 - M16	1057	596	603
				•			DIN 371/376	Ti Ni	B	6HX	HSS-E-PM	C	M3 - M16	2901	596	602
				•			DIN 371/376	Ti Ni	B	6HX	HSS-E-PM	A	M3 - M16	2916	596	602

Machine taps for ISO metric fine threads

≤ 800							DIN 2180	N R40	C	ISO2/6H	HSS-E	○	M 6 X0.75 - M12 X1.5	1970	23	106
≤ 800							DIN 374	N	C	ISO2/6H	HSS-E	○	M 3 X0.35 - M63 X1.5	830	18	100
≤ 800							DIN 374	N	C	ISO3/6G	HSS-E	○	M 3 X0.35 - M63 X1.5	829	18	100

Machine taps for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	○	M 3 X0.35 - M40 X1.5	827	19	91
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	S	M 3 X0.35 - M40 X1.5	832	19	91
≤ 1000	○						DIN 374	N	B	ISO2/6H	HSS-E	A + M	M 5 X0.5 - M50 X1.5	2878	20	94
≤ 1000	○						DIN 374	N	B	ISO2/6H	HSS-E	●	M 5 X0.5 - M50 X1.5	2879	20	94
≤ 800							DIN 374	N	B	ISO2/6H	HSS-E	●	M 3 X0.35 - M40 X1.5	2888	19	91
≤ 1000	●						DIN 374	N	B	ISO2/6H	HSS-E-PM	S	M 6 X0.75 - M24 X2	1291	20	98
●	●	○	○	○			DIN 374	N	B	6HX	HSS-E	S	M 6 X0.75 - M24 X1.5	4219	21	90
≤ 1000							DIN 374	N	B	6HX	VHM	C	M14 X1.25 - M16 X1.5	944	21	96
≤ 800							DIN 374	N	B	ISO3/6G	HSS-E	○	M 6 X0.75 - M20 X1.5	316	19	93
≤ 1000	○						DIN 374	N	B	ISO3/6G	HSS-E	S	M 6 X0.75 - M20 X1.5	2993	20	93
≤ 1000	○	○					DIN 374	N R15	E	ISO2/6H	HSS-E	C	M 8 X1 - M16 X1.5	4157	23	103
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	○	M 4 X0.5 - M30 X2	833	22	102
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	○	M 5 X0.5 - M20 X1.5	1905	22	104
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	S	M 4 X0.5 - M30 X2	1971	22	102
≤ 800							DIN 374	N R15	C	ISO2/6H	HSS-E	●	M 4 X0.5 - M30 X2	2838	22	102
≤ 1000	○	○					DIN 374	N R15	C	ISO2/6H	HSS-E	C	M 8 X1 - M16 X1.5	4156	23	103
		○	≥ 7				DIN 374	N R15	C	6HX	VHM	○	M12 X1.5 - M20 X1.5	978	465	493
			≥ 7				DIN 374	N L15	D	6HX	VHM	○	M12 X1.5 - M18 X1.5	976	463	495
≤ 1000	○	○	○				DIN 374	N R40	E	ISO2/6H	HSS-E	○	M 5 X0.5 - M30 X2	2792	24	107
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	○	M 3 X0.35 - M30 X2	834	23	105
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	S	M 3 X0.35 - M30 X2	852	23	105
≤ 1000	○	○	○				DIN 374	N R40	C	ISO2/6H	HSS-E	○	M 5 X0.5 - M30 X2	2424	24	107
≤ 800							DIN 374	N R40	C	ISO2/6H	HSS-E	●	M 3 X0.35 - M30 X2	2843	23	105
≤ 1000	○	○					DIN 374	N R40	C	ISO2/6H	HSS-E	●	M 5 X0.5 - M30 X2	2853	24	107

Machine taps for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 1000	○	○					DIN 374	N R40	C	ISO2/6H	HSS-E-PM	S	M 6 X0.75 - M24 X2	1292	25	109
≤ 1000	○	○					DIN 374	N R40	C	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1.5	1049	24	108
≤ 1000	○	○	○				DIN 374	N R40	C	ISO3/6G	HSS-E	○	M 8 X1 - M20 X1.5	2998	24	108
≤ 1000	○	○					DIN 374	N R40	C	ISO3/6G	HSS-E	●	M 8 X1 - M20 X1.5	2999	24	108
≤ 1000	○	○					DIN 374	N R40	C(K)	ISO2/6H	HSS-E	S	M 6 X0.75 - M24 X2	273	25	109
●	●	○	○	○			DIN 374	N R50	C	ISO2/6H	HSS-E-PM	S	M 8 X1 - M20 X1.5	1100	25	110
●	●	○	●	○			DIN 374	N R50	C	ISO2/6H	HSS-E-PM	C	M 8 X1 - M20 X1.5	1294	25	110
≤ 1200		●	≥ 7				DIN 374	H	E	6HX	HSS-E-PM	C	M 5 X0.5 - M16 X1.5	1007	23	113
		●	≥ 7				DIN 374	H	E	6HX	VHM	○	M10 X1 - M16 X1.5	1009	351	369
≤ 1200		●	≥ 7				DIN 374	H	C	6HX	HSS-E-PM	C	M 5 X0.5 - M16 X1.5	1090	23	113
		●	≥ 7				DIN 374	H	C	6HX	VHM	○	M12 X1.5 - M20 X1.5	974	351	368
		●	≥ 7				DIN 374	H	C	6HX	VHM	○	M12 X1.5 - M20 X1.5	1860	349	368
≤ 1200							DIN 374	H	B	ISO2/6H	HSS-E	○	M 3 X0.35 - M24 X1.5	828	21	97
≤ 1200							DIN 374	H	B	ISO2/6H	HSS-E	●	M 3 X0.35 - M24 X1.5	2943	21	97
≤ 1200							DIN 374	H	B	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1.5	2983	21	99
≤ 1200							DIN 374	H R15	C	ISO2/6H	HSS-E-PM	○	M 6 X0.75 - M24 X1.5	874	23	112
≤ 1200							DIN 374	H R15	C	6HX	HSS-E-PM	C	M 6 X0.75 - M24 X1.5	1200	23	112
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	○	M 6 X0.75 - M24 X1.5	835	25	114
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	●	M 6 X0.75 - M24 X1.5	2852	25	114
≤ 1200							DIN 374	H R40	C	ISO2/6H	HSS-E	●	M 6 X0.75 - M24 X1.5	2940	25	114
≤ 1200							DIN 374	H R40	C	ISO3/6G	HSS-E	●	M 8 X1 - M20 X1.5	2988	25	116
≤ 1200							DIN 374	H R40	C	ISO3/6G	HSS-E	S	M 8 X1 - M20 X1.5	2989	25	116
≤ 1000	●						DIN 374	VA	B	ISO2/6H	HSS-E	S	M 3 X0.35 - M24 X1.5	1001	229	257
≤ 1000	●		●				DIN 374	VA	B	ISO2/6H	HSS-E	○	M 5 X0.5 - M24 X2	1873	229	256

Machine taps for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
≤ 1000	•						DIN 374	VA	B	ISO2/6H	HSS-E		M 3 X0.35 - M24 X1.5	2871	229	257
≤ 1000	•						DIN 374	VA	B	ISO2/6H	HSS-E-PM	○	M 5 X0.5 - M24 X2	887	229	256
	•						DIN 374	VA R15	C	ISO2/6H	HSS-E		M 4 X0.5 - M24 X1.5	1874	230	249
	•						DIN 374	VA R15	C	ISO2/6H	HSS-E	S	M 4 X0.5 - M24 X1.5	2897	230	249
	•						DIN 374	VA R40	C	ISO2/6H	HSS-E		M 3 X0.35 - M24 X1.5	2864	231	251
	•		•				DIN 374	VA R40	C	ISO2/6H	HSS-E-PM	○	M 8 X1 - M20 X1.5	936	231	253
	•						DIN 374	VA R40	C	ISO2/6H	HSS-E-PM	S	M 8 X1 - M20 X1.5	1004	231	253
•	•	○	○	○			DIN 374	VA R45	C	6HX	HSS-E	A	M 6 X0.75 - M24 X1.5	394	25	115
•	•	○	•	○			DIN 374	VA R50	C	6HX	HSS-E-PM	S	M 8 X1 - M20 X1.5	764	25	111
•	•	○	•	○			DIN 374	VA R50	C	6HX	HSS-E-PM	C	M 8 X1 - M20 X1.5	1144	25	111
		•					DIN 374	GG	C	6HX	HSS-E	A	M 4 X0.5 - M30 X1.5	169	349	365
		•					DIN 374	GG	C	6HX	HSS-E	A	M 8 X1 - M24 X1.5	347	350	366
		•					DIN 374	GG	C	6HX	HSS-E	●	M 4 X0.5 - M30 X1.5	831	349	365
		•					DIN 374	GG	C	6HX	HSS-E	S	M 4 X0.5 - M30 X1.5	932	349	365
		•					DIN 374	GG	C	6HX	HSS-E	●	M 8 X1 - M24 X1.5	1904	350	366
		○	≥ 7				DIN 371	N R15	C	6HX	VHM	○	M 4 X0.5 - M10 X1	977	465	493
			≥ 7				DIN 371	N R15	C	6HX	VHM	M	M 5 - M10	2516	-	494
			≥ 7				DIN 371	N L15	D	6HX	VHM	○	M 4 X0.5 - M10 X1	975	463	495
		•	≥ 7				DIN 371	H	C	6HX	VHM	○	M 5 X0.5 - M10 X1	972	351	368
		•	≥ 7				DIN 371	H	C	6HX	VHM	○	M 5 X0.5 - M10 X1	1861	349	368
					45-55		DIN 371	H	D	6HX	HSS-E-PM	C	M 8 X1 - M12 X1.5	4161	676	682
				•			DIN 371	Ti R15	C	4HX	HSS-E-PM	C	MJ 6 X0.5 - MJ10 X1.25	1062	597	609
				•			DIN 371	Ti R15	C	6HX	HSS-E-PM	C	M 3 X0.35 - M10 X1.25	2910	597	608
				•			DIN 371	Ni R10	C(K)	4HX	HSS-E-PM	A	MJ 6 X0.5 - MJ10 X1.25	1066	597	609

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Machine taps for ISO metric fine threads																
				•			DIN 371	Ni R10	C(K)	6HX	HSS-E-PM	A	M 3 X0.35 - M10 X1.25	2921	597	608
				•			DIN 371	Ti Ni	B	4HX	HSS-E-PM	C	MJ 6 X0.5 - MJ10 X1.25	1058	596	607
				•			DIN 371	Ti Ni	B	6HX	HSS-E-PM	C	M 3 X0.35 - M10 X1.25	2903	596	606
				•			DIN 371	Ti Ni	B	6HX	HSS-E-PM	A	M 3 X0.35 - M10 X1.25	2917	596	606
≤ 1000							~DIN 371	N	B	6HX	VHM	C	M 5 X0.5 - M12 X1.5	943	21	95
					≤62		~DIN 371	H	D	ISO2/6H	VHM	C	M 6 X0.5 - M12 X1.5	1161	676	683
Machine taps for UNC-threads																
≤ 800							~DIN 371	N	C	2B	HSS-E		3 - 48 - 3/8 - 16	1977	18	121
≤ 800							~DIN 371	N	B	2B	HSS-E		1 - 64 - 3/8 - 16	873	19	117
≤ 1000	•		•				~DIN 371	N	B	2B	HSS-E		4 - 40 - 3/8 - 16	1980	229	258
≤ 1000	○						~DIN 371	N	B	2B	HSS-E		4 - 40 - 3/8 - 16	2881	20	118
≤ 800							~DIN 371	N	B	2B	HSS-E		1 - 64 - 3/8 - 16	2889	19	117
≤ 800							~DIN 371	N R15	C	2B	HSS-E		4 - 40 - 3/8 - 16	1978	22	119
≤ 800							~DIN 371	N R15	C	2B	HSS-E		4 - 40 - 10 - 24	2839	22	120
≤ 800							~DIN 371	N R40	C	2B	HSS-E		2 - 56 - 3/8 - 16	876	23	122
≤ 1000	○	○					~DIN 371	N R40	C	2B	HSS-E	S	10 - 24 - 3/8 - 16	1837	25	124
≤ 800							~DIN 371	N R40	C	2B	HSS-E		2 - 56 - 3/8 - 16	2844	23	122
≤ 1000	○	○	○				~DIN 371	N R40	C	2B	HSS-E		2 - 56 - 3/8 - 16	2854	24	123
≤ 1000	○	○					~DIN 371	N R40	C	2B	HSS-E		2 - 56 - 3/8 - 16	2855	24	123
≤ 1000	•						~DIN 371	VA	B	2B	HSS-E		4 - 40 - 3/8 - 16	2872	229	258
	•		•				~DIN 371	VA R40	C	2B	HSS-E		2 - 56 - 3/8 - 16	1981	231	259
	•						~DIN 371	VA R40	C	2B	HSS-E		2 - 56 - 3/8 - 16	2865	231	259
		•					~DIN 371	GG	C	2B	HSS-E	A	10 - 24 - 3/8 - 16	1085	350	371
		•					~DIN 371	GG	C	2B	HSS-E		2 - 56 - 3/8 - 16	1979	349	370

Machine taps for UNC-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
				•			~DIN 371	Ti Ni	B	2BX	HSS-E-PM	C	6 - 32 - 3/8 - 16	2905	596	610
				•			~DIN 371	Ti Ni	B	2BX	HSS-E-PM	A	6 - 32 - 3/8 - 16	2918	596	610
≤ 800							~DIN 376	N	B	2B	HSS-E		7/16 - 14 - 1 1/2 - 6	878	19	117
≤ 1000	•		•				~DIN 376	N	B	2B	HSS-E		1/2 - 13 - 1 - 8	1985	229	258
≤ 1000	○						~DIN 376	N	B	2B	HSS-E		7/16 - 14 - 1 - 8	2883	20	118
≤ 800							~DIN 376	N	B	2B	HSS-E		7/16 - 14 - 1 1/2 - 6	2890	19	117
≤ 800							~DIN 376	N R15	C	2B	HSS-E		1/2 - 13 - 1 - 8	2840	22	120
≤ 800							~DIN 376	N R40	C	2B	HSS-E		7/16 - 14 - 1 - 8	881	23	122
≤ 800							~DIN 376	N R40	C	2B	HSS-E		7/16 - 14 - 1 - 8	2845	23	122
≤ 1000	○	○	○				~DIN 376	N R40	C	2B	HSS-E		7/16 - 14 - 1 - 8	2856	24	123
≤ 1000	○	○					~DIN 376	N R40	C	2B	HSS-E		7/16 - 14 - 1 - 8	2857	24	123
≤ 1000	•						~DIN 376	VA	B	2B	HSS-E		1/2 - 13 - 1 - 8	2873	229	258
	•		•				~DIN 376	VA R40	C	2B	HSS-E		7/16 - 14 - 7/8 - 9	1986	231	259
	•						~DIN 376	VA R40	C	2B	HSS-E		7/16 - 14 - 7/8 - 9	2866	231	259
		•					~DIN 376	GG	C	2B	HSS-E	A	7/16 - 14 - 7/8 - 9	1086	350	371
		•					~DIN 376	GG	C	2B	HSS-E		7/16 - 14 - 3/4 - 10	1984	349	370
				•			~DIN 371/376	Ti R15	C	2BX	HSS-E-PM	C	4 - 40 - 5/8 - 11	2912	597	612
				•			~DIN 371/376	Ti R15	C	3BX	HSS-E-PM	C	6 - 32 - 5/8 - 11	1063	597	613
				•			~DIN 371/376	Ni R10	C	2BX	HSS-E-PM	A	4 - 40 - 5/8 - 11	2922	597	612
				•			~DIN 371/376	Ni R10	C	3BX	HSS-E-PM	A	6 - 32 - 5/8 - 11	1067	597	613
				•			~DIN 371/376	Ti Ni	B	3BX	HSS-E-PM	C	6 - 32 - 5/8 - 11	1059	596	611

Machine taps for UNF-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
≤ 800							~DIN 374	N	C	2B	HSS-E		3 - 56 - 1 - 12	1987	18	126
≤ 800							~DIN 374	N	B	2B	HSS-E		3 - 56 - 1 1/4 - 12	908	18	125

Machine taps for UNF-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
≤ 1000	•		•				~DIN 374	N	B	2B	HSS-E	○	10 - 32 - 3/8 - 24	1990	229	260
≤ 1000	○						~DIN 374	N	B	2B	HSS-E	●	6 - 40 - 1 - 12	2885	20	130
≤ 800							~DIN 374	N	B	2B	HSS-E	●	3 - 56 - 1 1/4 - 12	2891	19	125
≤ 800							~DIN 374	N R15	C	2B	HSS-E	○	3 - 56 - 1 - 12	1988	22	127
≤ 800							~DIN 374	N R15	C	2B	HSS-E	●	3 - 56 - 1 - 12	2841	22	127
≤ 800							~DIN 374	N R40	C	2B	HSS-E	○	3 - 56 - 1 - 12	911	23	128
≤ 1000	○	○					~DIN 374	N R40	C	2B	HSS-E	S	10 - 32 - 1 - 12	1838	25	131
≤ 800							~DIN 374	N R40	C	2B	HSS-E	●	3 - 56 - 1 - 12	2846	23	128
≤ 1000	○	○					~DIN 374	N R40	C	2B	HSS-E	●	10 - 32 - 7/8 - 14	2859	24	129
≤ 1000	•						~DIN 374	VA	B	2B	HSS-E	●	4 - 48 - 1 - 12	2874	229	260
	•						~DIN 374	VA R15	C	2B	HSS-E	●	5 - 44 - 1 - 12	1991	230	261
	•						~DIN 374	VA R15	C	2B	HSS-E	S	5 - 44 - 1 - 12	2898	230	261
	•		•				~DIN 374	VA R40	C	2B	HSS-E	○	1/4 - 28 - 1 - 12	2867	231	262
	•						~DIN 374	VA R40	C	2B	HSS-E	●	10 - 32 - 1 - 12	2868	231	262
		•					~DIN 374	GG	C	2B	HSS-E	A	10 - 32 - 7/8 - 14	1082	350	373
		•					~DIN 374	GG	C	2B	HSS-E	■	4 - 48 - 1 - 12	1989	349	372
				•			~DIN 371	Ti Ni	B	2BX	HSS-E-PM	A	6 - 40 - 3/8 - 24	2919	596	614
				•			~DIN 371-374	Ti R15	C	2BX	HSS-E-PM	C	4 - 48 - 5/8 - 18	2914	597	617
				•			~DIN 371-374	Ti R15	C	3BX	HSS-E-PM	C	6 - 40 - 5/8 - 18	1064	597	618
				•			~DIN 371-374	Ni R10	C	2BX	HSS-E-PM	A	4 - 48 - 5/8 - 18	2923	597	616
				•			~DIN 371-374	Ni R10	C	3BX	HSS-E-PM	A	6 - 40 - 5/8 - 18	1068	597	618
				•			~DIN 371-374	Ti Ni	B	3BX	HSS-E-PM	C	6 - 40 - 5/8 - 18	1060	596	615
		•					DIN 5156	GG	C		HSS-E	■	G1/16 - G2	961	349	374

Machine taps for BSP-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
≤ 800							DIN 5156	N	C		HSS-E	○	G 1/16 - G2	963	18	133
≤ 800							DIN 5156	N	B		HSS-E	○	G 1/16 - G2	962	19	132
≤ 1000	●		●				DIN 5156	N	B		HSS-E	○	G 1/16 - G1	967	229	263
≤ 1000	○						DIN 5156	N	B		HSS-E	A	G 1/8 - G2	2886	20	140
≤ 1000	○						DIN 5156	N	B		HSS-E	●	G 1/8 - G2	2887	20	140
≤ 800							DIN 5156	N	B		HSS-E	●	G 1/16 - G2	2894	19	132
●	●	○	○	○			DIN 5156	N	B		HSS-E	S	G 1/16 - G1	4220	21	134
≤ 1000	○	○					DIN 5156	N R15	E		HSS-E	C	G 1/16 - G1	4158	23	135
≤ 800							DIN 5156	N R15	C		HSS-E	○	G 1/16 - G1	964	22	135
≤ 800							DIN 5156	N R15	C		HSS-E	●	G 1/16 - G1	2842	22	135
≤ 1000	○	○					DIN 5156	N R40	C		HSS-E	S	G 1/8 - G1	937	25	141
≤ 800							DIN 5156	N R40	C		HSS-E	○	G 1/16 - G1 1/2	965	23	136
≤ 800							DIN 5156	N R40	C		HSS-E	●	G 1/16 - G1 1/2	2849	23	136
≤ 1000	○	○	○				DIN 5156	N R40	C		HSS-E	○	G 1/8 - G2	2860	24	137
≤ 1000	○	○					DIN 5156	N R40	C		HSS-E	●	G 1/8 - G2	2861	24	137
≤ 1000	●						DIN 5156	VA	B		HSS-E	●	G 1/16 - G1	2875	229	263
	●						DIN 5156	VA R40	C		HSS-E	●	G 1/16 - G1 1/2	968	231	265
	●		●				DIN 5156	VA R40	C		HSS-E-PM	○	G 1/16 - G1 1/2	939	231	265
●	●	○	○	○			DIN 5156	VA R45	C		HSS-E	A	G 1/16 - G1	395	25	139
●	●	○	●	○			DIN 5156	VA R50	C		HSS-E-PM	S	G 1/16 - G 1/2	4159	25	138

Machine taps for BSW-threads

≤ 800							~DIN 371	N	B		HSS-E	●	W 1/8 - W 3/8	2892	19	142
≤ 800							~DIN 371	N R40	C		HSS-E	●	W 1/8 - W 3/8	2847	23	143
≤ 800							~DIN 376	N	B		HSS-E	●	W 7/16 - W1	2893	19	142

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
Machine taps for BSW-threads																
≤ 800							~DIN 376	N R40	C		HSS-E	○	W 3/8 - W1	2848	23	143
Machine taps for EG-threads																
≤ 1000	○						DIN 40435	N	B		HSS-E	S	EG M 4 - EG M16	1010	20	144
≤ 1000	○	○					DIN 40435	N R40	C		HSS-E	S	EG M 4 - EG M16	1011	24	145
Machine taps for NPT-threads																
≤ 800							WN	N	C		HSS-E	○	1/16 - 2	973	18	146
	●	○	○				WN	N	C		HSS-E	○	1/16 - 1	1087	230	268
	●	○	○				WN	N	C		HSS-E	S	1/16 - 1	1088	230	268
Machine taps for NPTF-threads																
	●	○	○				WN	N	C		HSS-E	S	1/16 - 1	4127	230	269
Machine taps for PG-threads																
≤ 800							DIN 40432	N	C		HSS-E	○	PG7 - PG29	979	18	147
≤ 800							DIN 40432	N	B		HSS-E	○	PG7 - PG29	980	19	147
Fluteless machine taps for ISO metric threads																
●	●		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 3 - M10	322	27	154
●	●		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 5 - M10	323	27	158
●	●		○	○			~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M16	339	27	154
●	●		○	○			~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M16	342	27	158
●	●		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 3 - M10	919	26	152
●	●		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 3 - M10	1266	27	155
●	●		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 3 - M10	918	26	153
●	●		○				~DIN 371	N	C	6HX	HSS-E-PM	S	M 1 - M10	1255	26	149
●	●		○				~DIN 371	N	C	6GX	HSS-E-PM	S	M 1 - M10	903	26	149
●	●		○				~DIN 371	N	C	6GX	HSS-E	S	M 2 - M10	920	26	150
●	●		○				~DIN 371	N	C	6HX	HSS-E	S	M 1 - M10	921	26	149

Fluteless machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○	○			~DIN 376	N	C	6HX	HSS-E	S	M 6 - M39	923	26	152
•	•		○	○			~DIN 376	N	C	6GX	HSS-E	S	M 6 - M39	922	26	153
•	•		○				~DIN 376	N	C	6HX	HSS-E	S	M12 - M20	925	26	149
•	•		○				~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M20	1256	26	149
•	•		○				~DIN 376	N	C	6GX	HSS-E-PM	S	M12 - M20	952	26	149
•	•		○	○			~DIN 376	N	C	6HX	HSS-E-PM	S	M12 - M20	1267	27	155
•	•		≥ 7	•			~DIN 371	N	C	6HX	HSS-E-PM	C	M 3 - M10	1270	27	159
•	•		≥ 7	•			~DIN 371	N	C	6GX	HSS-E-PM	C	M 5 - M10	1713	27	160
•	•		≥ 7	○			~DIN 376	N	C	6HX	HSS-E-PM	C	M12 - M20	1271	27	159
			•				~DIN 371	N	C	6HX	HSS-E-PM	Cb	M 1 - M10	1347	466	506
			•				~DIN 371	N	C	6GX	HSS-E-PM	Cb	M 2 - M10	1565	466	508
			•				~DIN 376	N	C	6HX	HSS-E-PM	Cb	M12 - M20	1566	466	506
			•				~DIN 376	N	C	6GX	HSS-E-PM	Cb	M12 - M20	1567	466	508
•	•		≥ 7	•			~DIN 376	N	C	6HX	VHM	C	M12 - M20	1931	27	163
•							~DIN 371	N	C	6HX	HSS-E	P	M 3 - M10	1587	26	152
•							~DIN 371	N	C	6HX	HSS-E-PM	P	M 3 - M10	1599	27	155
•							~DIN 371	N	C	6GX	HSS-E	P	M 3 - M10	1588	26	153
•							~DIN 371	N	C	6GX	HSS-E-PM	P	M 3 - M10	1705	27	153
•							~DIN 376	N	C	6HX	HSS-E	P	M 6 - M39	1589	26	152
•							~DIN 376	N	C	6HX	HSS-E-PM	P	M12 - M20	1707	27	155
•							~DIN 376	N	C	6GX	HSS-E	P	M 6 - M20	1590	26	153
•							~DIN 376	N	C	6GX	HSS-E-PM	P	M 6 - M20	1708	27	153
•	•			•			~DIN 371	N	C	6HX	HSS-E-PM	A	M 3 - M10	1717	27	159
•	•			•			~DIN 371	N	C	6GX	HSS-E-PM	A	M 3 - M10	1718	27	161

Fluteless machine taps for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•			•			~DIN 376	N	C	6HX	HSS-E-PM	A	M12 - M20	1719	27	159
•	•			•			~DIN 376	N	C	6GX	HSS-E-PM	A	M12 - M20	1720	27	161
•	•		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 5 - M10	2442	27	156
•	•		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 5 - M10	2443	27	156
•	•		○	○			~DIN 371	N	E	6HX	HSS-E-PM	S	M 3 - M10	1725	27	159
•	•		○	○			~DIN 371	N	E	6GX	HSS-E-PM	S	M 3 - M10	1726	27	161
•	•		○	○			~DIN 376	N	C	6HX	HSS-E	S	M12 - M16	2444	27	156
•	•		○	○			~DIN 376	N	C	6GX	HSS-E	S	M12 - M16	2445	27	156
•	•		○	○			~DIN 376	N	E	6HX	HSS-E-PM	S	M12 - M20	1727	27	159
•	•		○	○			~DIN 376	N	E	6GX	HSS-E-PM	S	M12 - M20	1728	27	161
•	•		≥ 7	•			~DIN 371	N	E	6HX	VHM	C	M 3 - M10	1927	27	164
•	•		≥ 7	•			~DIN 371	N	C	6HX	VHM	C	M 3 - M10	1972	27	163
•	•		≥ 7	○			~DIN 376	N	C	6HX	HSS-E	C	M 6 - M39	2013	26	152
•	•		≥ 7	○			~DIN 371	N	C	6HX	HSS-E	C	M 3 - M10	2012	26	152
•	•		≥ 7	○			~DIN 371	N	C	6HX	HSS-E	C	M 5 - M10	2446	27	156
•	•		≥ 7	○			~DIN 371	N	C	6GX	HSS-E	C	M 5 - M10	2447	27	157
•	•		≥ 7	○			~DIN 376	N	C	6HX	HSS-E	C	M12 - M16	2448	27	156
			•				~DIN 371/376	N	C	6HX	HSS-E	Cb	M 5 - M20	2515	467	517
•	•		≥ 7	○			~DIN 371/376	N	C	6HX	VHM	S	M 5 - M16	2518	26	151
•	•		○	○				N	C	6HX	HSS-E-PM	S	M 3 - M20	4143	27	162
			•				~DIN 371/376	N	C	6GX	HSS-E	Cb	M 5 - M20	4146	467	520

Fluteless machine taps for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M 8 X1 - M20 X1.5	333	27	173
•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M 8 X1 - M16 X1.5	338	27	177

Fluteless machine taps for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○	○			~DIN 371	N	C	6HX	HSS-E	S	M 6 X0.75 - M10 X1.25	1275	26	169
•	•		○	○			~DIN 371	N	C	6GX	HSS-E	S	M 8 X1 - M10 X1	1277	26	172
•	•		○				~DIN 371	N	C	6HX	HSS-E-PM	S	M 8 X1 - M10 X1	1257	26	166
•	•		○				~DIN 371	N	C	6GX	HSS-E-PM	S	M 8 X1 - M10 X1.25	1740	26	167
•	•		○	○			~DIN 374	N	C	6HX	HSS-E	S	M 6 X0.75 - M24 X1.5	927	26	169
•	•		○	○			~DIN 374	N	C	6GX	HSS-E	S	M 8 X1 - M20 X1.5	926	26	172
•	•		○				~DIN 374	N	C	6HX	HSS-E	S	M 8 X1 - M20 X1.5	929	26	165
•	•		○				~DIN 374	N	C	6HX	HSS-E-PM	S	M12 X1 - M24 X2	1258	26	166
•	•		○				~DIN 374	N	C	6GX	HSS-E	S	M 8 X1 - M18 X1.5	928	26	168
•	•		○	○			~DIN 374	N	C	6HX	HSS-E-PM	S	M12 X1.25 - M24 X2	1269	27	174
•	•		○	○			~DIN 371	N	C	6HX	HSS-E-PM	S	M 8 X1 - M10 X1	1268	27	174
•	•		≥ 7	•			~DIN 371	N	C	6HX	HSS-E-PM	C	M 8 X1 - M10 X1.25	1272	27	178
•	•		≥ 7	•			~DIN 371	N	C	6GX	HSS-E-PM	C	M 8 X1 - M10 X1.25	1715	27	179
•	•		≥ 7	•			~DIN 374	N	C	6HX	HSS-E-PM	C	M12 X1 - M24 X1.5	1273	27	178
			•				~DIN 371	N	C	6HX	HSS-E-PM	Cb	M 8 X1 - M10 X1	1568	466	526
			•				~DIN 371	N	C	6GX	HSS-E-PM	Cb	M 8 X1 - M10 X1	1569	466	529
			•				~DIN 374	N	C	6GX	HSS-E-PM	Cb	M12 X1 - M24 X1.5	1580	466	529
•	•		≥ 7	•			~DIN 371/376	N	C	6HX	VHM	C	M10 X1 - M24 X1.5	1581	27	181
•							~DIN 374	N	C	6HX	HSS-E	P	M 6 X0.75 - M24 X1.5	1593	26	169
•							~DIN 374	N	C	6HX	HSS-E-PM	P	M12 X1 - M24 X1.5	1711	27	175
•							~DIN 374	N	C	6GX	HSS-E-PM	P	M12 X1 - M24 X1.5	1712	27	176
•							~DIN 371	N	C	6HX	HSS-E	P	M 6 X0.75 - M10 X1.25	1591	26	169
•							~DIN 371	N	C	6GX	HSS-E	P	M 8 X1 - M10 X1	1592	26	171
•							~DIN 371	N	C	6GX	HSS-E-PM	P	M 8 X1 - M10 X1	1710	27	176

Fluteless machine taps for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		≥ 7	•			~DIN 374	N	C	6GX	HSS-E-PM	C	M12 X1 - M24 X1.5	1716	27	179
•	•			•			~DIN 371	N	C	6HX	HSS-E-PM	A	M 8 X1 - M10 X1.25	1721	27	178
•	•			•			~DIN 374	N	C	6HX	HSS-E-PM	A	M12 X1 - M24 X1.5	1723	27	178
•	•		○	○			~DIN 371	N	E	6HX	HSS-E-PM	S	M 8 X1 - M10 X1.25	1729	27	178
•	•		○	○			~DIN 371	N	E	6GX	HSS-E-PM	S	M 8 X1 - M10 X1.25	1730	27	179
•	•		○	○			~DIN 374	N	E	6HX	HSS-E-PM	S	M12 X1 - M24 X1.5	1731	27	178
•	•		○	○			~DIN 374	N	E	6GX	HSS-E-PM	S	M12 X1 - M24 X1.5	1732	27	179
•	•		≥ 7	○			~DIN 374	N	C	6HX	HSS-E	C	M 6 X0.75 - M20 X1.5	2008	26	170
•	•		○	○				N	C	6HX	HSS-E-PM	S	M 8 X1 - M16 X1.5	4145	27	180
			•				~DIN 371-374	N	C	6HX	HSS-E	Cb	M 8 X1 - M16 X1.5	4147	467	537
			•				~DIN 371-374	N	C	6GX	HSS-E	Cb	M 8 X1 - M16 X1.5	4151	467	539

Fluteless machine taps for UNC-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○	○			~DIN 371	N	C	2BX	HSS-E	S	4 - 40 - 3/8 - 16	1582	26	182
•	•		○				~DIN 371	N	C	2BX	HSS-E	S	4 - 40 - 3/8 - 16	2273	26	182
•	•		○	○			~DIN 376	N	C	2BX	HSS-E	S	7/16 - 14 - 7/8 - 9	1583	26	182
•	•		○				~DIN 376	N	C	2BX	HSS-E	S	7/16 - 14 - 7/8 - 9	2274	26	182

Fluteless machine taps for UNF-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○	○			~DIN 374	N	C	2BX	HSS-E	S	10 - 32 - 1 - 12	1585	26	183
•	•		○				~DIN 374	N	C	2BX	HSS-E	S	10 - 32 - 1 - 12	2275	26	183
•	•		○				~DIN 371	N	C	2BX	HSS-E	S	4 - 48 - 3/8 - 24	1283	26	183
•	•		○	○			~DIN 371	N	C	2BX	HSS-E	S	4 - 48 - 3/8 - 24	1584	26	183

Fluteless machine taps for BSP-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•		○				DIN 2189	N	C		HSS-E	S	G 1/16 - G1 1/4	966	26	184
•	•		○	○			DIN 2189	N	C		HSS-E	S	G 1/16 - G 3/4	1586	26	184
			•				DIN 2189	N	C		HSS-E	Cb	G 1/16 - G1	4152	467	546

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page

Thread milling cutters without chamfer for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
○	○	●	●				WN	TM SP			VHM	◯	M 6 - M20 X1.5	3734	468	548
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	3735	28	187
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20 X1.5	3737	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	3740	28	187
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20 X1.5	3743	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	4132	28	186
●	○	●	●	○	≤55		WN	TM SP			VHM	C	M 6 - M20	4133	28	186
○	○	●	●	○			WN	TMC SP			VHM	◯	M 3 - M20	3510	469	551
○	○	●	●	○			WN	TMC SP			VHM	◯	M 3 - M20	3511	469	552
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3525	28	188
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3526	29	189
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3543	28	188
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3544	29	189
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3759	29	190
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 3 - M20	3760	29	190

Thread milling cutters with chamfer for ISO metric fine threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
○	○	●	●	○			WN	TMC SP			VHM	◯	M 4 X0.5 - M16 X1.5	3512	469	554
○		●	●				WN	TMC SP			VHM	◯	M 4 X0.5 - M16 X1.5	3513	469	555
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0.5 - M16 X1.5	3527	28	191
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0.5 - M16 X1.5	3528	29	192
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0.5 - M16 X1.5	3545	28	191
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0.5 - M16 X1.5	3546	29	192
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0.5 - M16 X1.5	3762	29	193
●	●	●	●	●	≤55		WN	TMC SP			VHM	C	M 4 X0.5 - M16 X1.5	3763	29	193

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
Thread milling cutters without chamfer for UNC-threads																
•	○	•	•	○	≤55		WN	TM SP			VHM	C	10 - 24 - 5/8 - 11	4134	28	194
•	○	•	•	○	≤55		WN	TM SP			VHM	C	10 - 24 - 5/8 - 11	4135	28	194
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3516	28	195
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3517	29	196
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3534	28	195
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 20 - 1/2 - 13	3535	29	196
Thread milling cutters without chamfer for UNF-threads																
•	○	•	•	○	≤55		WN	TM SP			VHM	C	10 - 32 - 5/8 - 18	4136	28	197
•	○	•	•	○	≤55		WN	TM SP			VHM	C	10 - 32 - 5/8 - 18	4137	28	197
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3518	28	198
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3519	29	199
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3536	28	198
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/4 - 28 - 1/2 - 20	3537	29	199
Thread milling cutters without chamfer for BSP-threads																
•	○	•	•	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3745	28	200
•	○	•	•	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3746	28	201
•	○	•	•	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3748	28	200
•	○	•	•	○	≤55		WN	TM SP			VHM	C	G 1/8 - G 3/8	3750	28	201
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3514	28	202
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3515	29	203
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3529	28	202
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3533	29	203
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3765	29	204
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	G 1/8 - G 3/8	3766	29	204

Thread milling cutters without chamfer for NPT-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3753	28	205
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3754	28	205
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3520	28	206
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3538	28	206

Thread milling cutters without chamfer for NPTF-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3756	28	207
•	•	•	•	•	≤55		WN	TM SP			VHM	C	1/16 - 3/8	3757	28	207
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3521	28	208
•	•	•	•	•	≤55		WN	TMC SP			VHM	C	1/8 - 3/8	3539	28	208

Universal thread milling cutters for BSP-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
○	○	•	•	○			WN	TM SP	BSP		VHM	○	≥ 1/4 - ≥ 1	3524	470	575
•	•	•	•	•	≤55		WN	TM SP	BSP		VHM	C	≥ 1/4 - ≥ 1	3542	29	212
•	•	•	•	•	≤55		WN	TM SP	BSP		VHM	C	≥ 1/4 - ≥ 1	3557	29	212
•	•	•	•	•	≤55		WN	TM SP	NPT		VHM	C	≥ 1/2 - ≥ 1	3768	69	213
•	•	•	•	•	≤55		WN	TM SP	NPT		VHM	C	≥ 1/2 - ≥ 1	3769	69	213
•	•	•	•	•	≤55		WN	TM SP	NPTF		VHM	C	≥ 1/2 - ≥ 1	3772	29	214
•	•	•	•	•	≤55		WN	TM SP	NPTF		VHM	C	≥ 1/2 - ≥ 1	3773	29	214
○	○	•	•	○			WN	TMU SP	M		VHM	○	≥ 10 - ≥ 30	3523	470	572
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 10 - ≥ 30	3541	29	209
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 10 - ≥ 30	3556	29	209
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 3 - ≥ 24	4162	29	210
•	•	•	•	•	≤55		WN	TMU SP	M		VHM	C	≥ 3 - ≥ 24	4163	29	210
•	•	•	•	•	≤55		WN	TMU UN	UN		VHM	C	≥ 1/2 - ≥ 1	3595	29	211
•	•	•	•	•	≤55		WN	TMU UN	UN		VHM	C	≥ 1/2 - ≥ 1	3596	29	211

Micro-thread milling cutters

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
•	•	•	•	•			WN	SP G	BSP		VHM	C	G 1/8 - G2	4228	29	216
•	•	•	•	•			WN	SP M	M		VHM	C	M 1.6 - M16	4226	29	215
				○	•		WN	SP M	M		VHM	A	M 2 - M12	4227	679	703
•	•	•	•	•			WN	SP M/MF	M		VHM	C	M1.4 - M1.8 - M8 - M10	4225	29	217

Drill thread milling cutters for ISO metric threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
		○	•				WN	DTMC SP	M		VHM		M3 - M16	3774	471	581
		○	•				WN	DTMC SP	M		VHM		M3 - M16	3775	471	581
		•	•				WN	DTMC SP	M		VHM	C	M3 - M16	3776	471	581
		•	•				WN	DTMC SP	M		VHM	C	M3 - M16	3777	471	581
		○	•				WN	DTMC SP	M		VHM		M3 - M16	3778	471	582
		○	•				WN	DTMC SP	M		VHM		M3 - M16	3779	471	582
		•	•				WN	DTMC SP	M		VHM	C	M3 - M16	3780	471	582
		•	•				WN	DTMC SP	M		VHM	C	M3 - M16	3781	471	582
		○	•				WN	DTMC SP	M		VHM		M3 - M16	3782	471	583
		○	•				WN	DTMC SP	M		VHM		M3 - M16	3783	471	583
		•	•				WN	DTMC SP	M		VHM	C	M3 - M16	3784	471	583
		•	•				WN	DTMC SP	M		VHM	C	M3 - M16	3785	471	583
		○	•				WN	DTMC SP	MF		VHM		M4 x 0.5 - M16 x 1.5	3787	471	584
		•	•				WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3788	471	584
		•	•				WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3789	471	584
		○	•				WN	DTMC SP	MF		VHM		M4 x 0.5 - M16 x 1.5	3790	471	585
		○	•				WN	DTMC SP	MF		VHM		M4 x 0.5 - M16 x 1.5	3791	471	585
		•	•				WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3792	471	585
		•	•				WN	DTMC SP	MF		VHM	C	M4 x 0.5 - M16 x 1.5	3793	471	585

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
Drill thread milling cutters for ISO metric threads																
		•	•				WN	DTMC SP	UNC		VHM	○	1/4 - 20 - 5/8 - 11	4138	471	586
		•	•				WN	DTMC SP	UNC		VHM	C	1/4 - 20 - 5/8 - 11	4139	471	586
		•	•				WN	DTMC SP	UNF		VHM	○	1/4 - 28 - 5/8 - 18	4140	471	587
		•	•				WN	DTMC SP	UNF		VHM	C	1/4 - 28 - 5/8 - 18	4141	471	587
Die nuts for ISO metric threads																
VI 1000		•	•				WN		B	6g	HSS	○	M 3 - M12	121	706	707
VI 1000		•	•				WN		B	6g	HSS	○	M 2 - M10	125	706	708
Dies for ISO metric threads																
VI 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 1 - M30	151	706	710
VI 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 - M30	152	706	711
VI 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 1 - M30	153	706	710
VI 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 - M20	156	706	713
VI 1000		•	•				DIN 382			6g	HSS	○	M 5 - M52	139	706	709
VI 1200	•						DIN EN 22568		B	6g	HSS-E	●	M 2 - M20	130	706	712
Dies for ISO metric fine threads																
VI 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 X0.35 - M30 X2	161	706	714
VI 1000		•	•				DIN EN 22568		B	6g	HSS	○	M 3 X0.35 - M30 X2	162	706	714
Dies for UNC-threads																
VI 1000		•	•				DIN EN 22568		B	2a	HSS	○	8 -32 - 3/4 -10	182	706	716
Dies for UNF-threads																
VI 1000		•	•				DIN EN 22568		B	2a	HSS	○	10 - 32 - 7/8 - 14	185	706	717
Dies for BSP-threads																
VI 1000		•	•				DIN EN 24231		B		HSS	○	G 1/8 - G1 1/2	175	706	718
VI 1000		•	•				DIN EN 24231		B		HSS	○	G 1/8 - G1 1/2	176	706	718
Dies for R-threads BSPT																
VI 1000		•	•				DIN EN 24230		B		HSS	○	R 1/8 - R 1/2	198	706	719

Dies for NPT-threads

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tolerance on Ø	Tool material	Surface	d1/mm	Article no.	Cutting data page	Page
≤ 1000		•	•				DIN EN 22568		B		HSS	○	1/8 - 3/4	191	706	720

Hand taps for ISO metric threads

≤ 800			○				DIN 352	N		ISO2/6H	HSS	○	M 1 - M68	861		721
≤ 800			○				DIN 352	N	A	ISO2/6H	HSS	○	M 1 - M68	862		721
≤ 800			○				DIN 352	N	D	ISO2/6H	HSS	○	M 1 - M68	863		721
≤ 800			○				DIN 352	N	C	ISO2/6H	HSS	○	M 1 - M45	864		721
≤ 800			○				DIN 352	N		ISO2/6H	HSS	○	M 1 - M45	882		723
≤ 800			○				DIN 352	N	D	ISO2/6H	HSS	○	M 1 - M45	883		723
≤ 800			○				DIN 352	N		ISO2/6H	HSS	○	M 2 - M18	904		724
≤ 800			○				DIN 352	N-LH	A	ISO2/6H	HSS	○	M 2 - M18	905		724
≤ 800			○				DIN 352	N-LH	D	ISO2/6H	HSS	○	M 2 - M18	906		724
≤ 800			○				DIN 352	N-LH	C	ISO2/6H	HSS	○	M 2 - M18	907		724
•	•	•	•				DIN 352	H		ISO2/6H	HSS-E	●	M 2 - M20	857		726
•	•	•	•				DIN 352	H	A	ISO2/6H	HSS-E	●	M 2 - M20	858		726
•	•	•	•				DIN 352	H	D	ISO2/6H	HSS-E	●	M 2 - M20	859		726
•	•	•	•				DIN 352	H	C	ISO2/6H	HSS-E	●	M 2 - M20	860		726
≤ 1000	•	•	•				DIN 352	VA		ISO2/6H	HSS-E	○	M 2 - M20	853		725
≤ 1000	•	•	•				DIN 352	VA	A	ISO2/6H	HSS-E	○	M 2 - M20	854		725
≤ 1000	•	•	•				DIN 352	VA	D	ISO2/6H	HSS-E	○	M 2 - M20	855		725
≤ 1000	•	•	•				DIN 352	VA	C	ISO2/6H	HSS-E	○	M 2 - M20	856		725
•	•	•	•				DIN 352	H		ISO2/6H	HSS-E-PM	●	M 3 - M12	1818		727
•	•	•	•				DIN 352	H	A	ISO2/6H	HSS-E-PM	●	M 3 - M12	1819		727
•	•	•	•				DIN 352	H	D	ISO2/6H	HSS-E-PM	●	M 3 - M12	1820		727
•	•	•	•				DIN 352	H	C	ISO2/6H	HSS-E-PM	●	M 3 - M12	1821		727

P	M	K	N	S	H	Tool illustration	Standard	Type	Form	Tole-rance on Ø	Tool material	Sur-face	d1/mm	Article no.	Cutting data page	Page
Hand taps for ISO metric fine threads																
800 VI			○				DIN 2180	N		ISO2/6H	HSS	◯	M 2 X0.25 - M52 X1.5	884		728
800 VI			○				DIN 2180	N	D	ISO2/6H	HSS	◯	M 2 X0.25 - M52 X1.5	885		728
800 VI			○				DIN 2180	N	C	ISO2/6H	HSS	◯	M 2 X0.25 - M52 X1.5	886		728
Hand taps for UNC-threads																
800 VI			○				~DIN 352	N		2B	HSS	◯	1 -64 - 2- 4 1/2	981		730
800 VI			○				~DIN 352	N	A	2B	HSS	◯	1 -64 - 2- 4 1/2	982		730
800 VI			○				~DIN 352	N	D	2B	HSS	◯	1 -64 - 2- 4 1/2	983		730
800 VI			○				~DIN 352	N	C	2B	HSS	◯	1 -64 - 2- 4 1/2	984		730
Hand taps for UNF-threads																
800 VI			○				~DIN 2181	N		2B	HSS	◯	1 -72 - 1 -12	985		731
800 VI			○				~DIN 2181	N	D	2B	HSS	◯	1 -72 - 1 -12	986		731
800 VI			○				~DIN 2181	N	C	2B	HSS	◯	1 -72 - 1 -12	987		731
Hand taps for BSW-threads																
800 VI			○				~DIN 352	N			HSS	◯	W 3/32 - W2	954		732
800 VI			○				~DIN 352	N	A		HSS	◯	W 3/32 - W2	955		732
800 VI			○				~DIN 352	N	D		HSS	◯	W 3/32 - W2	956		732
800 VI			○				~DIN 352	N	C		HSS	◯	W 3/32 - W2	957		732
Hand taps for BSP-threads																
800 VI			○				DIN 5157	N			HSS	◯	G 1/8 - G2	958		733
800 VI			○				DIN 5157	N	D		HSS	◯	G 1/8 - G2	959		733
800 VI			○				DIN 5157	N	C		HSS	◯	G 1/8 - G2	960		733

Synchro tapping chucks for internal cooling

Tool illustration		Shank form	Clamping diameter (mm)	Guhring no.	Page
	HSK-A hydraulic synchro tapping chucks with internal cooling	HSK-A	HSK-A 63 - HSK-A 100	**4601**	742
	ISO taper hydraulic synchro tapping chucks with internal cooling	SK	SK 30 - SK 40	**4576**	743
	MAS/BT hydraulic synchro tapping chucks with internal cooling	BT	BT 30 - BT 40	**4577**	744
	Straight shank hydraulic synchro tapping chucks for internal cooling	cyl.	20,000 - 25,000	**4525**	745
	Reduction bushes, sealed, for hydraulic synchro tapping chucks		12,000 / 20,000	**4605**	746
	GÜHROJET reduction bushes for hydraulic synchro tapping chucks		12,000 / 20,000	**4606**	748
	Setting screws “faces” synchro tapping chucks for internal cooling		ER20 - ER32	**4364**	750
	Synchro tapping chucks with straight shank	cyl.	25,000	**4326**	751
	HSK-A synchro tapping chucks	HSK-A	HSK-A 63 - HSK-A 100	**4327**	751
	Tapping collets		ER16 - ER40	**4308**	753
	HSK-A adaptors for tapping chucks	HSK-A	HSK-A 50 - HSK-A 100	**4343**	754
	Quick change tapping chucks without internal cooling		M3 - M20	**4340**	754
	Quick change tapping chucks with internal cooling		M3 - M20	**4342**	755
	HSK-A quick change tapping chucks with internal cooling	HSK-A	HSK-A 63	**4328**	755
	Quick change tapping chuck adaptors		M3 - M20	**4206**	756

MQL tapping chucks

Tool illustration		Shank form	Clamping diameter (mm)	Guhring no.	Page
	MQL HSK-A 1-channel hydraulic synchro tapping chucks (for auto. tool change)	HSK-A	HSK-A 63 - HSK-A 100	**4602**	760
	MQL HSK-A 2-channel hydraulic synchro tapping chucks (for auto. tool change)	HSK-A	HSK-A 63 - HSK-A 100	**4603**	761
	MQL HSK-A hydraulic synchro tapping chucks (for manual tool change)	HSK-A	HSK-A 63 - HSK-A 100	**4604**	762
	MQL hydraulic synchro tapping chucks with internal cooling	cyl.	20,000	**4524**	763
	MQL synchro tapping chucks HSK-A for manual tool change	HSK-A	HSK-A 63	**4298**	764
	MQL 1-channel synchro tapping chucks HSK-A for automatic tool change	HSK-A	HSK-A 63 - HSK-A 100	**4330**	764
	MQL 1-channel synchro tapping chucks HSK-A for automatic tool change	HSK-A	HSK-A 63 - HSK-A 100	**4341**	765
	MQL setting screws with internal cone for MQL synchro tapping chucks		ER20 - ER32	**4305**	766
	MQL 1-channel coolant delivery set HSK-A	HSK-A	HSK-A 32 - HSK-A 100	**4508**	767
	MQL 2-channel coolant delivery set HSK-A	HSK-A	HSK-A 32 - HSK-A 100	**4511**	767
	MQL coolant delivery set HSK-A (filler)	HSK-A	HSK-A 32 - HSK-A 100	**4513**	768
	Retaining nuts, system DIN ISO 15488		ER16 - ER40	**4306**	769
	Sealing washers		ER16 - ER40	**4335**	770
	Clamping key		ER16 mini - ER40	**4913**	770

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
57	47		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H	B
58	47		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H	B
59	246		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
60	246		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
121	707			Die nuts for ISO metric threads	HSS		B
125	708			Die nuts for ISO metric threads	HSS		B
130	712			Dies for ISO metric threads	HSS-E		B
139	709			Dies for ISO metric threads	HSS		
151	710			Dies for ISO metric threads	HSS		B
152	711			Dies for ISO metric threads	HSS		B
153	710			Dies for ISO metric threads	HSS		B
156	713			Dies for ISO metric threads	HSS		B
161	714			Dies for ISO metric fine threads	HSS		B
162	714			Dies for ISO metric fine threads	HSS		B
169	365		DIN 374	Machine taps for ISO metric fine threads	HSS-E	GG	C
174	70		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C(K)
175	718			Dies for BSP-threads	HSS		B
176	718			Dies for BSP-threads	HSS		B
182	716			Dies for UNC-threads	HSS		B
185	717			Dies for UNF-threads	HSS		B
191	720			Dies for NPT-threads	HSS		B
196	70		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C(K)
198	719			Dies for R-threads BSPT	HSS		B
273	109		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C(K)
297	78, 359, 479		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	H	C
302	78, 359, 479		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	H	C
313	33		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
315	33		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
316	93		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
318	358		DIN 371	Oil feed taps for ISO metric threads	HSS-E	GG	C
319	358		DIN 376	Oil feed taps for ISO metric threads	HSS-E	GG	C
322	154, 275, 380, 511, 620		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
323	158, 279, 384, 515, 622		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
333	173, 294, 399, 533, 629		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
338	177, 295, 400, 535, 631		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
339	154, 275, 380, 511, 620		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
342	158, 279, 384, 515, 622		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
347	366		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E	GG	C
361	82		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
362	82		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
393	71, 244		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	VA R45	C
394	115, 252		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R45	C
395	139, 267		DIN 5156	Machine taps for BSP-threads	HSS-E	VA R45	C
733	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
734	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
761	75, 247, 486		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA R50	C
763	75, 247, 486		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA R50	C
764	111, 255, 490		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA R50	C
767	74, 245, 485		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N R50	C
778	79, 360, 480		DIN 376	Oil feed taps for ISO metric threads	HSS-E	H	C
779	80, 361, 481			Oil feed taps for ISO metric threads	HSS-E	H	C
783	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
784	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
785	241		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R15	C
786	62		DIN 371	Machine taps for ISO metric threads	HSS-E	N L40-LH	C
787	62		DIN 376	Machine taps for ISO metric threads	HSS-E	N L40-LH	C
788	483		DIN 371	Machine taps for ISO metric threads	HSS-E	H AZ	C
789	32		DIN 371	Machine taps for ISO metric threads	HSS-E	N-LH	B
790	32		DIN 376	Machine taps for ISO metric threads	HSS-E	N-LH	B
791	44		DIN 371	Machine taps for ISO metric threads	HSS-E	H AZ	B
792	240		DIN 376	Machine taps for ISO metric threads	HSS-E	VA AZ	B
794	36		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
795	52		DIN 371	Machine taps for ISO metric threads	HSS-E	N	C
796	56		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
797	56		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
799	52		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
800	482		DIN 371	Machine taps for ISO metric threads	HSS-E	Ms	E
801	49		DIN 371	Machine taps for ISO metric threads	HSS-E	N	D
802	55		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
803	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
804	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
805	472		DIN 371	Machine taps for ISO metric threads	HSS-E	Al	B

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
806	50		DIN 371	Machine taps for ISO metric threads	HSS-E	N	C
807	356		DIN 371	Machine taps for ISO metric threads	HSS-E	GG	C
808	89		DIN 371	Machine taps for ISO metric threads	HSS-E	N L15	D
809	57		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
810	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
811	81		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
812	474		DIN 371	Machine taps for ISO metric threads	HSS-E	Al R45	C
813	49		DIN 376	Machine taps for ISO metric threads	HSS-E	N	D
814	243, 475		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R40	C
815	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
816	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
817	472		DIN 376	Machine taps for ISO metric threads	HSS-E	Al	B
818	51		DIN 376	Machine taps for ISO metric threads	HSS-E	N	C
819	356		DIN 376	Machine taps for ISO metric threads	HSS-E	GG	C
820	89		DIN 376	Machine taps for ISO metric threads	HSS-E	N L15	D
821	57		DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
822	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
823	81		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
824	474		DIN 376	Machine taps for ISO metric threads	HSS-E	Al R45	C
825	243, 475		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R40	C
826	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
827	91		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
828	97		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H	B
829	100		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	C
830	100		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	C
831	365		DIN 374	Machine taps for ISO metric fine threads	HSS-E	GG	C
832	91		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
833	102		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
834	105		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
835	114		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
836	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
837	37		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
838	54		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
839	54		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
843	241		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R15	C
844	61		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
845	37		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
846	54		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
847	54		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
848	61		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
849	44		DIN 376	Machine taps for ISO metric threads	HSS-E	H AZ	B
851	85			Machine nut taps for ISO metric threads	HSS-E	N	
852	105		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
853	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	
854	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	A
855	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	D
856	725		DIN 352	Hand taps for ISO metric threads	HSS-E	VA	C
857	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	
858	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	A
859	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	D
860	726		DIN 352	Hand taps for ISO metric threads	HSS-E	H	C
861	721		DIN 352	Hand taps for ISO metric threads	HSS	N	
862	721		DIN 352	Hand taps for ISO metric threads	HSS	N	A
863	721		DIN 352	Hand taps for ISO metric threads	HSS	N	D
864	721, 723		DIN 352	Hand taps for ISO metric threads	HSS	N	C
869	56		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
872	76		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
873	117		~DIN 371	Machine taps for UNC-threads	HSS-E	N	B
874	112		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	H R15	C
875	46		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H	B
876	122		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
877	237		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA	B
878	117		~DIN 376	Machine taps for UNC-threads	HSS-E	N	B
879	237		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA	B
881	122		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
882	723		DIN 352	Hand taps for ISO metric threads	HSS	N	
883	723		DIN 352	Hand taps for ISO metric threads	HSS	N	D
884	728		DIN 2181	Hand taps for ISO metric fine threads	HSS	N	
885	728		DIN 2181	Hand taps for ISO metric fine threads	HSS	N	D
886	728		DIN 2181	Hand taps for ISO metric fine threads	HSS	N	C
887	256		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA	B
888	88			Machine taps for ISO metric threads	HSS-E	N R40	C

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
889	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
890	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
903	149, 271, 376, 508		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
904	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	
905	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	A
906	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	D
907	724		DIN 352	Hand taps for ISO metric threads	HSS	N-LH	C
908	125		~DIN 374	Machine taps for UNF-threads	HSS-E	N	B
909	246		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
910	246		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	VA R40	C
911	128		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C
912	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
913	57		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
914	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
915	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
916	57		DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
917	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
918	153, 274, 379, 510		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
919	152, 274, 379, 510		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
920	150, 272, 377, 507		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
921	149, 271, 376, 506		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
922	153, 274, 379, 510		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
923	152, 274, 379, 510		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
925	149, 271, 376, 506		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
926	172, 292, 397, 532		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
927	169, 288, 395, 530		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
928	168, 290, 393, 528		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
929	165, 286, 391, 524		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
930	356		DIN 371	Machine taps for ISO metric threads	HSS-E	GG	C
931	356		DIN 376	Machine taps for ISO metric threads	HSS-E	GG	C
932	365		DIN 374	Machine taps for ISO metric fine threads	HSS-E	GG	C
935	76		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
936	253, 488		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA R40	C
937	141		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C(K)
939	265, 503		DIN 5156	Machine taps for BSP-threads	HSS-E-PM	VA R40	C
942	42		~DIN 371	Machine taps for ISO metric threads	Solid carbide	N	B
943	95		~DIN 371	Machine taps for ISO metric fine threads	Solid carbide	N	B
944	96		DIN 374	Machine taps for ISO metric fine threads	Solid carbide	N	B
945	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
946	57		DIN 371	Machine taps for ISO metric threads	HSS-E	N R15	C
947	81		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
948	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
949	57		DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
950	81		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
952	149, 271, 376, 508		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
954	732		~DIN 352	Hand taps for BSW-threads	HSS	N	
955	732		~DIN 352	Hand taps for BSW-threads	HSS	N	A
956	732		~DIN 352	Hand taps for BSW-threads	HSS	N	D
957	732		~DIN 352	Hand taps for BSW-threads	HSS	N	C
958	733		DIN 5157	Hand taps for BSP-threads	HSS	N	
959	733		DIN 5157	Hand taps for BSP-threads	HSS	N	D
960	733		DIN 5157	Hand taps for BSP-threads	HSS	N	C
961	374		DIN 5156	Machine taps for BSP-threads	HSS-E	GG	C
962	132		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
963	133		DIN 5156	Machine taps for BSP-threads	HSS-E	N	C
964	135		DIN 5156	Machine taps for BSP-threads	HSS-E	N R15	C
965	136		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
966	184, 302, 407, 544		DIN 2189	Fluteless machine taps for BSP-threads	HSS-E	N	C
967	263, 502		DIN 5156	Machine taps for BSP-threads	HSS-E	VA	B
968	265		DIN 5156	Machine taps for BSP-threads	HSS-E	VA R40	C
969	362, 476		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
971	478		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	N R15	C
972	368, 491		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
973	146			Machine taps for NPT-threads	HSS-E	N	C
974	368, 491		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
975	495		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	N L15	D
976	495		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	N L15	D
977	493		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	N R15	C
978	493		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	N R15	C
979	147		DIN 40432	Machine taps for PG-threads	HSS-E	N	C
980	147		DIN 40432	Machine taps for PG-threads	HSS-E	N	B
981	730		~DIN 352	Hand taps for UNC-threads	HSS	N	

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
982	730		~DIN 352	Hand taps for UNC-threads	HSS	N	A
983	730		~DIN 352	Hand taps for UNC-threads	HSS	N	D
984	730		~DIN 352	Hand taps for UNC-threads	HSS	N	C
985	731		~DIN 2181	Hand taps for UNF-threads	HSS	N	
986	731		~DIN 2181	Hand taps for UNF-threads	HSS	N	D
987	731		~DIN 2181	Hand taps for UNF-threads	HSS	N	C
991	35		DIN 352	Machine taps for ISO metric threads	HSS-E	N	B
992	58		DIN 352	Machine taps for ISO metric threads	HSS-E	N R15	C
993	65		DIN 352	Machine taps for ISO metric threads	HSS-E	N R40	C
995	53		DIN 352	Machine taps for ISO metric threads	HSS-E	N	C
998	86			Machine taps for ISO metric threads	HSS-E	N	B
1001	257		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA	B
1002	238		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	VA	B
1004	253		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	VA R40	C
1007	113, 367, 497		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	H	E
1008	364, 477		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	E
1009	369, 492		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	H	E
1010	144			Machine taps for EG-threads	HSS-E	N	B
1011	145			Machine taps for EG-threads	HSS-E	N R40	C
1049	108		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
1057	603		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	TiNi	B
1058	607		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	TiNi	B
1059	611		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	TiNi	B
1060	615		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	TiNi	B
1061	605		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ti R15	C
1062	609		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ti R15	C
1063	613		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ti R15	C
1064	618		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ti R15	C
1065	605		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ni R10	C(K)
1066	609		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ni R10	C(K)
1067	613		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ni R10	C(K)
1068	618		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ni R10	C(K)
1082	373		~DIN 374	Oil feed taps for UNF threads	HSS-E	GG	C
1084	482		DIN 371	Machine taps for ISO metric threads	HSS-E	Ms	E
1085	371		~DIN 371	Oil feed taps for UNC threads	HSS-E	GG	C
1086	371		~DIN 376	Oil feed taps for UNC threads	HSS-E	GG	C
1087	268			Machine taps for NPT-threads	HSS-E	VA R25	C
1088	268			Machine taps for NPT-threads	HSS-E	VA R25	C
1090	113, 367, 496		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	H	C
1091	78, 359, 479		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	H	E
1098	74, 245, 485		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	N R50	C
1100	110, 254, 489		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	N R50	C
1139	75, 247, 486		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	VA R50	C
1142	75, 247, 486		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	VA R50	C
1144	111, 255, 490		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	VA R50	C
1152	74, 245, 485		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	N R50	C
1161	683		~DIN 371	Machine taps for ISO metric fine threads	Solid carbide	H	D
1188	77		DIN 371	Oil feed taps for ISO metric threads	HSS-E-PM	H R15	C
1194	77		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	H R15	C
1200	112		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	H R15	C
1201	680		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H	D
1246	30		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
1249	31		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
1252	60		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
1254	60		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
1255	149, 271, 376, 506		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1256	149, 271, 376, 506		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1257	166, 287, 394, 525		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1258	166, 287, 394, 525		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1266	155, 276, 381, 512, 621		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1267	155, 276, 381, 512, 621		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1268	174, 293, 398, 534, 630		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1269	174, 293, 398, 534, 630		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1270	159, 280, 385, 516, 623		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1271	159, 280, 385, 516, 623		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1272	178, 296, 401, 536, 632		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1273	178, 296, 401, 536, 632		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1275	169, 288, 395, 530		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1277	172, 292, 397, 532		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1283	183, 301, 406, 543		~DIN 371	Fluteless machine taps for UNF-threads	HSS-E	N	C
1285	39		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N	B
1286	39		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	N	B

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1287	40		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N	B
1288	72		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N R40	C
1289	72		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	N R40	C
1290	73		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	N R40	C
1291	98, 248		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	N	B
1292	109		DIN 374	Machine taps for ISO metric fine threads	HSS-E-PM	N R40	C
1293	74, 245, 485		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	N R50	C
1294	110, 254, 489		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E-PM	N R50	C
1347	506		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1565	508		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1566	506		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1567	508		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1568	526		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1569	529		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1575	47		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H	B
1576	47		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H	B
1577	76		DIN 371	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
1578	76		DIN 376	Machine taps for ISO metric threads	HSS-E-PM	H R15	C
1580	529		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1581	181, 299, 404, 541, 635		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric fine threads	Solid carbide	N	C
1582	182, 300, 405, 542		~DIN 371	Fluteless machine taps for UNC-threads	HSS-E	N	C
1583	182, 300, 405, 542		~DIN 376	Fluteless machine taps for UNC-threads	HSS-E	N	C
1584	183, 301, 406, 543		~DIN 371	Fluteless machine taps for UNF-threads	HSS-E	N	C
1585	183, 301, 406, 543		~DIN 374	Fluteless machine taps for UNF-threads	HSS-E	N	C
1586	184, 302, 408, 545		DIN 2189	Fluteless machine taps for BSP-threads	HSS-E	N	C
1587	152		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1588	153		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1589	152		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1590	153		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
1591	169		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1592	171		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1593	169		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
1599	155		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1705	153		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1707	155		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1708	153		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E-PM	N	C
1710	176		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1711	175		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1712	176		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1713	160, 281, 386, 518, 624		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1715	179, 297, 402, 538, 633		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1716	179, 297, 402, 538, 633		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1717	159, 280, 385, 623		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1718	161, 282, 387, 625		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1719	159, 280, 385, 623		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1720	161, 282, 387, 625		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
1721	178, 296, 401, 632		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1723	178, 296, 401, 632		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
1725	159, 280, 385, 516, 623		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1726	161, 282, 387, 519, 625		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1727	159, 280, 385, 516, 623		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1728	161, 282, 387, 519, 625		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	E
1729	178, 296, 401, 536, 632		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1730	179, 297, 402, 538, 633		~DIN 371	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1731	178, 296, 401, 536, 632		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1732	179, 297, 402, 538, 633		~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	E
1740	167, 289, 392, 527		~DIN 371	Fluteless machine taps for ISO metric fine threads	HSS-E-PM	N	C
1818	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	
1819	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	A
1820	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	D
1821	727		DIN 352	Hand taps for ISO metric threads	HSS-E-PM	H	C
1837	124		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C(K)
1838	131		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C(K)
1839	87			Machine combination drill taps for ISO metric threads	HSS-E	N	D
1858	362, 476		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
1859	362, 476		DIN 376	Oil feed taps for ISO metric threads	Solid carbide	H	C
1860	368, 491		DIN 374	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
1861	368, 491		DIN 371	Oil feed taps for ISO metric fine threads	Solid carbide	H	C
1870	236, 473		DIN 371	Machine taps for ISO metric threads	HSS-E	VA	B
1871	240		DIN 371	Machine taps for ISO metric threads	HSS-E	VA AZ	B
1872	236, 473		DIN 376	Machine taps for ISO metric threads	HSS-E	VA	B
1873	256, 487		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA	B

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1874	249		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R15	C
1875	357		DIN 371	Machine taps for ISO metric threads	HSS-E	GGT	C
1876	357		DIN 376	Machine taps for ISO metric threads	HSS-E	GGT	C
1883	362, 476		DIN 376	Oil feed taps for ISO metric threads	Solid carbide	H	C
1890	358		DIN 371	Oil feed taps for ISO metric threads	HSS-E	GG	C
1891	59		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R15	C
1892	243		DIN 371	Oil feed taps for ISO metric threads	HSS-E	VA R40	C
1893	63		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R40	C
1894	83		DIN 371	Oil feed taps for ISO metric threads	HSS-E	H R40	C
1897	358		DIN 376	Oil feed taps for ISO metric threads	HSS-E	GG	C
1898	59		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N R15	C
1899	243		DIN 376	Oil feed taps for ISO metric threads	HSS-E	VA R40	C
1901	83		DIN 376	Oil feed taps for ISO metric threads	HSS-E	H R40	C
1904	366		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E	GG	C
1905	104		DIN 374	Oil feed taps for ISO metric fine threads	HSS-E	N R15	C
1914	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
1915	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
1916	82		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
1917	82		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
1918	356		DIN 371	Machine taps for ISO metric threads	HSS-E	GG	C
1919	356		DIN 376	Machine taps for ISO metric threads	HSS-E	GG	C
1927	164, 285, 390, 523, 628		~DIN 371	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	E
1931	163, 284, 389, 522, 627		~DIN 376	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	C
1970	106		DIN 2181	Machine taps for ISO metric fine threads	HSS-E	N R40	C
1971	102		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
1972	163, 284, 389, 522, 627		~DIN 371	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	C
1977	121		~DIN 371	Machine taps for UNC-threads	HSS-E	N	C
1978	119		~DIN 371	Machine taps for UNC-threads	HSS-E	N R15	C
1979	370		~DIN 371	Machine taps for UNC-threads	HSS-E	GG	C
1980	258, 498		~DIN 371	Machine taps for UNC-threads	HSS-E	VA	B
1981	259, 499		~DIN 371	Machine taps for UNC-threads	HSS-E	VA R40	C
1984	370		~DIN 376	Machine taps for UNC-threads	HSS-E	GG	C
1985	258, 498		~DIN 376	Machine taps for UNC-threads	HSS-E	VA	B
1986	259, 499		~DIN 376	Machine taps for UNC-threads	HSS-E	VA R40	C
1987	126		~DIN 374	Machine taps for UNF-threads	HSS-E	N	C
1988	127		~DIN 374	Machine taps for UNF-threads	HSS-E	N R15	C
1989	372		~DIN 374	Machine taps for UNF-threads	HSS-E	GG	C
1990	260, 500		~DIN 374	Machine taps for UNF-threads	HSS-E	VA	B
1991	261		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R15	C
2008	170, 291, 396, 531		~DIN 374	Fluteless machine taps for ISO metric fine threads	HSS-E	N	C
2012	152, 274, 379, 510		~DIN 371	Fluteless machine taps for ISO metric threads	HSS-E	N	C
2013	152, 274, 379, 510		~DIN 376	Fluteless machine taps for ISO metric threads	HSS-E	N	C
2086	236		DIN 371	Machine taps for ISO metric threads	HSS-E	VA	B
2087	236		DIN 376	Machine taps for ISO metric threads	HSS-E	VA	B
2273	182, 300, 405, 542		~DIN 371	Fluteless machine taps for UNC-threads	HSS-E	N	C
2274	182, 300, 405, 542		~DIN 376	Fluteless machine taps for UNC-threads	HSS-E	N	C
2275	183, 301, 406, 543		~DIN 374	Fluteless machine taps for UNF-threads	HSS-E	N	C
2311	364		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
2424	107		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2425	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2426	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
2427	33		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2428	33		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
2436	59		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R15	C
2437	59		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N R15	C
2438	64		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R40	C
2439	64		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N R40	C
2440	66		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2441	66		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	C
2442	156, 277, 382, 513		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2443	156, 277, 382, 513		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2444	156, 277, 382, 513		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2445	156, 277, 382, 513		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2446	156, 277, 382, 513		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2447	157, 278, 383, 514		~DIN 371	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2448	156, 277, 382, 513		~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2465	45		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
2506	363		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	H	C
2510	364		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	N R15	C
2514	68		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N R40	C
2515	517		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
2516	494		DIN 371	Oil feed taps for ISO metric threads	Solid carbide	N R15	C

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
2517	34		DIN 371	Oil feed taps for ISO metric threads	HSS-E	N	B
2518	151, 273, 378, 509		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric threads	Solid carbide	N	C
2710	45		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
2790	69		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	E
2791	69		DIN 376	Machine taps for ISO metric threads	HSS-E	N R40	E
2792	107		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	E
2838	102		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
2839	120		~DIN 371	Machine taps for UNC-threads	HSS-E	N R15	C
2840	120		~DIN 376	Machine taps for UNC-threads	HSS-E	N R15	C
2841	127		~DIN 374	Machine taps for UNF-threads	HSS-E	N R15	C
2842	135		DIN 5156	Machine taps for BSP-threads	HSS-E	N R15	C
2843	105		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2844	122		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
2845	122		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
2846	128		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C
2847	143		~DIN 371	Machine taps for BSW-threads	HSS-E	N R40	C
2848	143		~DIN 376	Machine taps for BSW-threads	HSS-E	N R40	C
2849	136		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
2850	81		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
2851	81		DIN 376	Machine taps for ISO metric threads	HSS-E	H R40	C
2852	114		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2853	107		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2854	123		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
2855	123		~DIN 371	Machine taps for UNC-threads	HSS-E	N R40	C
2856	123		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
2857	123		~DIN 376	Machine taps for UNC-threads	HSS-E	N R40	C
2859	129		~DIN 374	Machine taps for UNF-threads	HSS-E	N R40	C
2860	137		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
2861	137		DIN 5156	Machine taps for BSP-threads	HSS-E	N R40	C
2862	243		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R40	C
2863	243		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R40	C
2864	251		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R40	C
2865	259		~DIN 371	Machine taps for UNC-threads	HSS-E	VA R40	C
2866	259		~DIN 376	Machine taps for UNC-threads	HSS-E	VA R40	C
2867	262, 501		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R40	C
2868	262		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R40	C
2869	236		DIN 371	Machine taps for ISO metric threads	HSS-E	VA	B
2870	236		DIN 376	Machine taps for ISO metric threads	HSS-E	VA	B
2871	257		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA	B
2872	258		~DIN 371	Machine taps for UNC-threads	HSS-E	VA	B
2873	258		~DIN 376	Machine taps for UNC-threads	HSS-E	VA	B
2874	260		~DIN 374	Machine taps for UNF-threads	HSS-E	VA	B
2875	263		DIN 5156	Machine taps for BSP-threads	HSS-E	VA	B
2876	33		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2877	33		DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
2878	94		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2879	94		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2881	118		~DIN 371	Machine taps for UNC-threads	HSS-E	N	B
2883	118		~DIN 376	Machine taps for UNC-threads	HSS-E	N	B
2885	130		~DIN 374	Machine taps for UNF-threads	HSS-E	N	B
2886	140		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
2887	140		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
2888	91		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2889	117		~DIN 371	Machine taps for UNC-threads	HSS-E	N	B
2890	117		~DIN 376	Machine taps for UNC-threads	HSS-E	N	B
2891	125		~DIN 374	Machine taps for UNF-threads	HSS-E	N	B
2892	142		~DIN 371	Machine taps for BSW-threads	HSS-E	N	B
2893	142		~DIN 376	Machine taps for BSW-threads	HSS-E	N	B
2894	132		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
2895	241		DIN 376	Machine taps for ISO metric threads	HSS-E	VA R15	C
2896	241		DIN 371	Machine taps for ISO metric threads	HSS-E	VA R15	C
2897	249		DIN 374	Machine taps for ISO metric fine threads	HSS-E	VA R15	C
2898	261		~DIN 374	Machine taps for UNF-threads	HSS-E	VA R15	C
2899	484		DIN 376	Oil feed taps for ISO metric threads	HSS-E	N AZ	E
2901	602		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	TiNi	B
2903	606		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	TiNi	B
2905	610		~DIN 371	Machine taps for UNC-threads	HSS-E-PM	TiNi	B
2909	604		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ti R15	C
2910	608		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ti R15	C
2912	612		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ti R15	C
2914	617		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ti R15	C
2916	602		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	TiNi	B

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
2917	606		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	TiNi	B
2918	610		~DIN 371	Machine taps for UNC-threads	HSS-E-PM	TiNi	B
2919	614		~DIN 371	Machine taps for UNF-threads	HSS-E-PM	TiNi	B
2920	604		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E-PM	Ni R10	C(K)
2921	608		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	Ni R10	C(K)
2922	612		~DIN 371/~DIN 376	Machine taps for UNC-threads	HSS-E-PM	Ni R10	C(K)
2923	616		~DIN 371/~DIN 374	Machine taps for UNF-threads	HSS-E-PM	Ni R10	C(K)
2940	114		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2941	43		DIN 371	Machine taps for ISO metric threads	HSS-E	H	B
2942	43		DIN 376	Machine taps for ISO metric threads	HSS-E	H	B
2943	97		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H	B
2944	681		~DIN 371	Machine taps for ISO metric threads	Solid carbide	H	D
2983	99		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H	B
2985	84		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
2986	84		DIN 371	Machine taps for ISO metric threads	HSS-E	H R40	C
2988	116		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2989	116		DIN 374	Machine taps for ISO metric fine threads	HSS-E	H R40	C
2990	41		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2991	41		DIN 371	Machine taps for ISO metric threads	HSS-E	N	B
2993	93		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
2994	73		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2995	73		DIN 371	Machine taps for ISO metric threads	HSS-E	N R40	C
2998	108		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
2999	108		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R40	C
3510	413, 551, 643	1.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3511	414, 552, 644	2xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3512	416, 554, 646	1.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3513	417, 555, 647	2xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3514	202, 320, 429, 565, 657, 693	1.5xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3515	203, 321, 430, 566, 658, 694	2xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3516	195, 313, 420, 558, 650, 689	1.5xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3517	196, 314, 421, 559, 651, 690	2xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3518	198, 316, 423, 561, 653, 691	1.5xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3519	199, 317, 424, 562, 654, 692	2xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3520	206, 324, 426, 569, 661, 695			Thread milling cutters with chamfer for NPT-threads	Solid carbide	TMC SP	
3521	208, 326, 433, 571, 663, 696			Thread milling cutters with chamfer for NPTF-threads	Solid carbide	TMC SP	
3523	434, 572, 664			Universal thread milling cutters for ISO metric threads	Solid carbide	TMU SP	
3524	437, 575, 667			Universal thread milling cutters for BSP-threads	Solid carbide	TMU SP	
3525	188, 306, 413, 551, 643, 685	1.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3526	189, 307, 414, 552, 644, 686	2xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3527	191, 309, 416, 554, 646, 687	1.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3528	192, 310, 417, 555, 647, 688	2xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3529	202, 320, 429, 565, 657, 693	1.5xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3533	203, 321, 430, 566, 658, 694	2xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3534	195, 313, 420, 558, 650, 689	1.5xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3535	196, 314, 421, 559, 651, 690	2xD		Thread milling cutters with chamfer for UNC-threads	Solid carbide	TMC SP	
3536	198, 316, 423, 561, 653, 691	1.5xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3537	199, 317, 424, 562, 654, 692	2xD		Thread milling cutters with chamfer for UNF-threads	Solid carbide	TMC SP	
3538	206, 324, 426, 569, 661, 695			Thread milling cutters with chamfer for NPT-threads	Solid carbide	TMC SP	
3539	208, 326, 433, 571, 663, 696			Thread milling cutters with chamfer for NPTF-threads	Solid carbide	TMC SP	
3541	209, 327, 434, 572, 664, 697			Universal thread milling cutters for ISO metric threads	Solid carbide	TMU SP	
3542	212, 330, 437, 575, 667, 700			Universal thread milling cutters for BSP-threads	Solid carbide	TMU SP	
3543	188, 306, 413, 551, 643, 685	1.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3544	189, 307, 414, 552, 644, 686	2xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3545	191, 309, 416, 554, 646, 687	1.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3546	192, 310, 417, 555, 647, 688	2xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3556	209, 327, 434, 572, 664, 697			Universal thread milling cutters for ISO metric threads	Solid carbide	TMU SP	
3557	212, 330, 437, 575, 667, 700			Universal thread milling cutters for BSP-threads	Solid carbide	TMU SP	
3595	211, 329, 436, 574, 666, 699			Universal thread milling cutters for UN-threads	Solid carbide	TMU UN	
3596	211, 329, 436, 574, 666, 699			Universal thread milling cutters for UN-threads	Solid carbide	TMU UN	
3734	410, 548, 640	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3735	187, 305, 412, 550, 642	2.5xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3737	186, 304, 410, 548, 640	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3740	187, 305, 412, 550, 642	2.5xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3743	186, 304, 410, 548, 640	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
3745	200, 318, 427, 563, 655	2xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3746	201, 319, 428, 564, 656	2.5xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3748	200, 318, 427, 563, 655	2xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3750	201, 319, 428, 564, 656	2.5xD		Thread milling cutters without chamfer for BSP-threads	Solid carbide	TM SP	
3753	205, 323, 425, 568, 660			Thread milling cutters without chamfer for NPT-threads	Solid carbide	TM SP	
3754	205, 323, 425, 568, 660			Thread milling cutters without chamfer for NPT-threads	Solid carbide	TM SP	
3756	207, 325, 432, 570, 662			Thread milling cutters without chamfer for NPTF-threads	Solid carbide	TM SP	

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
3757	207, 325, 432, 570, 662			Thread milling cutters without chamfer for NPTF-threads	Solid carbide	TM SP	
3759	190, 308, 415, 553, 645	2.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3760	190, 308, 415, 553, 645	2.5xD		Thread milling cutters with chamfer for ISO metric threads	Solid carbide	TMC SP	
3762	193, 311, 418, 556, 648	2.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3763	193, 311, 418, 556, 648	2.5xD		Thread milling cutters with chamfer for ISO metric fine threads	Solid carbide	TMC SP	
3765	204, 322, 431, 567, 659	2.5xD		Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3766	204, 322, 431, 567, 659	2.5xD	Company std.	Thread milling cutters with chamfer for BSP-threads	Solid carbide	TMC SP	
3768	213, 331, 438, 576, 668, 701			Universal thread milling cutters for NPT-threads	Solid carbide	TMU SP	
3769	213, 331, 438, 576, 668, 701			Universal thread milling cutters for NPT-threads	Solid carbide	TMU SP	
3772	214, 332, 439, 577, 669, 702			Universal thread milling cutters for NPTF-threads	Solid carbide	TMU SP	
3773	214, 332, 439, 577, 669, 702			Universal thread milling cutters for NPTF-threads	Solid carbide	TMU SP	
3774	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3775	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3776	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3777	443, 581	1.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3778	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3779	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3780	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3781	444, 582	2xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3782	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3783	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3784	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3785	445, 583	2.5xD		Drill thread milling cutters for ISO metric threads	Solid carbide	DTMC SP	
3787	446, 584	1.5xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3788	446, 584	1.5xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3789	446, 584	1.5xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3790	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3791	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3792	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
3793	447, 585	2xD		Drill thread milling cutters for ISO metric fine threads	Solid carbide	DTMC SP	
4127	269			Machine taps for NPTF-threads	HSS-E	VA R25	C
4132	186, 304, 411, 549, 641	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
4133	186, 304, 411, 549, 641	2xD		Thread milling cutters without chamfer for ISO metric threads	Solid carbide	TM SP	
4134	194, 312, 419, 557, 649	2xD		Thread milling cutters without chamfer for UNC-threads	Solid carbide	TM SP	
4135	194, 312, 419, 557, 649	2xD		Thread milling cutters without chamfer for UNC-threads	Solid carbide	TM SP	
4136	197, 315, 422, 560, 652	2xD		Thread milling cutters without chamfer for UNF-threads	Solid carbide	TM SP	
4137	197, 315, 422, 560, 652	2xD		Thread milling cutters without chamfer for UNF-threads	Solid carbide	TM SP	
4138	448, 586	2xD		Drill thread milling cutters for UNC-threads	Solid carbide	DTMC SP	
4139	448, 586	2xD		Drill thread milling cutters for UNC-threads	Solid carbide	DTMC SP	
4140	449, 587	2xD		Drill thread milling cutters for UNF-threads	Solid carbide	DTMC SP	
4141	449, 587	2xD		Drill thread milling cutters for UNF-threads	Solid carbide	DTMC SP	
4143	162, 283, 388, 521, 626			Oil feed fluteless taps f. ISO metric threads	HSS-E-PM	N	C
4145	180, 298, 403, 540, 634			Oil feed fluteless taps f. ISO metric fine threads	HSS-E-PM	N	C
4146	520		~DIN 371/~DIN 376	Oil feed fluteless taps f. ISO metric threads	HSS-E	N	C
4147	537		~DIN 371/~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E	N	C
4151	539		~DIN 371/~DIN 374	Oil feed fluteless taps f. ISO metric fine threads	HSS-E	N	C
4152	546			Oil feed fluteless taps f. BSP-threads	HSS-E	N	C
4153	67			Machine taps for ISO metric threads	HSS-E	N R40	C
4154	48, 242		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	C
4155	48, 242		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	N R15	E
4156	103, 250		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	C
4157	103, 250		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N R15	E
4158	135		DIN 5156	Machine taps for BSP-threads	HSS-E	N R15	E
4159	138, 266, 504		DIN 5156	Machine taps for BSP-threads	HSS-E-PM	VA R40	C
4161	682		DIN 371	Machine taps for ISO metric fine threads	HSS-E-PM	H	D
4162	210, 328, 435, 573, 665, 698			External thread milling cutters	Solid carbide	TMU SP	
4163	210, 328, 435, 573, 665, 698			External thread milling cutters	Solid carbide	TMU SP	
4165	78, 359, 479		DIN 376	Oil feed taps for ISO metric threads	HSS-E-PM	H	E
4218	38, 239		DIN 371/DIN 376	Machine taps for ISO metric threads	HSS-E	N	B
4219	90, 248		DIN 374	Machine taps for ISO metric fine threads	HSS-E	N	B
4220	134, 264		DIN 5156	Machine taps for BSP-threads	HSS-E	N	B
4225	217, 335, 442, 580, 639	3xD		Micro-thread milling cutters	Solid carbide	SP M/MF	
4226	215, 333, 440, 578, 637	3xD		Micro-thread milling cutters	Solid carbide	SP M	
4227	703	3xD		Micro-thread milling cutters	Solid carbide	SP M	
4228	216, 334, 441, 579, 638	3xD		Micro-thread milling cutters	Solid carbide	SP G	

Article no.	Page	Drilling depth	Standard	Description	Tool material	Type	Form
4206	756			Quick change tapping chuck adaptors			
4298	764			MQL synchro tapping chucks HSK-A for manual tool change		HSK-A	
4305	766			MQL setting screws with int. cone for MQL synchro tapping chucks			
4306	769			Retaining nuts, system DIN ISO 15488			
4308	753			Tapping collets			
4326	751			Synchro tapping chucks with straight shank		cyl.	
4327	751			HSK-A synchro tapping chucks		HSK-A	
4328	755			HSK-A quick change tapping chucks with internal cooling		HSK-A	
4330	764			MQL 1-channel synchro tapping chucks HSK-A for automatic tool change		HSK-A	
4335	770			Sealing washers			
4340	754			Quick change tapping chucks without internal cooling			
4341	765			MQL 2-channel synchro tapping chucks HSK-A for automatic tool change		HSK-A	
4342	755			Quick change tapping chucks with internal cooling			
4343	754			HSK-A adaptors for tapping chucks		HSK-A	
4364	750			Setting screws “faces” synchro tapping chucks for internal cooling			
4508	767			MQL 1-channel coolant delivery set HSK-A		HSK-A	
4511	767			MQL 2-channel coolant delivery set HSK-A		HSK-A	
4513	768			MQL coolant delivery set HSK-A (filler)		HSK-A	
4524	763			MQL hydraulic synchro tapping chucks with internal cooling		cyl.	
4525	745			Straight shank hydraulic synchro tapping chucks for internal cooling		cyl.	
4576	743			ISO taper hydraulic synchro tapping chucks with internal cooling		SK	
4577	744			MAS/BT hydraulic synchro tapping chucks with internal cooling		BT	
4601	742			HSK-A hydraulic synchro tapping chucks with internal cooling		HSK-A	
4602	760			MQL HSK-A 1-channel hydraulic synchro tapping chucks (for auto. tool change)		HSK-A	
4603	761			MQL HSK-A 2-channel hydraulic synchro tapping chucks (for auto. tool change)		HSK-A	
4604	762			MQL HSK-A hydraulic synchro tapping chucks (for manual tool change)		HSK-A	
4605	746, 747			Reduction bushes, sealed, for hydraulic synchro tapping chucks			
4606	748, 749			GÜHROJET reduction bushes for hydraulic synchro tapping chucks			
4913	770			Clamping key			



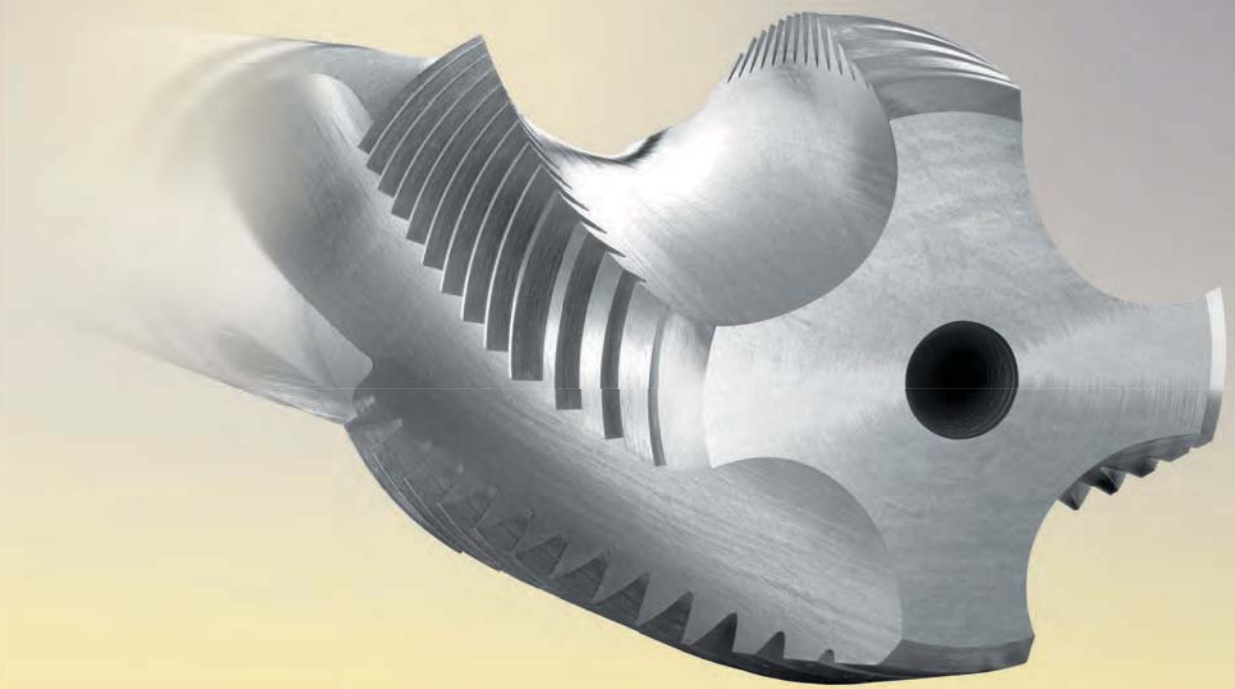
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GUHRING KG | Telephone: + 49 74 31 17-0 | Fax: + 49 74 31 17-21279

Herderstraße 50-54 | 72458 Albstadt | Germany | info@guehring.de | www.guehring.de