



BERLIN CARBIDE
GERMAN CARBIDE



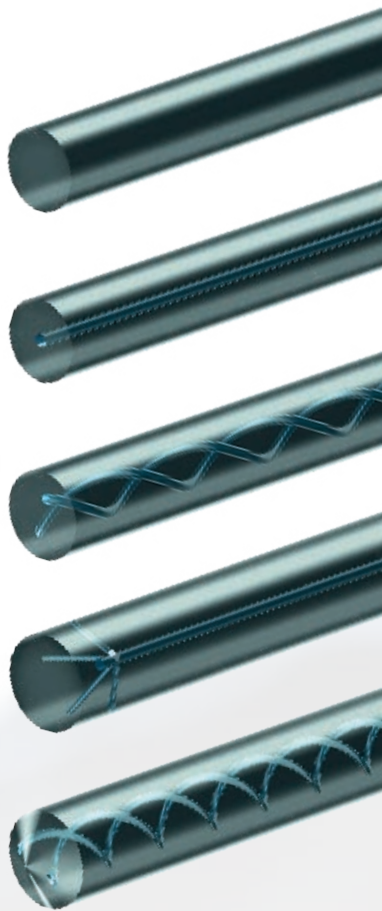
KATALOG
CATALOGUE

HARTMETALLE
FÜR PRÄZISIONSWERKZEUGE

CARBIDES
FOR PRECISION CUTTING TOOLS

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Hartmetall aus Berlin – Tradition und Innovation vereint *Carbide from Berlin – tradition and innovation combined*

Die Marke „BERLIN CARBIDE“ liefert höchste Hartmetallqualität aus der deutschen Hauptstadt für Kundenansprüche aus der ganzen Welt.

Als Teil des größten deutschen Werkzeugherstellers – der „Gühring KG“ – produziert der Geschäftsbereich Hartstoffe der „G-ELIT Präzisionswerkzeuge GmbH“ verschiedenste Hartmetallqualitäten unter anderem für die Anwendungsbereiche Luftfahrt, Automobil, Maschinenbau und Unterhaltungselektronik.

In unseren denkmalgeschützten Hallen produzieren wir als eines der 200 größten Berliner Unternehmen mitten in der Hauptstadt mit einem Team von rund 400 Mitarbeitern ca. 1.600 Tonnen Hartmetall pro Jahr. Die vollverglasten Fassaden im Bauhausstil geben unserer Produktionsstätte dabei ihren eigenen, unvergleichlichen Charme.

The brand “BERLIN CARBIDE” delivers the highest carbide grade quality to meet customer demands worldwide directly from Germany's capital.

As part of "Gühring KG", the largest German tool manufacturer, the carbide division of "G-ELIT Präzisionswerkzeuge GmbH" produces a wide range of cemented carbide grades for applications in the area of aerospace, automotive, engineering and consumer electronics, among others.

In our heritage-protected production hall as one of the 200 largest Berlin companies, we produce in the middle of the capital with a team of around 400 employees about 1,600 tonnes of carbide per year. The fully glazed facades in Bauhaus style give our production facility its own incomparable charm.

Mit „Blick aufs Grüne“ in den historischen Fabrikgarten setzen wir die Tradition des Geländes und der Gebäude fort, stellen uns aber gleichzeitig für die Zukunft und Ihre Anforderungen auf.

Egal, ob Rohlinge für rotierende Werkzeuge oder speziell auf Ihre Bedürfnisse zugeschnittene Geometrien: Dank unserer modernen, fortschrittlichen und teilautomatisierten Strang- und Trockenpressen in Verbindung mit der flexiblen Formgebung ermöglichen wir selbst anspruchsvollste Form- und Bauteile.

Gerne können Sie sich vor Ort von unserer Leistung überzeugen und uns dazu in der Bundeshauptstadt Berlin besuchen!

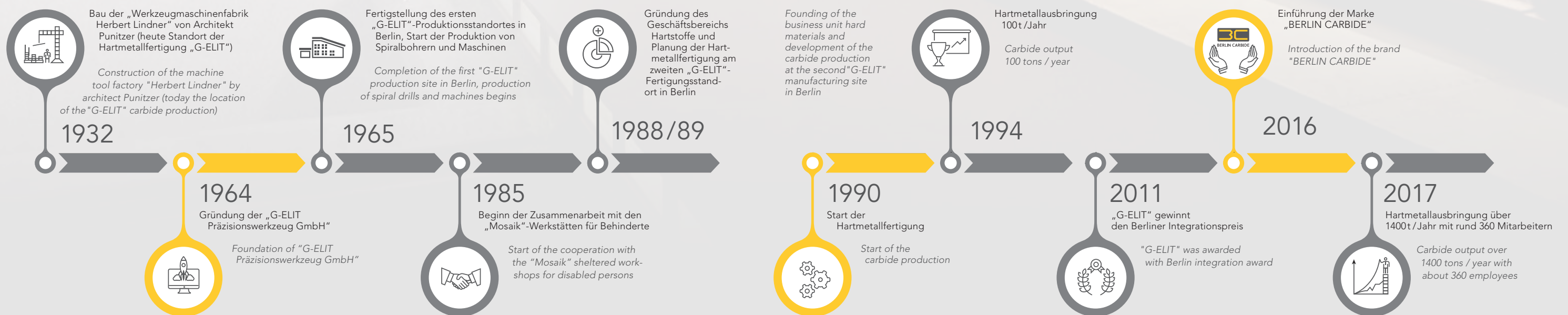
With a view of the countryside into the historical factory garden, we pursue on the one hand the tradition of the terrain and the buildings, but on the other hand at the same time we stand up for the future and your demands.

Whether blanks for rotating cutting tools or customised geometries, our state-of-the-art, advanced and semi-automated extrusion and dry presses, combined with the flexible preforming department, allow us to create even the most challenging moulded and component parts.

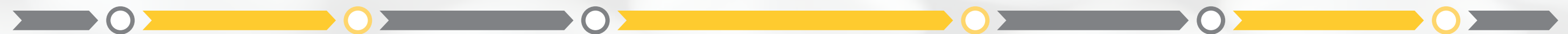
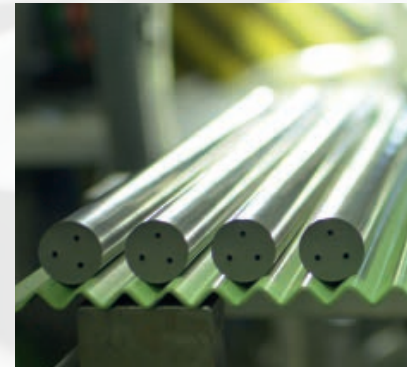
You are invited to convince yourself of our performance on site and visit us in the federal capital Berlin!



Meilensteine | Milestones



Vom Pulver zum Hartmetall-Rohling *From the powder to the carbide blank*



MISCHEN & MAHLEN

Zunächst werden Wolframkarbid, Kobalt, und Dotierkarbide nach speziellen Rezepturen verwogen. Diese Mischungen werden mehrere Stunden in Attritoren gemahlen und danach gesiebt bzw. sprühtrocknet, um Pulver oder Granulate für die verschiedenen Fertigungstechnologien zu erhalten.

MIXING & MILLING

Firstly tungsten carbide, cobalt and doping elements are mixed according to our special recipes. This mixture is then ball-milled for several hours and afterwards sieved or spray-dried to get powder or granulate for our different production technologies.

KNETEN

Durch Hinzugabe organischer Additive wird die Mischung in unseren Knetern zu einer extrusionsfähigen Masse weiterverarbeitet.

KNEADING

With the help of organic additives, the powder is plasticised in our kneaders into a clay-like dough that can be extruded.

STRANGPRESSEN

Mittels unserer innovativen Presstechnik können aus dem plastifizierten Material anschließend die unterschiedlichsten Innen- und Außengeometrien hergestellt werden.

EXTRUDING

Through our innovative pressing technology different inner and outer geometries can be realized out of the plasticised mixture.

TROCKNEN

Danach wird ein Teil der zugebenen Flüssigkeit unter streng kontrollierten Bedingungen in der Klimakammer und speziellen Trocknungsöfen langsam aus den Produkten entfernt. Die Trocknungsdauer ist dabei abhängig vom Außendurchmesser des Stabes.

DRYING

Subsequently, part of the added liquids must be slowly removed from the product under strictly controlled conditions in our climate chamber and special drying furnaces. The drying time depends on the outer diameter.

SINTERN

Bei ca. 1380 °C schmilzt das Kobalt und fließt in die Lücken zwischen den Wolframkarbid-Körnern. Der Sinter-HIP-Prozess führt zu porenfreien Formteilen und der Schwund kann bei den Produkten bis zu 25% betragen.

SINTERING

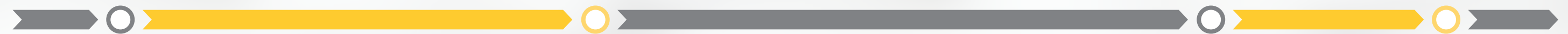
The cobalt melts at about 1380 °C and flows into the free spaces between the tungsten carbide grains. Sinter-HIP process results in non-porous molded parts and shrinkage of the products amounts up to 25%.

SCHLEIFEN

Nach umfassenden Qualitätskontrollen wandern die Stäbe entweder in unser modernes Logistikzentrum oder werden in der Centerless-Schleiferei veredelt.

GRINDING

After passing a last rigorous inspection the rods are then either stocked in our warehouse or refined in our centerless-grinding department.



TROCKENPRESSEN

Vom Pulver zum Grünling: In Sekunden-schnelle pressen Stempel und Matrize Teile verschiedenster Geometrien in Form – bis zu 10 Teile pro Minute.

DRY-PRESSING

From the powder to the green body: Within seconds punches and dies press parts of different geometries into shape - up to 10 pieces per minute.

Technische Daten

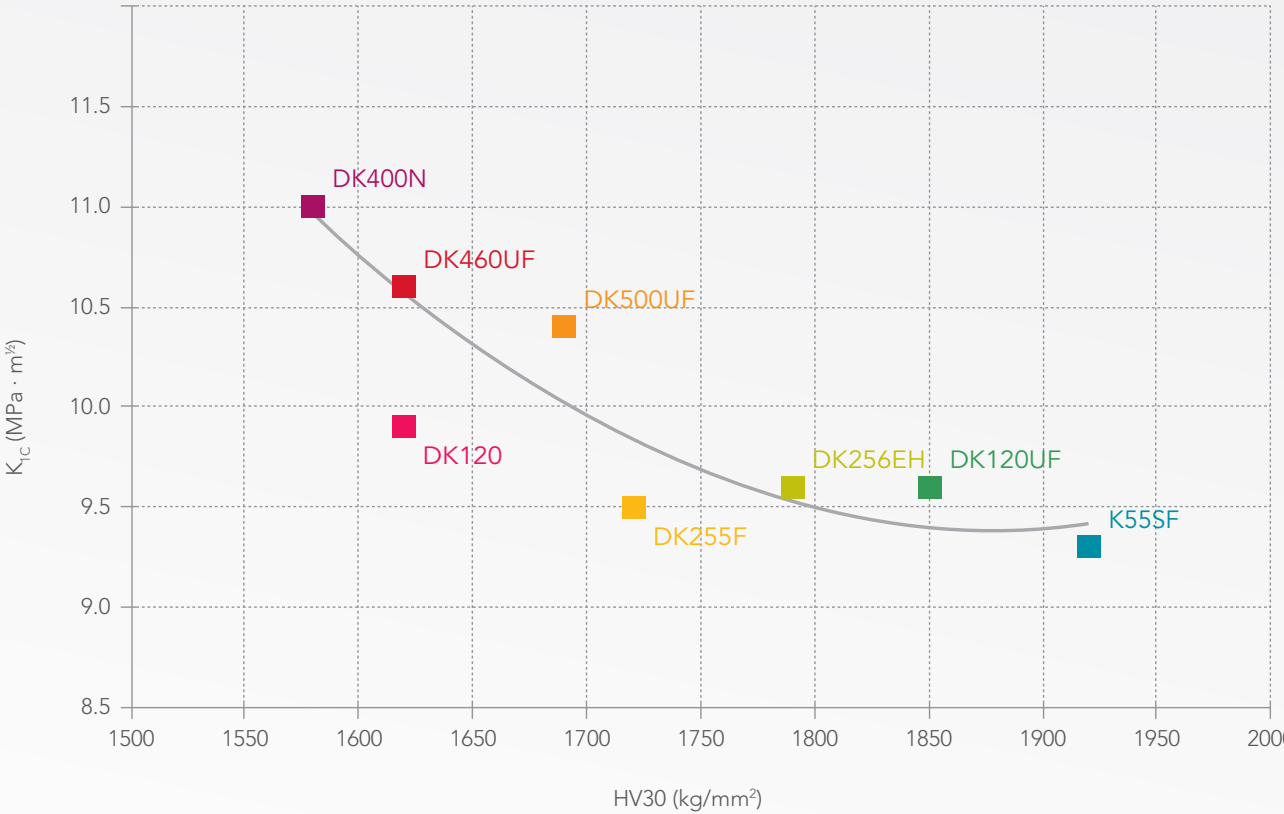
Technical data

Sorte Grade		DK400N	DK120	DK460UF	DK500UF	DK255F	DK256EH	DK120UF	K55SF
Klassifizierung Classification		K20-K40	K15-K20	K20-K40	K20-K30	K20	K20	K10	K05-K10
Co	%	10.0	6.0	10.0	12.0	8.0	8.0	7.0	9.0
WC inkl. Dotierung WC incl. doping	%	90.0	94.0	90.0	88.0	92.0	92.0	93.0	91.0
Dichte Density	g/cm³	14.50	14.95	14.45	14.05	14.55	14.60	14.70	14.35
Härte HV30 Hardness HV30	kg/mm²	1580	1620	1620	1690	1720	1790	1850	1920
Bruchzähigkeit K _{IC} Fracture toughness	MPa · m½	11.0	9.9	10.6	10.4	9.5	9.6	9.6	9.3
Biegebruchfestigkeit Transverse rupture strength	N/mm²	4100	3200	4100	4200	3800	3700	3500	3800
Mittlere Korngröße Average grain size	µm	0.70	1.20	0.60	0.50	0.70	0.60	0.70	0.20

Auf Grund der Abhängigkeit der gemessenen Werte des kritischen Intensitätsfaktors K_{IC} von der Probengeometrie und der Probenpräparation sind die gemessenen Werte nur mit Werten vergleichbar, die unter gleichen Bedingungen ermittelt wurden. Gültige Porosität für alle Sorten: A <02 / B 00 / C 00.
Due to the dependence of the fracture toughness K_{IC} on sample dimensions and sample finishing, the specified values can only be compared with values measured under the same conditions. Valid porosity for all grades: A <02 / B 00 / C 00.

Bruchzähigkeit gg. Härte

Fracture toughness vs. hardness



Anwendungen

Applications

Sorte Grade		DK400N	DK120	DK460UF	DK500UF	DK255F	DK256EH	DK120UF	K55SF
	ISO								
Bohren Drilling		•	•	•	•	•	•	•	•
Fräsen End Milling		•		•	•	•	•		•
Reiben Reaming								•	
Gewindeschneiden Tapping		•	•	•	•			•	
reine, unlegierte Stähle carbon steel	P	•		•					
niedriglegierte Stähle low-alloyed steel	P	•		•	•				
hochlegierte Stähle (Werkzeug- und Formbaustähle) high-alloyed steel (tool and sectional steel)	P				•		•	•	•
Edelstähle – Austenitisch austenitic stainless steel	M	•		•	•	•	•	•	
Edelstähle – Ferritisch & Martensitisch ferritic & martensitic stainless steel	M			•	•		•	•	
Grauguss grey cast iron	K			•	•	•			
Temperguss malleable cast iron	K			•	•	•			
Aluminiumlegierungen aluminium alloys	N					•			•
Kupferlegierungen copper alloys	N			•					
Superlegierungen (auf Fe-/Ni-/Co-/Ti-Basis) superalloys (Fe-/Ni-/Co-/Ti-based)	S	•		•	•		•	•	
gehärtete Metalle (weißes/gehärtetes Gusseisen) hardened metals (white/chilled cast iron)	H				•	•	•		•
GFK GRP					•		•	•	•
CFK CFRP					•		•	•	•
Verbundwerkstoffe composite materials				•	•			•	•
Kunststoffe plastics				•					•
Buntmetalle non-ferrous metals						•			
Holz wood				•		•			
Graphit graphite			•*					•	•

* Diamantbeschichtung | * Diamond Coating

Luftfahrt, Automobil, Maschinenbau oder Unterhaltungselektronik – wir bieten die richtige Lösung für jede Ihrer Anwendungen.

Aerospace, automotive, engineering or consumer electronics – we provide the right solution for each of your applications.



Rundstäbe, roh

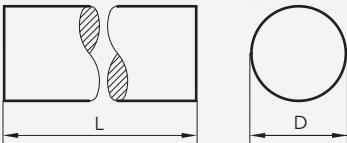
Rods, raw



D mm		Code	DK120 7021	DK460UF 7014 7352		DK500UF 7367	DK255F 7022	DK120UF 7016	K55SF 7187
			330mm	330mm	415mm	330mm	330mm	330mm	330mm
1.2	+0.30	1.200		•					•
1.7	+0.30	1.700		•					•
2.2	+0.30	2.200	•	•			•	•	•
2.7	+0.30	2.700	•	•			•	•	•
3.2	+0.30	3.200	•	•		•	•	•	•
3.7	+0.30	3.700	•	•			•	•	•
4.2	+0.30	4.200	•	•		•	•	•	•
4.7	+0.30	4.700	•	•			•	•	•
5.2	+0.30	5.200	•	•		•	•	•	•
5.7	+0.30	5.700	•	•			•	•	•
6.2	+0.30	6.200	•	•	•	•	•	•	•
6.7	+0.30	6.700	•	•			•	•	•
7.2	+0.30	7.200	•	•			•	•	•
7.7	+0.30	7.700		•					•
8.2	+0.30	8.200	•	•	•	•	•	•	•
8.7	+0.30	8.700	•	•			•	•	•
9.2	+0.30	9.200	•	•			•	•	•
9.7	+0.30	9.700	•	•					•
10.2	+0.40	10.200	•	•	•	•	•	•	•
10.7	+0.40	10.700		•			•		•
11.2	+0.40	11.200	•	•			•	•	•
11.7	+0.40	11.700		•					•
12.2	+0.50	12.200	•	•	•	•	•	•	•
12.7	+0.50	12.700		•				•	•
13.2	+0.50	13.200	•	•			•	•	•
13.7	+0.50	13.700		•					•
14.2	+0.60	14.200	•	•	•	•	•	•	•
14.7	+0.60	14.700		•					•
15.2	+0.60	15.200	•	•			•		•
15.7	+0.60	15.700		•					
16.2	+0.60	16.200	•	•	•	•	•	•	•
16.7	+0.60	16.700	•	•					
17.2	+0.60	17.200	•	•					•
17.7	+0.60	17.700		•					
18.2	+0.60	18.200	•	•	•	•	•	•	•
18.7	+0.60	18.700		•					

D mm		Code	DK120 7021	DK460UF 7014 7352		DK500UF 7367	DK255F 7022	DK120UF 7016	K55SF 7187
			330mm	330mm	415mm	330mm	330mm	330mm	330mm
19.2	+0.60	19.200		•					•
19.7	+0.60	19.700		•					
20.2	+0.60	20.200	•	•	•	•	•	•	
20.7	+0.60	20.700		•					
21.2	+0.60	21.200	•	•					
22.2	+0.60	22.200	•	•					
23.2	+0.60	23.200		•					
24.2	+0.70	24.200		•					
25.2	+0.70	25.200	•	•	•	•	•	•	•
26.2	+0.70	26.200		•			•		
27.2	+0.70	27.200		•					
28.2	+0.80	28.200		•					
29.2	+0.80	29.200		•					
30.2	+0.80	30.200		•	•				
32.2	+0.80	32.200	•	•	•		•		
34.2	+0.80	34.200		•					
35.2	+0.80	35.200		•					
36.2	+0.80	36.200		•					
38.2	+0.80	38.200		•					
40.2	+0.80	40.200		•					

Bemaßung | Dimensioning



Rundstäbe, geschliffen h6

Rods, ground to tolerance h6



D h6 mm		Code	DK120 7031	7075	DK460UF 7354	7085	DK500UF 7372	DK255F 7032	K555F 7187
			330mm	330mm	415mm	100mm	330mm	330mm	330mm
1.0	1.000			•					
1.5	1.500			•					
2.0	2.000			•					
3.0	3.000		•	•		•	•	•	•
3.5	3.500		•	•					
4.0	4.000		•	•		•	•	•	•
4.5	4.500			•					
5.0	5.000		•	•		•	•	•	•
5.5	5.500		•	•					
6.0	6.000		•	•	•	•	•	•	•
6.5	6.500			•					
7.0	7.000			•		•			•
7.5	7.500			•					
8.0	8.000		•	•	•	•	•	•	•
8.5	8.500			•					
9.0	9.000			•		•	•	•	•
9.5	9.500			•					•
10.0	10.000		•	•	•	•	•	•	•
10.5	10.500			•					
11.0	11.000			•					
11.5	11.500			•					
12.0	12.000		•	•	•	•	•	•	•
12.5	12.500			•					
13.0	13.000		•	•					•
14.0	14.000		•	•	•	•	•	•	•
15.0	15.000			•		•			
16.0	16.000		•	•	•	•	•	•	•
17.0	17.000			•					
18.0	18.000		•	•	•	•	•	•	•
19.0	19.000			•					
20.0	20.000		•	•	•	•	•	•	•
21.0	21.000			•					
22.0	22.000			•					
23.0	23.000			•					
24.0	24.000			•					
25.0	25.000		•	•		•	•	•	•

D h6 mm		Code	DK120 7031	7075	DK460UF 7354	7085	DK500UF 7372	DK255F 7032	K555F 7187
			330mm	330mm	415mm	100mm	330mm	330mm	330mm
26.0	26.000			•					
27.0	27.000			•					
28.0	28.000			•					
30.0	30.000			•					
31.0	31.000			•					
32.0	32.000			•				•	
34.0	34.000			•					
35.0	35.000			•					
36.0	36.000			•					
40.0	40.000			•					

Rundstäbe, geschliffen h6

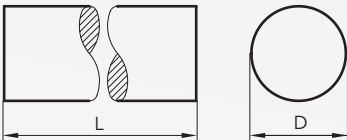
■ in Zoll

Rods, ground to tolerance h6

■ in inches

D h6 inches / mm			Code	DK460UF 7932
				330mm / 13 inches
1/8	3.175	3.170		•
3/16	4.763	4.760		•
1/4	6.350	6.350		•
5/16	7.938	7.930		•
3/8	9.525	9.520		•
7/16	11.113	11.110		•
1/2	12.700	12.700		•
9/16	14.288	14.280		•
5/8	15.875	15.870		•
3/4	19.050	19.050		•
7/8	22.225	22.220		•
1	25.400	25.400		•

Bemaßung | Dimensioning



Rundstäbe, roh

■ mit 1 Zentralbohrung

Rods, raw

■ with 1 central coolant duct

D mm	d mm	a mm	Code	DK460UF 7387	DK460UF 7987	DK120UF 7380
				330mm	415mm	330mm
4.5 +0.30	0.60 ±0.10	0.07	4.500	•		
6.3 +0.30	1.00 ±0.15	0.07	6.300	•	•	
6.3 +0.30	1.80 ±0.15	0.07	6.301	•		
8.3 +0.30	1.30 ±0.15	0.07	8.300	•	•	
8.3 +0.30	2.50 ±0.20	0.07	8.301	•		
10.3 +0.40	2.00 ±0.20	0.10	10.300	•	•	
10.3 +0.40	3.00 ±0.25	0.10	10.301	•		
12.3 +0.40	2.00 ±0.20	0.10	12.300	•	•	
12.3 +0.40	3.00 ±0.25	0.10	12.301	•		
13.3 +0.40	2.00 ±0.20	0.12	13.300	•		
14.3 +0.40	2.00 ±0.20	0.12	14.300	•	•	
14.3 +0.40	3.00 ±0.25	0.12	14.301	•		
14.3 +0.40	1.50 ±0.20	0.12	14.302	•		
16.3 +0.50	2.00 ±0.20	0.12	16.300	•	•	
16.3 +0.50	2.50 ±0.20	0.12	16.301	•		
16.3 +0.50	4.00 ±0.30	0.12	16.302	•		
16.3 +0.50	3.00 ±0.25	0.12	16.304	•	•	
18.3 +0.50	3.00 ±0.25	0.15	18.300	•	•	
20.3 +0.50	3.00 ±0.25	0.15	20.300	•	•	
22.3 +0.50	3.00 ±0.25	0.15	22.300	•		
24.3 +0.50	4.00 ±0.30	0.15	24.300	•		
25.3 +0.50	4.00 ±0.30	0.15	25.300	•	•	
25.3 +0.50	3.00 ±0.25	0.15	25.301	•	•	
26.3 +0.50	4.00 ±0.30	0.15	26.300	•		
28.3 +0.50	4.00 ±0.30	0.15	28.300	•		
30.3 +0.50	5.00 ±0.35	0.15	30.300	•		
32.3 +0.50	5.00 ±0.35	0.15	32.300	•	•	
4.5 +0.30	1.00 ±0.10	0.07	4.500			•
6.3 +0.30	1.30 ±0.15	0.07	6.300			•
8.3 +0.30	2.00 ±0.20	0.07	8.300			•
10.3 +0.40	2.50 ±0.25	0.10	10.300			•
12.3 +0.40	3.00 ±0.25	0.10	12.300			•
14.3 +0.40	3.00 ±0.25	0.12	14.300			•
16.3 +0.50	3.50 ±0.30	0.12	16.300			•
18.3 +0.50	3.50 ±0.30	0.15	18.300			•
20.3 +0.50	4.00 ±0.30	0.15	20.300			•

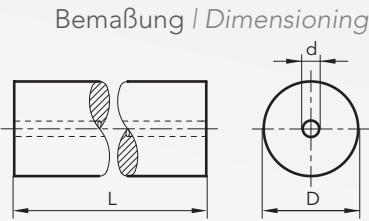
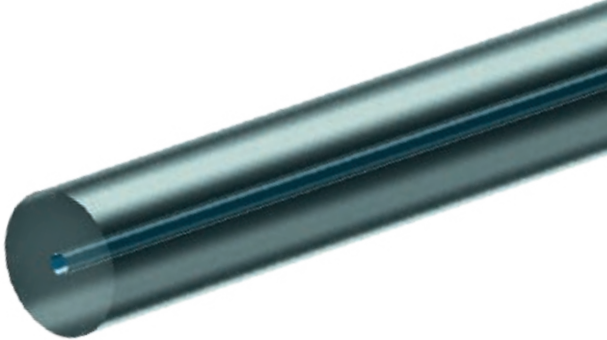
Rundstäbe, geschliffen h6

■ mit 1 Zentralbohrung

Rods, ground to tolerance h6

■ with 1 central coolant duct

D h6 mm	d mm	a mm	Code	DK460UF 7339
				330mm
4.0	0.60 ±0.10	0.07	4.000	•
6.0	1.00 ±0.15	0.07	6.000	•
6.0	1.80 ±0.15	0.07	6.001	•
8.0	1.30 ±0.15	0.07	8.000	•
8.0	2.50 ±0.20	0.07	8.001	•
10.0	2.00 ±0.20	0.10	10.000	•
10.0	3.00 ±0.25	0.10	10.001	•
12.0	2.00 ±0.20	0.10	12.000	•
12.0	3.00 ±0.25	0.10	12.001	•
14.0	2.00 ±0.20	0.12	14.000	•
14.0	3.00 ±0.25	0.12	14.001	•
16.0	2.00 ±0.20	0.12	16.000	•
16.0	2.50 ±0.20	0.12	16.001	•
16.0	4.00 ±0.30	0.12	16.002	•
16.0	3.00 ±0.25	0.12	16.004	•
18.0	3.00 ±0.25	0.15	18.000	•
20.0	3.00 ±0.25	0.15	20.000	•
22.0	3.00 ±0.25	0.15	22.000	•
24.0	4.00 ±0.30	0.15	24.000	•
25.0	4.00 ±0.30	0.15	25.000	•
25.0	3.00 ±0.30	0.15	25.001	•
26.0	4.00 ±0.30	0.15	26.000	•
28.0	4.00 ±0.30	0.15	28.000	•
30.0	5.00 ±0.35	0.15	30.000	•
32.0	5.00 ±0.35	0.15	32.000	•

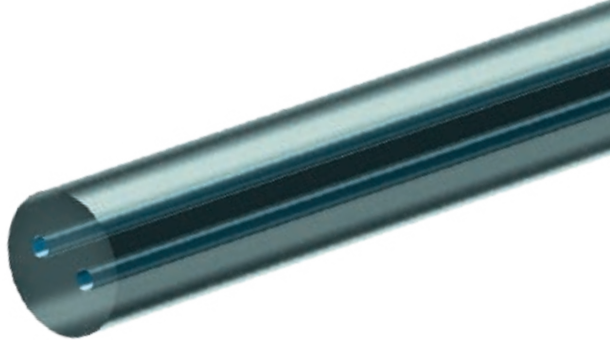


Rundstäbe, roh

mit 2 parallelen Kühlkanälen

Rods, raw

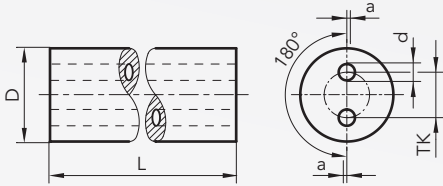
with 2 parallel coolant ducts



D mm	TK BC mm	d mm	a mm	Code	DK460UF	
					7301	7309
					330mm	415mm
4.2 +0.30	1.80 −0.15	0.80 ±0.10	0.10	4.200	•	
4.2 +0.30	2.25 −0.15	0.60 −0.05	0.10	4.201	•	
5.2 +0.30	2.00 −0.15	0.80 ±0.10	0.13	5.200	•	
6.3 +0.30	1.50 −0.20	0.80 ±0.10	0.15	6.300	•	
6.3 +0.30	3.00 −0.20	1.00 ±0.10	0.15	6.301	•	•
6.3 +0.30	1.50 −0.20	0.60 ±0.10	0.15	6.302	•	
6.3 +0.30	1.55 −0.20	0.65 ±0.15	0.08	6.303	•	
6.3 +0.30	1.70 −0.10	0.70 ±0.10	0.15	6.304	•	
6.3 +0.30	2.00 −0.15	0.80 ±0.05	0.15	6.305	•	
6.3 +0.30	2.40 −0.30	1.00 ±0.15	0.15	6.306	•	
7.3 +0.30	1.80 −0.20	0.80 ±0.10	0.15	7.300	•	
7.3 +0.30	3.50 −0.20	1.00 ±0.15	0.15	7.301	•	
8.3 +0.30	1.50 −0.20	0.80 ±0.15	0.15	8.300	•	•
8.3 +0.30	2.60 −0.30	1.00 ±0.15	0.20	8.301	•	•
8.3 +0.30	4.00 −0.30	1.00 ±0.15	0.15	8.302	•	•
8.3 +0.30	2.00 −0.30	0.80 ±0.15	0.15	8.303	•	
9.3 +0.30	2.60 −0.30	1.00 ±0.15	0.20	9.300	•	
9.3 +0.30	4.00 −0.30	1.40 ±0.15	0.20	9.301	•	
10.3 +0.30	2.60 −0.30	1.00 ±0.15	0.20	10.300	•	•
10.3 +0.30	5.00 −0.30	1.40 ±0.15	0.20	10.301	•	•
10.3 +0.30	3.50 −0.20	1.20 ±0.15	0.15	10.302	•	
11.3 +0.40	3.50 −0.30	1.20 ±0.15	0.28	11.300	•	
11.3 +0.40	5.00 −0.30	1.40 ±0.15	0.28	11.301	•	
12.3 +0.40	3.50 −0.30	1.20 ±0.15	0.30	12.300	•	•
12.3 +0.40	6.00 −0.30	1.75 ±0.15	0.30	12.301	•	•
13.3 +0.40	3.50 −0.30	1.20 ±0.15	0.34	13.300	•	
13.3 +0.40	6.00 −0.30	1.75 ±0.15	0.34	13.301	•	
14.3 +0.40	5.00 −0.30	1.50 ±0.15	0.37	14.300	•	•
14.3 +0.40	7.00 −0.30	1.75 ±0.15	0.37	14.301	•	•
15.3 +0.40	5.00 −0.30	1.50 ±0.15	0.40	15.300	•	
15.3 +0.40	7.00 −0.30	2.00 ±0.20	0.40	15.301	•	
16.3 +0.40	5.00 −0.30	1.50 ±0.15	0.40	16.300	•	•
16.3 +0.40	8.00 −0.30	2.00 ±0.20	0.40	16.301	•	•
17.3 +0.50	6.20 −0.30	2.00 ±0.20	0.47	17.300	•	
17.3 +0.50	8.00 −0.30	2.00 ±0.20	0.47	17.301	•	

D mm	TK BC mm	d mm	a mm	Code	DK460UF	
					7301	7309
					330 mm	415 mm
18.3 +0.50	6.20 -0.30	2.00 ±0.20	0.50	18.300	•	•
18.3 +0.50	9.00 -0.30	2.00 ±0.20	0.50	18.301	•	•
19.3 +0.50	6.20 -0.30	2.00 ±0.20	0.50	19.300	•	
19.3 +0.50	9.00 -0.30	2.00 ±0.20	0.50	19.301	•	
20.4 +0.50	3.50 -0.30	1.50 ±0.15	0.34	20.402	•	
20.4 +0.50	6.20 -0.40	2.00 ±0.20	0.50	20.400	•	•
20.4 +0.50	10.00 -0.40	2.50 ±0.25	0.50	20.401	•	•
21.4 +0.50	6.20 -0.40	2.00 ±0.20	0.50	21.400	•	
21.4 +0.50	10.00 -0.40	2.50 ±0.25	0.50	21.401	•	
22.4 +0.50	6.20 -0.40	2.00 ±0.20	0.50	22.400	•	
22.4 +0.50	11.00 -0.40	2.50 ±0.25	0.50	22.401	•	
23.4 +0.50	7.50 -0.40	2.00 ±0.20	0.50	23.400	•	
23.4 +0.50	11.00 -0.40	2.50 ±0.25	0.50	23.401	•	
24.4 +0.50	7.50 -0.40	2.00 ±0.20	0.50	24.400	•	
24.4 +0.50	12.00 -0.50	3.00 ±0.25	0.50	24.401	•	
25.4 +0.50	7.50 -0.40	2.00 ±0.20	0.50	25.400	•	•
25.4 +0.50	12.00 -0.50	3.00 ±0.25	0.50	25.401	•	•
26.4 +0.50	7.50 -0.40	2.00 ±0.20	0.50	26.400	•	
26.4 +0.50	13.00 -0.50	3.00 ±0.25	0.50	26.401	•	
28.4 +0.50	9.00 -0.40	2.50 ±0.25	0.50	28.400	•	
28.4 +0.50	14.00 -0.50	3.00 ±0.25	0.50	28.401	•	
30.4 +0.50	9.00 -0.40	2.50 ±0.25	0.50	30.401	•	
30.4 +0.50	14.00 -0.50	3.00 ±0.25	0.50	30.400	•	
32.4 +0.50	9.00 -0.40	2.50 ±0.25	0.50	32.400	•	•
32.4 +0.50	14.00 -0.50	3.00 ±0.25	0.50	32.401	•	•

Bemaßung | Dimensioning

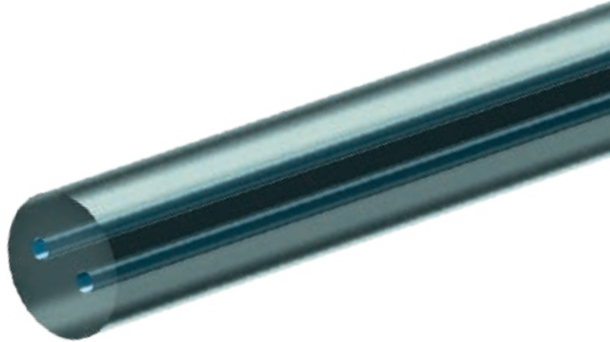


Rundstäbe, geschliffen h6

■ mit 2 parallelen Kühlkanälen

Rods, ground to tolerance h6

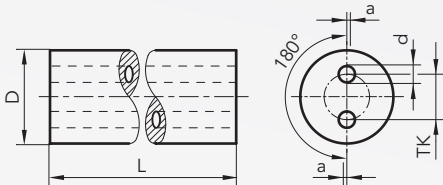
■ with 2 parallel coolant ducts



D h6 mm	TK BC mm	d mm	a mm	Code	DK460UF 7302
					330mm
4.0	1.80 -0.15	0.80 ±0.10	0.10	4.000	•
5.0	2.00 -0.15	0.80 ±0.10	0.13	5.000	•
6.0	1.50 -0.20	0.80 ±0.10	0.15	6.000	•
6.0	3.00 -0.20	1.00 ±0.10	0.15	6.001	•
6.0	2.00 -0.15	0.80 ±0.05	0.15	6.005	•
6.0	2.40 -0.30	1.00 ±0.10	0.15	6.006	•
7.0	1.80 -0.20	0.80 ±0.10	0.15	7.000	•
7.0	3.50 -0.20	1.00 ±0.15	0.15	7.001	•
8.0	1.50 -0.20	0.80 ±0.15	0.15	8.000	•
8.0	2.60 -0.30	1.00 ±0.15	0.20	8.001	•
8.0	4.00 -0.30	1.00 ±0.15	0.15	8.002	•
8.0	2.00 -0.30	0.80 ±0.15	0.15	8.003	•
9.0	2.60 -0.30	1.00 ±0.15	0.20	9.000	•
9.0	4.00 -0.30	1.40 ±0.15	0.20	9.001	•
9.525	2.60 -0.30	1.00 ±0.15	0.20	9.520	•
9.525	5.00 -0.30	1.40 ±0.15	0.20	9.521	•
10.0	2.60 -0.30	1.00 ±0.15	0.20	10.000	•
10.0	5.00 -0.30	1.40 ±0.15	0.20	10.001	•
10.0	3.50 -0.20	1.20 ±0.15	0.15	10.002	•
11.0	3.50 -0.30	1.20 ±0.15	0.28	11.000	•
11.0	5.00 -0.30	1.40 ±0.15	0.28	11.001	•
12.0	3.50 -0.30	1.20 ±0.15	0.30	12.000	•
12.0	6.00 -0.30	1.75 ±0.15	0.30	12.001	•
12.700	3.50 -0.30	1.20 ±0.15	0.30	12.700	•
12.700	6.00 -0.30	1.75 ±0.15	0.30	12.701	•
13.0	3.50 -0.30	1.20 ±0.15	0.34	13.000	•
13.0	6.00 -0.30	1.75 ±0.15	0.34	13.001	•
14.0	5.00 -0.30	1.50 ±0.15	0.37	14.000	•
14.0	7.00 -0.30	1.75 ±0.15	0.37	14.001	•
15.0	5.00 -0.30	1.50 ±0.15	0.40	15.000	•
15.0	7.00 -0.30	2.00 ±0.20	0.40	15.001	•
15.875	5.00 -0.30	1.50 ±0.15	0.40	15.870	•
15.875	8.00 -0.30	2.00 ±0.20	0.40	15.871	•
16.0	5.00 -0.30	1.50 ±0.15	0.40	16.000	•
16.0	8.00 -0.30	2.00 ±0.20	0.40	16.001	•

D h6 mm	TK BC mm	d mm	a mm	Code	DK460UF 7302
					330mm
17.0	6.20 -0.30	2.00 ±0.20	0.47	17.000	•
17.0	8.00 -0.30	2.00 ±0.20	0.47	17.001	•
18.0	6.20 -0.30	2.00 ±0.20	0.50	18.000	•
18.0	9.00 -0.30	2.00 ±0.20	0.50	18.001	•
19.0	9.00 -0.30	2.00 ±0.20	0.50	19.001	•
19.050	6.20 -0.30	2.00 ±0.20	0.50	19.050	•
19.050	9.00 -0.30	2.00 ±0.20	0.50	19.051	•
20.0	3.50 -0.30	1.50 ±0.15	0.34	20.002	•
20.0	6.20 -0.40	2.00 ±0.20	0.50	20.000	•
20.0	10.00 -0.40	2.50 ±0.25	0.50	20.001	•
21.0	6.20 -0.40	2.00 ±0.20	0.50	21.000	•
21.0	10.00 -0.40	2.50 ±0.25	0.50	21.001	•
22.0	6.20 -0.40	2.00 ±0.20	0.50	22.000	•
22.0	11.00 -0.40	2.50 ±0.25	0.50	22.001	•
23.0	11.00 -0.40	2.50 ±0.25	0.50	23.000	•
24.0	7.50 -0.40	2.00 ±0.20	0.50	24.000	•
24.0	12.00 -0.50	3.00 ±0.25	0.50	24.001	•
25.0	7.50 -0.40	2.00 ±0.20	0.50	25.000	•
25.0	12.00 -0.50	3.00 ±0.25	0.50	25.001	•
25.400	7.50 -0.40	2.00 ±0.20	0.50	25.402	•
26.0	13.00 -0.50	3.00 ±0.25	0.50	26.000	•
28.0	9.00 -0.40	2.50 ±0.25	0.50	28.000	•
28.0	14.00 -0.50	3.00 ±0.25	0.50	28.001	•
30.0	14.00 -0.50	3.00 ±0.25	0.50	30.000	•
30.0	9.00 -0.40	2.50 ±0.25	0.50	30.001	•
32.0	9.00 -0.40	2.50 ±0.25	0.50	32.000	•
32.0	14.00 -0.50	3.00 ±0.25	0.50	32.001	•

Bemaßung | Dimensioning



Rundstäbe, roh

■ mit 2 Kühlkanälen, 15° verdreht

Rods, raw

■ with 2 coolant ducts, 15° helix

D mm	TK BC mm	d mm	a mm	15° ±0.5° mm	Code	DK460UF	
						7945	7947
						330mm	415mm
4.3 +0.30	2.10 ±0.10	0.60 ±0.10	0.10	46.90 +1.69/−1.59	4.300	•	
5.3 +0.30	2.60 ±0.15	0.70 ±0.10	0.13	58.62 +2.12/−1.98	5.300	•	
6.3 +0.30	2.60 −0.40	0.70 ±0.10	0.15	70.35 +2.54/−2.38	6.300	•	•
8.3 +0.30	3.60 −0.40	1.25 ±0.15	0.15	93.80 +3.38/−3.17	8.300	•	•
10.3 +0.30	4.80 −0.60	1.40 ±0.15	0.20	117.25 +4.23/−3.96	10.300	•	•
12.3 +0.40	6.25 −0.80	1.55 ±0.15	0.30	140.70 +5.08/−4.76	12.300	•	•
14.3 +0.40	6.70 −0.80	1.90 ±0.20	0.37	164.14 +5.92/−5.55	14.300	•	•
16.3 +0.40	8.00 −0.80	2.10 ±0.25	0.40	187.59 +6.77 / −6.34	16.300	•	•
18.3 +0.40	9.00 −0.80	2.30 ±0.25	0.50	211.04 +7.61 / −7.13	18.300	•	
20.3 +0.50	10.00 −1.00	2.50 ±0.30	0.50	234.49 +8.46/−7.93	20.300	•	
23.3 +0.50	12.00 −1.00	2.50 ±0.30	0.50	269.67 +9.73/ −9.12	23.300	•	
26.3 +0.50	12.00 −1.00	2.50 ±0.30	0.50	304.84 +11.00/−10.31	26.300	•	

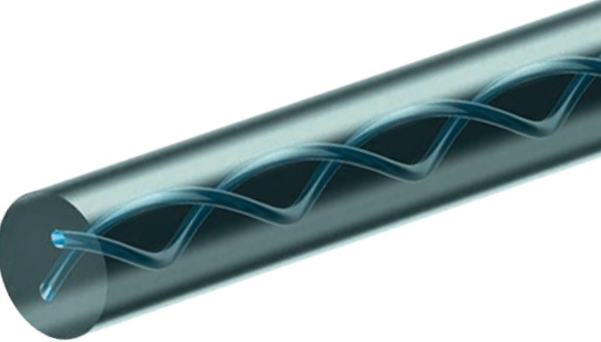
Rundstäbe, geschliffen h6

■ mit 2 Kühlkanälen, 15° verdreht

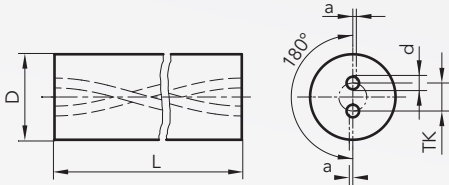
Rods, raw, ground to tolerance h6

■ with 2 coolant ducts, 15° helix

D h6 mm	TK BC mm	d mm	a mm	15° ±0.5° mm	Code	DK460UF 7583
						330mm
6.0	2.60 -0.40	0.70 ±0.10	0.15	70.35 +2.54/-2.38	6.000	•
8.0	3.60 -0.40	1.25 ±0.15	0.15	93.80 +3.38/-3.17	8.000	•
10.0	4.80 -0.60	1.40 ±0.15	0.20	117.25 +4.23/-3.96	10.000	•
12.0	6.25 -0.80	1.55 ±0.15	0.30	140.70 +5.08/-4.76	12.000	•
14.0	6.70 -0.80	1.90 ±0.20	0.37	164.14 +5.92/-5.55	14.000	•
16.0	8.00 -0.80	2.10 ±0.25	0.40	187.59 +6.77/-6.34	16.000	•
18.0	9.00 -0.80	2.30 ±0.25	0.50	211.04 +7.61/-7.13	18.000	•
20.0	10.00 -1.00	2.50 ±0.30	0.50	234.49 +8.46/-7.93	20.000	•

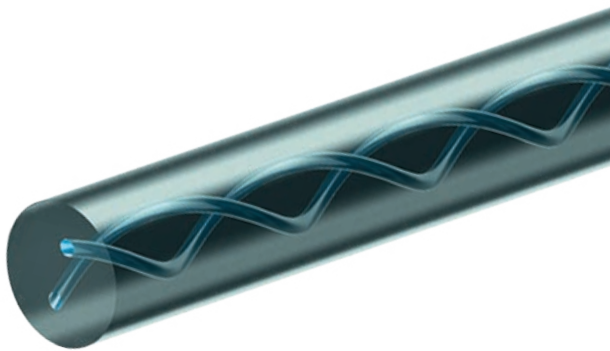


Bemaßung | Dimensioning



Rundstäbe, roh
mit 2 Kühlkanälen, 30° verdreht

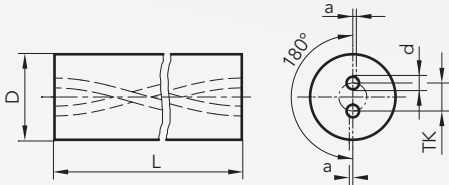
Rods, raw
with 2 coolant ducts, 30° helix



D mm	TK BC mm	d mm	a mm	30° ±0.5° mm	Code	DK460UF 7940 7353		DK255F 7370
						330mm	415mm	330mm
3.3 +0.30	1.60 ±0.10	0.40 ±0.10	0.08	16.32 +0.33/-0.32	3.300	•		
3.8 +0.30	1.80 ±0.10	0.50 ±0.10	0.09	19.04 +0.39/-0.38	3.800	•		
4.3 +0.30	2.10 ±0.10	0.60 ±0.10	0.10	21.77 +0.45/-0.43	4.300	•		
4.8 +0.30	2.30 ±0.10	0.70 ±0.10	0.10	24.49 +0.50/-0.49	4.800	•		
5.3 +0.30	2.60 ±0.15	0.70 ±0.10	0.13	27.21 +0.56/-0.54	5.300	•		
5.8 +0.30	2.60 -0.40	0.70 ±0.10	0.14	29.93 +0.61/-0.59	5.800	•		
6.3 +0.30	2.60 -0.40	0.70 ±0.10	0.15	32.65 +0.67/-0.65	6.300	•	•	•
6.3 +0.30	2.00 -0.20	0.80 ±0.10	0.15	32.65 +0.67/-0.65	6.301	•		
6.3 +0.30	2.60 -0.40	0.90 ±0.10	0.15	32.65 +0.67/-0.65	6.302	•		
6.8 +0.30	3.50 -0.40	1.00 ±0.15	0.15	35.37 +0.72/-0.70	6.800	•		
7.3 +0.30	3.50 -0.40	1.00 ±0.15	0.15	38.09 +0.78/-0.76	7.300	•		
7.8 +0.30	3.50 -0.40	1.00 ±0.15	0.15	40.81 +0.84/-0.81	7.800	•		
8.3 +0.30	3.60 -0.40	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.300	•	•	•
8.3 +0.30	3.50 -0.40	0.90 ±0.10	0.15	43.53 +0.89/-0.86	8.301	•		
8.8 +0.30	3.60 -0.40	1.25 ±0.15	0.20	46.25 +0.95/-0.92	8.800	•		
9.3 +0.30	4.80 -0.60	1.40 ±0.15	0.20	48.97 +1.00/-0.97	9.300	•		
9.8 +0.30	4.80 -0.60	1.40 ±0.15	0.20	51.69 +1.06/-1.03	9.800	•		
10.3 +0.30	4.80 -0.60	1.40 ±0.15	0.20	54.41 +1.11/-1.08	10.300	•	•	•
10.3 +0.30	4.80 -0.60	0.90 ±0.10	0.20	54.41 +1.11/-1.08	10.301	•		
10.8 +0.40	4.80 -0.60	1.40 ±0.15	0.28	57.13 +1.17/-1.13	10.800	•		
11.3 +0.40	5.30 -0.80	1.40 ±0.15	0.28	59.86 +1.22/-1.19	11.300	•	•	
11.8 +0.40	5.80 -0.80	1.40 ±0.15	0.30	62.58 +1.28/-1.24	11.800	•		
12.3 +0.40	6.25 -0.80	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.300	•	•	•
12.3 +0.40	5.40 -0.80	1.50 ±0.15	0.30	65.30 +1.34/-1.30	12.301	•		
12.8 +0.40	6.25 -0.80	1.55 ±0.15	0.33	68.02 +1.39/-1.35	12.800	•		
13.3 +0.40	6.50 -0.80	1.75 ±0.20	0.34	70.74 +1.45/-1.40	13.300	•		
13.8 +0.40	6.50 -0.80	1.75 ±0.20	0.35	73.46 +1.50/-1.46	13.800	•		
14.3 +0.40	6.70 -0.80	1.90 ±0.20	0.37	76.18 +1.56/-1.51	14.300	•	•	•
14.8 +0.40	6.70 -0.80	1.90 ±0.20	0.39	78.90 +1.61/-1.57	14.800	•		
15.3 +0.40	7.40 -0.80	1.90 ±0.20	0.40	81.62 +1.67/-1.62	15.300	•		
15.8 +0.40	7.40 -0.80	1.90 ±0.20	0.40	84.34 +1.73/-1.67	15.800	•		
16.3 +0.40	8.00 -0.80	2.10 ±0.25	0.40	87.06 +1.78/-1.73	16.300	•	•	•
16.8 +0.50	8.00 -0.80	2.10 ±0.25	0.45	89.78 +1.84/-1.78	16.800	•		
17.3 +0.50	8.00 -0.80	2.10 ±0.25	0.47	92.50 +1.89/-1.84	17.300	•		
17.8 +0.50	8.00 -0.80	2.10 ±0.25	0.48	95.22 +1.95/-1.89	17.800	•		

D mm	TK BC mm	d mm	a mm	30° ±0.5° mm	Code	DK460UF 7940 7353		DK255F 7370
						330mm	415mm	330mm
18.3 +0.50	9.00 -0.80	2.30 ±0.25	0.50	97.95 +2.00/-1.94	18.300	•	•	•
18.8 +0.50	9.00 -0.80	2.30 ±0.25	0.50	100.67 +2.06/-2.00	18.800	•		
19.3 +0.50	9.00 -0.80	2.30 ±0.25	0.50	103.39 +2.12/-2.05	19.300	•		
19.8 +0.50	9.00 -0.80	2.30 ±0.25	0.50	106.11 +2.17/-2.11	19.800	•		
20.3 +0.50	10.00 -1.00	2.50 ±0.30	0.50	108.83 +2.23/-2.16	20.300	•	•	•
21.3 +0.50	10.00 -1.00	2.50 ±0.30	0.50	114.27 +2.34/-2.27	21.300	•		
22.3 +0.50	10.00 -1.00	2.50 ±0.30	0.50	119.71 +2.45/-2.38	22.300	•		•
23.3 +0.50	12.00 -1.00	2.50 ±0.30	0.50	125.15 +2.56/-2.48	23.300	•		
24.3 +0.50	12.00 -1.00	2.50 ±0.30	0.50	130.59 +2.67/-2.59	24.300	•		
25.3 +0.50	12.00 -1.00	2.50 ±0.30	0.50	136.03 +2.78/-2.70	25.300	•	•	•
26.3 +0.50	12.00 -1.00	2.50 ±0.30	0.50	141.48 +2.90/-2.81	26.300	•		
27.3 +0.50	14.30 -1.20	2.50 ±0.30	0.60	146.92 +3.01/-2.92	27.300	•		
28.3 +0.50	14.80 -1.20	2.50 ±0.30	0.60	152.36 +3.12/-3.02	28.300	•		
29.3 +0.50	15.40 -1.20	2.50 ±0.30	0.60	157.80 +3.23/-3.13	29.300	•		
30.3 +0.50	16.00 -1.20	2.50 ±0.30	0.70	163.24 +3.34/-3.24	30.300	•		
32.3 +0.50	17.20 -1.20	3.00 ±0.30	0.80	174.12 +3.56/-3.46	32.300	•	•	•
33.3 +0.50	17.80 -1.20	3.00 ±0.30	0.80	179.57 +3.67/-3.57	33.300	•		

Bemaßung | Dimensioning



Rundstäbe, roh

■ mit 2 Kühlkanälen, 30° verdreht

Rods, raw

■ with 2 coolant ducts, 30° helix

D mm	TK BC mm	d mm	a mm	Steigung Pitch mm	Code	DK460UF 7074
						700 mm
12.8 +0.40	6.10 -0.80	1.40 ±0.15	0.30	57.40 ±1.94	12.301	•
12.8 +0.40	6.60 -0.80	1.50 ±0.15	0.30	62.80 ±2.19	12.300	•
14.8 +0.40	7.40 -0.80	1.70 ±0.20	0.37	71.00 ±2.44	14.300	•
16.8 +0.40	8.60 -0.80	1.90 ±0.25	0.40	81.90 ±2.94	16.300	•
18.8 +0.50	9.70 -0.80	2.20 ±0.25	0.40	92.80 ±3.33	18.300	•
20.8 +0.50	10.80 -1.00	2.50 ±0.30	0.40	103.70 ±3.66	20.300	•
25.8 +0.50	12.80 -1.00	2.70 ±0.30	0.40	122.70 ±4.84	25.300	•
30.8 +0.50	15.60 -1.20	3.30 ±0.30	0.40	149.90 ±6.04	30.300	•
32.8 +0.50	17.50 -1.20	3.70 ±0.30	0.40	169.00 ±6.93	32.300	•

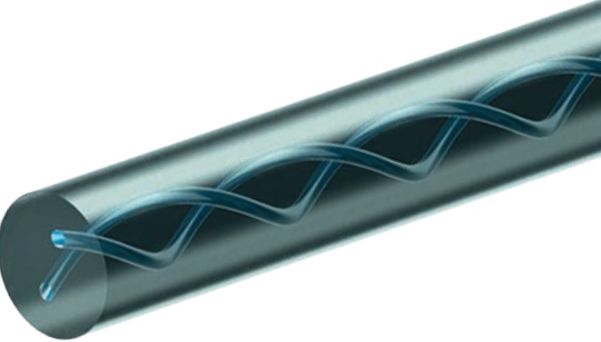
Rundstäbe, geschliffen h6

■ mit 2 Kühlkanälen, 30° verdreht

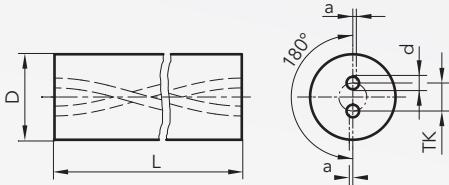
Rods, ground to tolerance h6

■ with 2 coolant ducts, 30° helix

D h6 mm	TK BC mm	d mm	a mm	30° ±0.5° mm	Code	DK460UF	
						7328	7355
						330 mm	415 mm
6.0	2.60 -0.40	0.70 ±0.10	0.15	32.65 +0.67/-0.65	6.000	•	•
7.0	3.50 -0.40	1.00 ±0.15	0.15	38.09 +0.78/-0.76	7.000	•	
8.0	3.60 -0.40	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.000	•	•
9.0	4.80 -0.60	1.40 ±0.15	0.20	48.97 +1.00/-0.97	9.000	•	
10.0	4.80 -0.60	1.40 ±0.15	0.20	54.41 +1.11/-1.08	10.000	•	•
11.0	5.30 -0.80	1.40 ±0.15	0.28	59.86 +1.22/-1.19	11.000	•	
12.0	6.25 -0.80	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.000	•	•
13.0	6.50 -0.80	1.75 ±0.20	0.34	70.74 +1.45/-1.40	13.000	•	
14.0	6.70 -0.80	1.90 ±0.20	0.37	76.18 +1.56/-1.51	14.000	•	•
15.0	7.40 -0.80	1.90 ±0.20	0.40	81.62 +1.67/-1.62	15.000	•	
16.0	8.00 -0.80	2.10 ±0.20	0.40	87.06 +1.78/-1.73	16.000	•	•
17.0	8.00 -0.80	2.10 ±0.20	0.47	92.50 +1.89/-1.84	17.000	•	
18.0	9.00 -0.80	2.30 ±0.25	0.50	97.95 +2.00/-1.94	18.000	•	•
20.0	10.00 -1.00	2.50 ±0.25	0.50	108.83 +2.23/-2.16	20.000	•	•
21.0	10.00 -1.00	2.50 ±0.25	0.50	114.27 +2.34/-2.27	21.000	•	
22.0	10.00 -1.00	2.50 ±0.25	0.50	119.71 +2.45/-2.38	22.000	•	
24.0	12.00 -1.00	2.50 ±0.25	0.50	130.59 +2.67/-2.59	24.000	•	
25.0	12.00 -1.00	2.50 ±0.25	0.50	136.03 +2.78/-2.70	25.000	•	
26.0	12.00 -1.00	2.50 ±0.25	0.50	141.48 +2.90/-2.81	26.000	•	
28.0	14.80 -1.20	2.50 ±0.30	0.60	152.36 +3.12/-3.02	28.000	•	
30.0	16.00 -1.20	2.50 ±0.30	0.70	163.24 +3.34/-3.24	30.000	•	
32.0	17.20 -1.20	3.00 ±0.30	0.80	174.12 +3.56/-3.46	32.000	•	

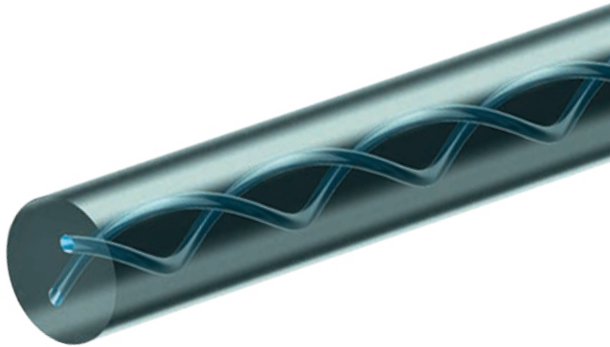


Bemaßung | Dimensioning



Rundstäbe, roh
mit 2 Kühlkanälen, 40° verdreht

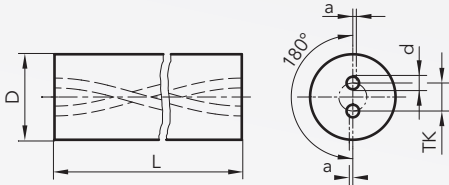
Rods, raw
with 2 coolant ducts, 40° helix



D	TK BC	d	a	40° ±0.5°	Code	DK460UF	DK255F
mm	mm	mm	mm	mm		7935	7385
						330mm	415mm
6.3 +0.30	2.20 -0.40	0.50 ±0.15	0.15	22.46 +0.40/-0.39	6.300	•	•
6.3 +0.30	1.30 -0.20	0.30 ±0.05	0.10	22.46 +0.40/-0.39	6.301	•	
6.3 +0.30	1.40 -0.40	0.40 ±0.15	0.15	22.46 +0.40/-0.39	6.302	•	
6.8 +0.30	2.30 -0.40	0.50 ±0.15	0.15	24.34 +0.44/-0.43	6.800	•	
7.3 +0.30	2.40 -0.40	0.65 ±0.15	0.15	26.21 +0.47/-0.46	7.300	•	
7.8 +0.30	2.50 -0.40	0.65 ±0.15	0.15	28.08 +0.50/-0.49	7.800	•	
8.3 +0.30	2.70 -0.60	0.65 ±0.15	0.15	29.95 +0.54/-0.53	8.300	•	•
8.3 +0.30	1.70 -0.20	0.40 ±0.10	0.10	29.95 +0.54/-0.53	8.301	•	
8.8 +0.30	2.90 -0.60	0.65 ±0.15	0.20	31.82 +0.57/-0.56	8.800	•	
9.3 +0.30	3.20 -0.60	0.75 ±0.15	0.20	33.70 +0.60/-0.59	9.300	•	
9.8 +0.30	3.50 -0.60	0.75 ±0.15	0.20	35.57 +0.64/-0.62	9.800	•	
10.3 +0.40	3.50 -0.80	0.80 ±0.15	0.20	37.44 +0.67/-0.66	10.300	•	•
10.3 +0.40	2.10 -0.20	0.50 ±0.10	0.20	37.44 +0.67/-0.66	10.301	•	
10.3 +0.40	3.00 -0.40	1.00 ±0.20	0.20	37.44 +0.67/-0.66	10.302	•	
10.8 +0.40	3.50 -0.80	0.80 ±0.15	0.28	39.31 +0.70/-0.69	10.800	•	
11.3 +0.40	3.70 -0.80	0.80 ±0.15	0.28	41.18 +0.74/-0.72	11.300	•	
11.8 +0.40	4.00 -0.80	0.85 ±0.15	0.30	43.06 +0.77/-0.76	11.800	•	
12.3 +0.40	4.20 -0.80	0.90 ±0.20	0.30	44.93 +0.80/-0.79	12.300	•	•
12.3 +0.40	2.50 -0.40	0.60 ±0.10	0.20	44.93 +0.80/-0.79	12.301	•	
12.8 +0.40	4.35 -0.80	0.90 ±0.20	0.33	46.80 +0.84/-0.82	12.800	•	
13.3 +0.40	4.40 -0.80	0.90 ±0.20	0.34	48.67 +0.87/-0.85	13.300	•	
14.3 +0.40	4.70 -0.80	1.00 ±0.20	0.37	52.42 +0.94/-0.92	14.300	•	•
14.3 +0.40	2.90 -0.40	0.70 ±0.10	0.20	52.42 +0.94/-0.92	14.301	•	
14.8 +0.40	4.90 -0.80	1.10 ±0.20	0.39	54.29 +0.97/-0.95	14.800	•	
15.3 +0.50	5.10 -0.80	1.10 ±0.20	0.40	56.16 +1.01/-0.99	15.300	•	
16.3 +0.50	5.50 -0.80	1.20 ±0.20	0.40	59.90 +1.07/-1.05	16.300	•	•
16.3 +0.50	3.30 -0.40	0.80 ±0.10	0.20	59.90 +1.07/-1.05	16.301	•	
16.8 +0.50	5.75 -0.80	1.20 ±0.20	0.45	61.78 +1.11/-1.08	16.800	•	
17.3 +0.50	5.90 -0.80	1.20 ±0.25	0.47	63.65 +1.14/-1.12	17.300	•	
18.3 +0.50	6.30 -0.80	1.40 ±0.25	0.50	67.39 +1.21/-1.18	18.300	•	•
18.3 +0.50	3.70 -0.40	0.90 ±0.15	0.20	67.39 +1.21/-1.18	18.301	•	

D	TK BC	d	a	40° ±0.5°	Code	DK460UF	DK255F
mm	mm	mm	mm	mm		7935	7385
						330mm	415mm
19.3 +0.50	6.70 -1.00	1.40 ±0.25	0.50	71.14 +1.27/-1.25	19.300	•	
20.3 +0.50	7.10 -1.00	1.50 ±0.25	0.50	74.88 +1.34/-1.31	20.300	•	•
20.3 +0.50	4.10 -0.40	1.00 ±0.15	0.20	74.88 +1.34/-1.31	20.301	•	
21.3 +0.50	7.40 -1.00	1.50 ±0.25	0.50	78.62 +1.41/-1.38	21.300	•	
22.3 +0.50	7.70 -1.00	1.70 ±0.25	0.50	82.37 +1.48/-1.44	22.300	•	
24.3 +0.50	8.00 -1.00	1.75 ±0.25	0.50	89.86 +1.61/-1.58	24.300	•	
25.3 +0.50	8.10 -1.00	1.75 ±0.25	0.50	93.60 +1.68/-1.64	25.300	•	•
25.3 +0.50	5.10 -0.60	1.30 ±0.15	0.20	93.60 +1.68/-1.64	25.301	•	
26.3 +0.50	8.20 -1.00	1.75 ±0.25	0.50	97.34 +1.74/-1.71	26.300	•	
28.3 +0.50	9.00 -1.20	2.00 ±0.30	0.50	104.83 +1.88/-1.84	28.300	•	
30.3 +0.50	10.00 -1.20	2.00 ±0.30	0.50	112.32 +2.01/-1.97	30.300	•	
32.3 +0.50	11.00 -1.20	2.00 ±0.30	0.50	119.81 +2.15/-2.10	32.300	•	•
32.3 +0.50	6.50 -0.80	1.60 ±0.20	0.25	119.81 +2.15/-2.10	32.301	•	

Bemaßung | Dimensioning



Rundstäbe, geschliffen h6

■ mit 2 Kühlkanälen, 40° verdreht

Rods, ground to tolerance h6

■ with 2 coolant ducts, 40° helix

D h6 mm	TK BC mm	d mm	a mm	40° ±0.5° mm	Code	DK460UF 7330
						330mm
6.0	2.20 -0.40	0.50 ±0.15	0.15	22.46 +0.40/-0.39	6.000	•
6.0	1.30 -0.20	0.30 ±0.05	0.10	22.46 +0.40/-0.39	6.001	•
6.0	1.40 -0.40	0.40 ±0.15	0.15	22.46 +0.40/-0.39	6.002	•
7.0	2.40 -0.40	0.65 ±0.15	0.15	26.21 +0.47/-0.46	7.000	•
8.0	2.70 -0.60	0.65 ±0.15	0.15	29.95 +0.54/-0.53	8.000	•
8.0	1.70 -0.20	0.40 ±0.10	0.10	29.95 +0.54/-0.53	8.001	•
9.0	3.20 -0.60	0.75 ±0.15	0.20	33.70 +0.60/-0.59	9.000	•
10.0	3.50 -0.80	0.80 ±0.15	0.20	37.44 +0.67/-0.66	10.000	•
10.0	2.10 -0.20	0.50 ±0.10	0.20	37.44 +0.67/-0.66	10.001	•
11.0	3.70 -0.80	0.80 ±0.15	0.28	41.18 +0.74/-0.72	11.000	•
12.0	4.20 -0.80	0.90 ±0.20	0.30	44.93 +0.80/-0.79	12.000	•
12.0	2.50 -0.40	0.60 ±0.10	0.20	44.93 +0.80/-0.79	12.001	•
13.0	4.40 -0.80	0.90 ±0.20	0.34	48.67 +0.87/-0.85	13.000	•
14.0	4.70 -0.80	1.00 ±0.20	0.37	52.42 +0.94/-0.92	14.000	•
14.0	2.90 -0.40	0.70 ±0.10	0.20	52.42 +0.94/-0.92	14.001	•
15.0	5.10 -0.80	1.10 ±0.20	0.40	56.16 +1.01/-0.99	15.000	•
16.0	5.50 -0.80	1.20 ±0.20	0.47	59.90 +1.07/-1.05	16.000	•
16.0	3.30 -0.40	0.80 ±0.10	0.20	59.90 +1.07/-1.05	16.001	•
18.0	6.30 -0.80	1.40 ±0.25	0.50	67.39 +1.21/-1.18	18.000	•
18.0	3.70 -0.40	0.90 ±0.15	0.20	67.39 +1.21/-1.18	18.001	•
20.0	7.10 -1.00	1.50 ±0.25	0.50	74.88 +1.34/-1.31	20.000	•
20.0	4.10 -1.00	1.00 ±0.15	0.20	74.88 +1.34/-1.31	20.001	•
22.0	7.70 -1.00	1.70 ±0.25	0.50	82.37 +1.48/-1.44	22.000	•
25.0	8.10 -1.00	1.75 ±0.25	0.50	93.60 +1.68/-1.64	25.000	•
25.0	5.10 -0.60	1.30 ±0.15	0.20	93.60 +1.68/-1.64	25.001	•
26.0	8.20 -1.00	1.75 ±0.25	0.50	97.34 +1.74/-1.71	26.000	•

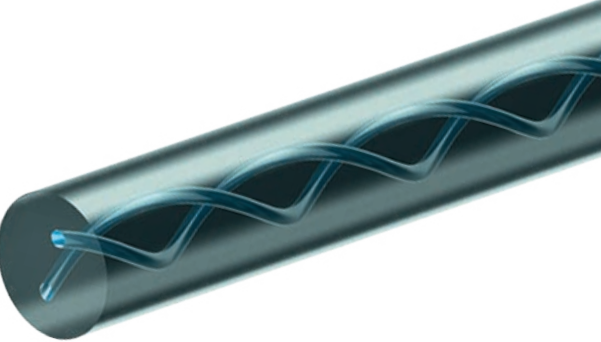
Rundstäbe, roh

■ mit 2 Kühlkanälen, kleinstverdreht

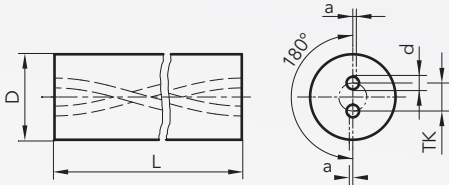
Rods, raw

■ with 2 coolant ducts, microtwisted

D mm	TK BC mm	d mm	a mm	Steigung Pitch mm	Code	DK460UF 7039
						330mm
4.3 +0.30	0.50 ±0.1	0.23 ±0.05	0.10	10.79 ±0.2	4.125	•
4.3 +0.30	0.80 ±0.1	0.23 ±0.05	0.10	11.12 ±0.2	4.165	•
4.3 +0.30	1.00 ±0.2	0.30 ±0.05	0.10	10.61 ±0.2	4.195	•
6.3 +0.30	1.00 ±0.2	0.45 ±0.05	0.15	12.79 ±0.3	6.225	•
6.3 +0.30	1.20 ±0.2	0.50 ±0.06	0.15	15.24 ±0.3	6.275	•
6.3 +0.30	1.50 ±0.2	0.55 ±0.07	0.15	17.68 ±0.3	6.325	•
6.3 +0.30	1.70 ±0.2	0.60 ±0.08	0.15	20.41 ±0.3	6.375	•
6.3 +0.30	2.00 ±0.2	0.70 ±0.10	0.15	23.13 ±0.3	6.425	•
6.3 +0.30	2.30 ±0.2	0.80 ±0.10	0.15	25.85 ±0.3	6.475	•
6.3 +0.30	2.60 ±0.2	0.90 ±0.10	0.15	28.57 ±0.3	6.525	•
6.3 +0.30	2.80 ±0.2	1.00 ±0.10	0.15	31.29 ±0.3	6.575	•



Bemaßung | Dimensioning



Rundstäbe, roh

■ mit 3 Kühlkanälen, 30° verdreht

Rods, raw

■ with 3 coolant ducts, 30° helix

D mm	TK BC mm	d mm	a	30° ±0.5° mm	Code	DK460UF	
						7933	7383
						330 mm	415 mm
6.3 +0.30	2.90 −0.30	0.50 ±0.10	±4°	32.65 +0.67 / −0.65	6.300	•	
6.8 +0.30	2.90 −0.30	0.50 ±0.10	±4°	35.37 +0.72 / −0.70	6.800	•	
8.3 +0.30	4.00 −0.30	0.70 ±0.10	±4°	43.53 +0.89 / −0.86	8.300	•	
8.8 +0.30	4.00 −0.30	0.70 ±0.10	±4°	46.25 +0.95 / −0.92	8.800	•	
9.3 +0.30	5.10 −0.30	0.85 ±0.15	±4°	48.97 +1.00 / −0.97	9.300	•	
10.3 +0.30	5.10 −0.30	0.85 ±0.15	±4°	54.41 +1.11 / −1.08	10.300	•	•
10.8 +0.40	5.10 −0.50	0.85 ±0.15	±4°	57.13 +1.17 / −1.13	10.800	•	
11.3 +0.40	5.70 −0.50	1.10 ±0.15	±4°	59.86 +1.22 / −1.19	11.300	•	
11.8 +0.40	6.10 −0.50	1.10 ±0.15	±4°	62.58 +1.28 / −1.24	11.800	•	
12.3 +0.40	6.30 −0.50	1.10 ±0.15	±4°	65.30 +1.34 / −1.30	12.300	•	•
12.8 +0.40	6.30 −0.50	1.10 ±0.15	±4°	68.02 +1.39 / −1.35	12.800	•	
13.3 +0.40	6.80 −0.50	1.20 ±0.15	±4°	70.74 +1.45 / −1.40	13.300	•	
14.3 +0.40	7.30 −0.50	1.40 ±0.15	±4°	76.18 +1.56 / −1.51	14.300	•	•
14.8 +0.40	7.60 −0.50	1.40 ±0.15	±4°	78.90 +1.61 / −1.57	14.800	•	
15.3 +0.40	7.80 −0.50	1.40 ±0.15	±4°	81.62 +1.67 / −1.62	15.300	•	
16.3 +0.40	8.30 −0.50	1.60 ±0.15	±4°	87.06 +1.78 / −1.73	16.300	•	•
16.8 +0.50	8.30 −0.50	1.60 ±0.20	±4°	89.78 +1.84 / −1.78	16.800	•	
17.3 +0.50	8.60 −0.50	1.60 ±0.20	±4°	92.50 +1.89 / −1.84	17.300	•	
18.3 +0.50	9.50 −0.50	1.70 ±0.20	±4°	97.95 +2.00 / −1.94	18.300	•	•
20.3 +0.50	10.20 −0.70	1.90 ±0.25	±4°	108.83 +2.23 / −2.16	20.300	•	•
21.3 +0.50	11.10 −0.70	2.00 ±0.25	±4°	114.27 +2.34 / −2.27	21.300	•	
22.3 +0.50	11.50 −0.70	2.00 ±0.25	±4°	119.71 +2.45 / −2.38	22.300	•	
23.3 +0.50	11.80 −0.70	2.00 ±0.25	±4°	125.15 +2.56 / −2.48	23.300	•	
24.3 +0.50	12.10 −0.70	2.00 ±0.25	±4°	130.59 +2.67 / −2.59	24.300	•	
25.3 +0.50	12.50 −0.70	2.00 ±0.25	±4°	136.03 +2.78 / −2.70	25.300	•	•
26.3 +0.50	13.10 −0.70	2.00 ±0.25	±4°	141.48 +2.90 / −2.81	26.300	•	
27.3 +0.50	13.60 −0.90	2.50 ±0.30	±4°	146.92 +3.01 / −2.92	27.300	•	
28.3 +0.50	14.10 −0.90	2.50 ±0.30	±4°	152.36 +3.12 / −3.02	28.300	•	
29.3 +0.50	14.60 −0.90	2.50 ±0.30	±4°	157.80 +3.23 / −3.13	29.300	•	
32.3 +0.50	16.10 −1.20	3.00 ±0.30	±4°	174.12 +3.56 / −3.46	32.300	•	•
33.3 +0.50	16.60 −1.20	3.00 ±0.30	±4°	179.57 +3.67 / −3.57	33.300	•	

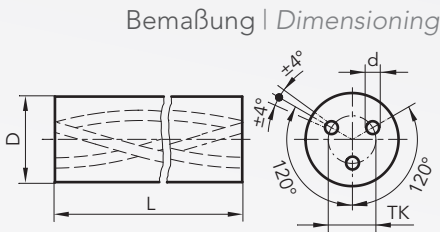
Rundstäbe, geschliffen h6

■ mit 3 Kühlkanälen, 30° verdreht

Rods, ground to tolerance h6

■ with 3 coolant ducts, 30° helix

D h6 mm	TK BC mm	d mm	a	30° ±0.5° mm	Code	DK460UF 7358
						330mm
6.0	2.90 −0.30	0.50 ±0.10	±4°	32.65 +0.67/−0.65	6.000	•
8.0	4.00 −0.30	0.70 ±0.10	±4°	43.53 +0.89/−0.86	8.000	•
10.0	5.10 −0.30	0.85 ±0.15	±4°	54.41 +1.11/−1.08	10.000	•
12.0	6.30 −0.50	1.10 ±0.15	±4°	65.30 +1.34/−1.30	12.000	•
14.0	7.30 −0.50	1.40 ±0.15	±4°	76.18 +1.56/−1.51	14.000	•
16.0	8.30 −0.50	1.60 ±0.15	±4°	87.06 +1.78/−1.73	16.000	•
18.0	9.50 −0.50	1.70 ±0.20	±4°	97.95 +2.00/−1.94	18.000	•
20.0	10.20 −0.70	1.90 ±0.25	±4°	108.83 +2.23/−2.16	20.000	•
22.0	11.50 −0.70	2.00 ±0.25	±4°	119.71 +2.45/−2.38	22.000	•
25.0	12.50 −0.70	2.00 ±0.25	±4°	136.03 +2.78/−2.70	25.000	•
26.0	13.10 −0.70	2.00 ±0.25	±4°	141.48 +2.90/−2.81	26.000	•
28.0	14.10 −0.90	2.50 ±0.30	±4°	152.36 +3.12/−3.02	28.000	•
32.0	16.10 −1.20	3.00 ±0.30	±4°	174.12 +3.56/−3.46	32.000	•



Rundstäbe, roh

■ mit 3 Kühlkanälen, 40° verdreht

Rods, raw

■ with 3 coolant ducts, 40° helix

D mm	TK BC mm	d mm	a	40° ±0.5° mm	Code	DK460UF	
						7934	7384
						330 mm	415 mm
6.3 +0.30	2.20 -0.30	0.50 ±0.15	±4°	22.46 +0.40/-0.39	6.300	•	
8.3 +0.30	2.70 -0.30	0.65 ±0.15	±4°	29.95 +0.54/-0.53	8.300	•	•
8.8 +0.30	2.90 -0.30	0.65 ±0.15	±4°	31.82 +0.57/-0.56	8.800	•	
10.3 +0.40	3.50 -0.30	0.80 ±0.15	±4°	37.44 +0.67/-0.66	10.300	•	•
12.3 +0.40	4.20 -0.50	0.90 ±0.20	±4°	44.93 +0.80/-0.79	12.300	•	
12.8 +0.40	4.35 -0.50	0.90 ±0.20	±4°	46.80 +0.84/-0.82	12.800	•	
14.3 +0.40	4.70 -0.50	1.00 ±0.20	±4°	52.42 +0.94/-0.92	14.300	•	•
15.3 +0.50	5.10 -0.50	1.10 ±0.20	±4°	56.16 +1.01/-0.99	15.300	•	
15.8 +0.50	5.30 -0.50	1.10 ±0.20	±4°	58.03 +1.04/-1.02	15.800	•	
16.3 +0.50	5.50 -0.50	1.20 ±0.20	±4°	59.90 +1.07/-1.05	16.300	•	•
16.8 +0.50	5.75 -0.50	1.20 ±0.20	±4°	61.78 +1.11/-1.08	16.800	•	
18.3 +0.50	6.30 -0.50	1.40 ±0.25	±4°	67.39 +1.21/-1.18	18.300	•	
18.8 +0.50	6.50 -0.50	1.40 ±0.25	±4°	69.26 +1.24/-1.21	18.800	•	
19.3 +0.50	6.70 -0.70	1.40 ±0.25	±4°	71.14 +1.27/-1.25	19.300	•	
20.3 +0.50	7.10 -0.70	1.50 ±0.25	±4°	74.88 +1.34/-1.31	20.300	•	
21.3 +0.50	7.40 -0.70	1.50 ±0.25	±4°	78.62 +1.41/-1.38	21.300	•	
22.3 +0.50	7.70 -0.70	1.70 ±0.25	±4°	82.37 +1.48/-1.44	22.300	•	
24.3 +0.50	8.00 -0.90	1.75 ±0.25	±4°	89.86 +1.61/-1.58	24.300	•	
25.3 +0.50	8.10 -0.90	1.75 ±0.25	±4°	93.60 +1.68/-1.64	25.300	•	
26.3 +0.50	8.20 -0.90	1.75 ±0.25	±4°	97.34 +1.74/-1.71	26.300	•	
28.3 +0.50	9.00 -0.90	2.00 ±0.30	±4°	104.83 +1.88/-1.84	28.300	•	
30.3 +0.50	10.00 -1.10	2.00 ±0.30	±4°	112.32 +2.01/-1.97	30.300	•	
32.3 +0.50	11.00 -1.10	2.00 ±0.30	±4°	119.81 +2.15/-2.10	32.300	•	•

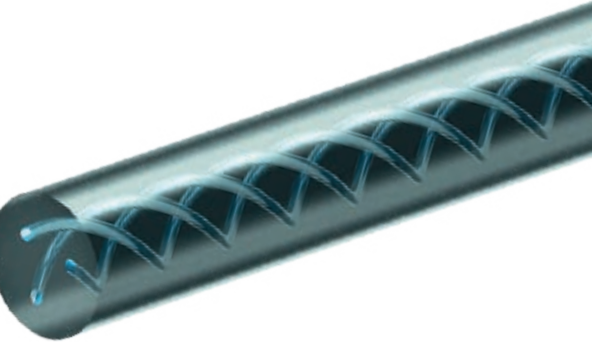
Rundstäbe, geschliffen h6

■ mit 3 Kühlkanälen, 40° verdreht

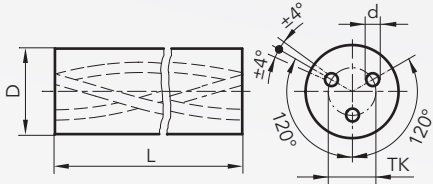
Rods, ground to tolerance h6

■ with 3 coolant ducts, 40° helix

D h6 mm	TK BC mm	d mm	a	40° ±0.5° mm	Code	DK460UF 7359
						330mm
6.0	2.20 -0.30	0.50 ±0.15	±4°	22.46 +0.40/-0.39	6.000	•
8.0	2.70 -0.30	0.65 ±0.15	±4°	29.95 +0.54/-0.53	8.000	•
10.0	3.50 -0.30	0.80 ±0.15	±4°	37.44 +0.67/-0.66	10.000	•
12.0	4.20 -0.50	0.90 ±0.20	±4°	44.93 +0.80/-0.79	12.000	•
14.0	4.70 -0.50	1.00 ±0.20	±4°	52.42 +0.94/-0.92	14.000	•
16.0	5.50 -0.50	1.20 ±0.20	±4°	59.90 +1.07/-1.05	16.000	•
18.0	6.30 -0.50	1.40 ±0.25	±4°	67.39 +1.21/-1.18	18.000	•
20.0	7.10 -0.70	1.50 ±0.25	±4°	74.88 +1.34/-1.31	20.000	•
22.0	7.70 -0.70	1.70 ±0.25	±4°	82.37 +1.48/-1.44	22.000	•
25.0	8.10 -0.90	1.75 ±0.25	±4°	93.60 +1.68/-1.64	25.000	•



Bemaßung | Dimensioning



Fräserrohlinge, geschliffen h6

■ mit einseitiger Fase, nach Werksnorm

Milling cutter blanks, ground to tolerance h6

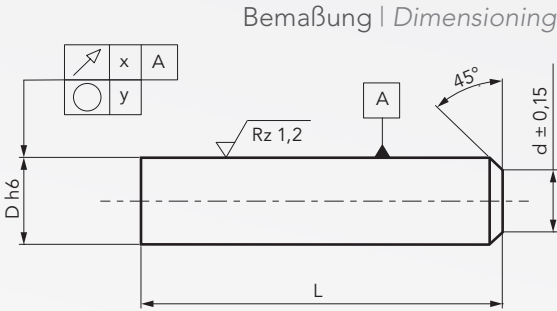
■ chamfered one end, to internal standard



D h6 mm	d mm	L mm	x mm	y mm	Code	DK460UF 7540
2.0		32.5 +0.60	0.004	0.003	2.000	•
2.5		32.5 +0.60	0.004	0.003	2.500	•
3.0	2.4	32.5 +0.60	0.004	0.002	3.000	•
*3.0	2.4	39.5 +0.60	0.004	0.002	3.001	•
3.0	2.4	76.2 +0.90	0.008	0.002	3.002	•
3.0	2.4	38.3 +0.60	0.004	0.002	3.003	•
3.0	2.4	47.3 +0.70	0.005	0.002	3.004	•
3.0	2.4	52.3 +0.70	0.005	0.002	3.005	•
3.0	2.4	45.0 +0.70	0.005	0.002	3.007	•
3.5	2.9	32.5 +0.60	0.005	0.002	3.500	•
*4.0	3.4	51.0 +0.70	0.005	0.002	4.000	•
*4.0	3.4	40.5 +0.60	0.005	0.002	4.001	•
4.0	3.4	32.5 +0.60	0.005	0.002	4.002	•
4.0	3.4	76.2 +0.90	0.008	0.002	4.003	•
4.0	3.4	59.3 +0.80	0.008	0.002	4.004	•
4.0	3.4	63.5 +0.80	0.008	0.002	4.005	•
4.0	3.4	67.5 +0.80	0.008	0.002	4.006	•
*4.5	3.9	51.2 +0.70	0.005	0.002	4.500	•
*5.0	4.0	51.2 +0.70	0.005	0.002	5.000	•
5.0	4.0	76.2 +0.90	0.006	0.002	5.001	•
5.5	4.5	51.2 +0.70	0.005	0.002	5.500	•
*5.5	4.5	58.2 +0.80	0.006	0.002	5.501	•
*6.0	5.0	51.2 +0.70	0.006	0.002	6.000	•
*6.0	5.0	55.0 +0.70	0.006	0.002	6.001	•
*6.0	5.0	58.2 +0.80	0.006	0.002	6.002	•
6.0	5.0	39.0 +0.60	0.004	0.002	6.003	•
6.0	5.0	76.2 +0.90	0.008	0.002	6.004	•
6.0	5.0	37.2 +0.60	0.004	0.002	6.005	•
6.0	5.0	40.2 +0.60	0.005	0.002	6.006	•
6.0	5.0	46.2 +0.70	0.005	0.002	6.007	•
*6.0	5.0	66.2 +0.80	0.006	0.002	6.008	•
6.0	5.0	60.5 +0.80	0.006	0.003	6.009	•
6.0	5.0	63.0 +0.80	0.006	0.002	6.013	•
*6.5	4.5	61.5 +0.80	0.006	0.003	6.500	•
*7.0	5.0	61.5 +0.80	0.006	0.003	7.000	•
7.5	5.5	61.5 +0.80	0.006	0.003	7.500	•
*7.5	5.5	64.2 +0.80	0.006	0.003	7.501	•

*für Fräser nach DIN 6527 / 6528
*for milling cutters in accordance with DIN 6527 / 6528

D h6 mm	d mm	L mm	x mm	y mm	Code	DK460UF 7540
*8.0	6.0	59.0 +0.80	0.006	0.003	8.000	•
*8.0	6.0	64.2 +0.80	0.006	0.003	8.001	•
8.0	6.0	44.0 +0.70	0.005	0.003	8.002	•
8.0	6.0	62.0 +0.80	0.006	0.003	8.003	•
8.0	6.0	76.2 +0.90	0.007	0.003	8.004	•
8.0	6.0	101.2 +1.00	0.008	0.003	8.005	•
8.0	6.0	56.2 +0.80	0.006	0.003	8.006	•
8.0	6.0	82.0 +0.90	0.008	0.003	8.007	•
8.0	6.0	87.2 +0.90	0.008	0.003	8.008	•
8.0	6.0	73.5 +0.90	0.008	0.003	8.015	•
8.5	6.5	62.0 +0.80	0.006	0.003	8.500	•
*8.5	6.5	68.2 +0.80	0.007	0.003	8.501	•
9.0	7.0	62.0 +0.80	0.006	0.003	9.000	•
*9.0	7.0	68.2 +0.80	0.007	0.003	9.001	•
*9.5	7.5	73.2 +0.90	0.008	0.003	9.501	•
*10.0	8.0	67.2 +0.80	0.007	0.003	10.000	•
10.0	8.0	71.0 +0.80	0.008	0.003	10.001	•
*10.0	8.0	73.2 +0.90	0.008	0.003	10.002	•
10.0	8.0	51.0 +0.70	0.005	0.003	10.003	•
10.0	8.0	101.2 +1.00	0.008	0.003	10.004	•
10.0	8.0	49.2 +0.70	0.005	0.003	10.005	•
10.0	8.0	56.2 +0.80	0.006	0.003	10.006	•
10.0	8.0	77.0 +0.90	0.008	0.003	10.007	•
*10.0	8.0	81.2 +0.90	0.008	0.003	10.008	•
10.0	8.0	91.2 +1.00	0.008	0.003	10.009	•
10.0	8.0	84.0 +0.90	0.008	0.003	10.012	•
11.0	9.0	72.0 +0.90	0.008	0.003	11.000	•
*11.0	9.0	84.2 +0.90	0.008	0.003	11.001	•



Fräserrohlinge, geschliffen h6

■ mit einseitiger Fase, nach Werksnorm

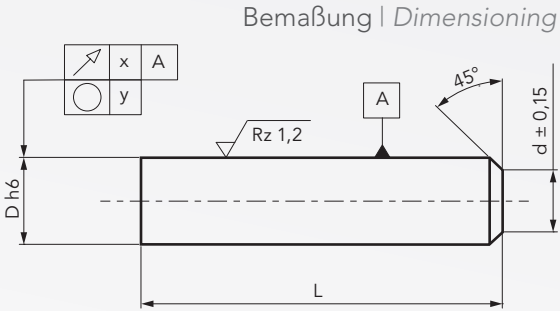
Milling cutter blanks, ground to tolerance h6

■ chamfered one end, to internal standard



D h6 mm	d mm	L mm	x mm	y mm	Code	DK460UF 7540
*12.0	12.0	74.2 +0.90	0.008	0.003	12.000	•
*12.0	12.0	84.2 +0.90	0.008	0.003	12.001	•
12.0	12.0	70.0 +0.80	0.008	0.003	12.002	•
12.0	12.0	72.0 +0.90	0.008	0.003	12.003	•
12.0	12.0	101.2 +1.00	0.008	0.003	12.004	•
12.0	12.0	151.2 +1.50	0.010	0.003	12.005	•
12.0	12.0	56.2 +0.80	0.006	0.003	12.006	•
*12.0	12.0	94.2 +1.00	0.008	0.003	12.007	•
12.0	12.0	121.0 +1.20	0.010	0.003	12.008	•
12.0	10.0	110.0 +1.10	0.010	0.003	12.013	•
13.0	11.0	77.0 +0.90	0.008	0.003	13.000	•
*13.0	11.0	84.2 +0.90	0.008	0.003	13.001	•
*14.0	12.0	84.2 +0.90	0.008	0.003	14.000	•
*14.0	12.0	76.2 +0.90	0.008	0.003	14.001	•
14.0	12.0	151.2 +1.50	0.010	0.003	14.002	•
14.0	12.0	59.2 +0.80	0.008	0.003	14.003	•
14.0	12.0	101.2 +1.00	0.008	0.003	14.004	•
15.0	12.0	77.0 +0.90	0.008	0.003	15.000	•
*15.0	12.0	93.2 +1.00	0.008	0.003	15.001	•
*16.0	13.0	93.2 +1.00	0.008	0.003	16.000	•
*16.0	13.0	83.2 +0.90	0.008	0.003	16.001	•
16.0	13.0	75.0 +0.90	0.008	0.003	16.002	•
16.0	13.0	77.0 +0.90	0.008	0.003	16.003	•
16.0	13.0	151.2 +1.50	0.010	0.003	16.004	•
16.0	13.0	63.2 +0.80	0.008	0.003	16.005	•
*16.0	13.0	109.2 +1.10	0.009	0.003	16.006	•
16.0	13.0	126.0 +1.20	0.010	0.003	16.007	•
18.0	15.0	101.0 +1.00	0.009	0.003	18.000	•
*18.0	15.0	85.0 +0.90	0.008	0.003	18.001	•
*18.0	15.0	93.0 +1.00	0.008	0.003	18.002	•
18.0	15.0	151.2 +1.50	0.010	0.003	18.003	•
18.0	15.0	71.2 +0.90	0.008	0.003	18.004	•

D h6 mm	d mm	L mm	x mm	y mm	Code	DK460UF 7540
*20.0	17.0	93.2 +1.00	0.008	0.004	20.000	•
*20.0	17.0	105.0 +1.00	0.008	0.004	20.001	•
20.0	17.0	100.0 +1.00	0.008	0.004	20.002	•
20.0	17.0	102.0 +1.00	0.008	0.004	20.003	•
20.0	17.0	151.2 +1.50	0.010	0.004	20.004	•
20.0	17.0	76.2 +0.90	0.008	0.004	20.005	•
20.0	17.0	127.2 +1.20	0.010	0.004	20.006	•
20.0	17.0	175.7 +2.10	0.011	0.004	20.007	•
25.0	22.0	103.0 +1.00	0.010	0.004	25.000	•
25.0	22.0	123.0 +1.20	0.010	0.004	25.001	•
25.0	22.0	151.2 +1.60	0.010	0.004	25.002	•
25.0	22.0	175.7 +2.10	0.011	0.004	25.003	•
32.0	28.0	134.2 +1.30	0.010	0.005	32.000	•
32.0	28.0	187.2 +2.40	0.012	0.005	32.001	•
32.0	28.0	311.5 +10.00	0.040	0.005	32.002	•



*für Fräser nach DIN 6527 / 6528
*for milling cutters in accordance with DIN 6527 / 6528

Fräserrohlinge, geschliffen h6

■ mit einseitiger Fasse

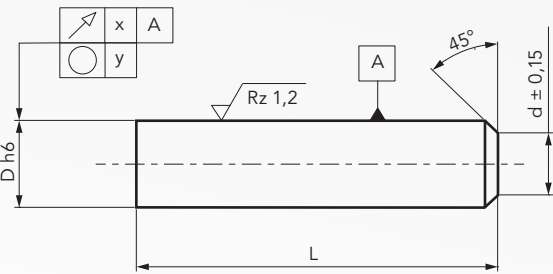
Milling cutter blanks,
ground to tolerance h6

■ chamfered one end



D h6 mm	d mm	L mm	x mm	y mm	Code	DK500UF 7556
3.0	2.4	39.5 +0.60	0.004	0.002	3.000	•
4.0	3.4	51.0 +0.70	0.005	0.002	4.000	•
4.0	3.4	76.2 +0.90	0.008	0.002	4.001	•
6.0	5.0	57.5 +0.80	0.006	0.002	6.000	•
6.0	5.0	76.0 +0.90	0.008	0.002	6.001	•
6.0	5.0	80.5 +0.90	0.008	0.002	6.002	•
6.0	5.0	100.5 +1.00	0.008	0.002	6.003	•
8.0	6.0	63.5 +0.80	0.007	0.003	8.000	•
8.0	6.0	100.5 +1.00	0.008	0.003	8.001	•
8.0	6.0	120.5 +1.20	0.010	0.003	8.002	•
10.0	8.0	72.5 +0.90	0.008	0.003	10.000	•
10.0	8.0	101.0 +1.00	0.008	0.003	10.001	•
10.0	8.0	120.5 +1.20	0.010	0.003	10.002	•
10.0	8.0	150.5 +1.60	0.010	0.003	10.003	•
12.0	10.0	83.5 +0.90	0.008	0.003	12.000	•
12.0	10.0	151.0 +1.50	0.010	0.003	12.001	•
12.0	10.0	120.5 +1.20	0.010	0.003	12.002	•
14.0	12.0	84.0 +0.90	0.008	0.003	14.000	•
16.0	13.0	93.0 +1.00	0.008	0.003	16.000	•
16.0	13.0	151.0 +1.50	0.010	0.003	16.001	•
20.0	17.0	105.0 +1.00	0.008	0.004	20.000	•
20.0	17.0	151.0 +1.50	0.010	0.004	20.001	•

Bemaßung | Dimensioning



Fräserrohlinge, geschliffen h6

■ in Zoll, mit einseitiger Fase

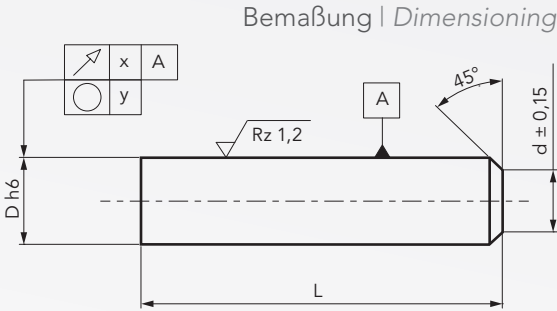
Milling cutter blanks, ground to tolerance h6

■ in inches, chamfered one end



D h6		d	L			x	y	Code	DK400N 7541
inches/mm		mm	inches/mm			mm	mm		
1/8	3.175	2.575	1 1/2	38.1	+0.60	0.004	0.002	18.112	•
1/8	3.175	2.575	2	50.8	+0.70	0.005	0.002	18.200	•
1/8	3.175	2.575	3	76.2	+0.90	0.008	0.002	18.300	•
1/8	3.175	2.575	4	101.6	+1.00	0.008	0.002	18.400	•
3/16	4.763	3.763	1 1/2	38.1	+0.60	0.005	0.002	316.112	•
3/16	4.763	3.763	2	50.8	+0.70	0.005	0.002	316.200	•
3/16	4.763	3.763	2 1/2	63.5	+0.80	0.006	0.002	316.212	•
3/16	4.763	3.763	3	76.2	+0.90	0.008	0.002	316.300	•
1/4	6.350	5.350	2	50.8	+0.70	0.005	0.003	14.200	•
1/4	6.350	5.350	2 1/2	63.5	+0.80	0.006	0.003	14.212	•
1/4	6.350	5.350	3	76.2	+0.90	0.008	0.003	14.300	•
1/4	6.350	5.350	3 1/4	82.6	+0.90	0.008	0.003	14.314	•
1/4	6.350	5.350	4	101.6	+1.00	0.008	0.003	14.400	•
5/16	7.938	5.938	2	50.8	+0.70	0.005	0.003	516.200	•
5/16	7.938	5.938	2 1/2	63.5	+0.80	0.006	0.003	516.212	•
5/16	7.938	5.938	3	76.2	+0.90	0.008	0.003	516.300	•
5/16	7.938	5.938	4	101.6	+1.00	0.008	0.003	516.400	•
3/8	9.525	7.525	2	50.8	+0.70	0.005	0.003	38.200	•
3/8	9.525	7.525	2 1/2	63.5	+0.80	0.006	0.003	38.212	•
3/8	9.525	7.525	3	76.2	+0.90	0.008	0.003	38.300	•
3/8	9.525	7.525	3 1/4	82.6	+0.90	0.008	0.003	38.314	•
3/8	9.525	7.525	3 1/2	88.9	+1.00	0.008	0.003	38.312	•
3/8	9.525	7.525	4	101.6	+1.00	0.008	0.003	38.400	•
3/8	9.525	7.525	6	152.4	+1.60	0.010	0.003	38.600	•
7/16	11.113	9.113	2 1/2	63.5	+0.80	0.006	0.003	716.212	•
7/16	11.113	9.113	2 3/4	69.9	+0.80	0.007	0.003	716.234	•
7/16	11.113	9.113	4	101.6	+1.00	0.008	0.003	716.400	•
7/16	11.113	9.113	4 1/2	114.3	+1.10	0.010	0.003	716.412	•
1/2	12.700	10.700	2 1/2	63.5	+0.80	0.006	0.003	12.212	•
1/2	12.700	10.700	3	76.2	+0.90	0.008	0.003	12.300	•
1/2	12.700	10.700	3 1/2	88.9	+1.00	0.008	0.003	12.312	•
1/2	12.700	10.700	4	101.6	+1.00	0.008	0.003	12.400	•
1/2	12.700	10.700	4 1/2	114.3	+1.10	0.010	0.003	12.412	•
1/2	12.700	10.700	5	127.0	+1.30	0.010	0.003	12.500	•
1/2	12.700	10.700	6	152.4	+1.60	0.010	0.003	12.600	•
5/8	14.288	12.288	3	76.2	+0.90	0.008	0.003	916.300	•

D h6		d	L			x	y	Code	DK400N 7541
inches/mm		mm	inches/mm			mm	mm		
5/16	14.288	12.288	3 1/2	88.9	+1.00	0.008	0.003	916.312	•
5/8	15.875	12.875	3	76.2	+0.90	0.008	0.004	58.300	•
5/8	15.875	12.875	3 1/2	88.9	+1.00	0.008	0.004	58.312	•
5/8	15.875	12.875	4	101.6	+1.00	0.008	0.004	58.400	•
5/8	15.875	12.875	5	127.0	+1.30	0.010	0.004	58.500	•
5/8	15.875	12.875	6	152.4	+1.60	0.010	0.004	58.600	•
3/4	19.050	16.050	3	76.2	+0.90	0.008	0.004	34.300	•
3/4	19.050	16.050	4	101.6	+1.00	0.008	0.004	34.400	•
3/4	19.050	16.050	5	127.0	+1.30	0.010	0.004	34.500	•
3/4	19.050	16.050	6	152.4	+1.60	0.010	0.004	34.600	•
7/8	22.225	19.225	4	101.6	+1.00	0.008	0.004	78.400	•
1	25.400	22.400	3	76.2	+0.90	0.008	0.005	1.300	•
1	25.400	22.400	4	101.6	+1.00	0.008	0.005	1.400	•
1	25.400	22.400	5	127.0	+1.30	0.010	0.005	1.500	•
1	25.400	22.400	6	152.4	+1.60	0.010	0.005	1.600	•
1	25.400	22.400	7	177.8	+2.10	0.010	0.005	1.700	•
1 1/4	31.750	28.750	6	152.4	+1.60	0.010	0.005	114.600	•
1 1/4	31.750	28.750	7 1/2	190.5	+2.50	0.010	0.005	114.712	•



Fräserrohlinge, geschliffen h6

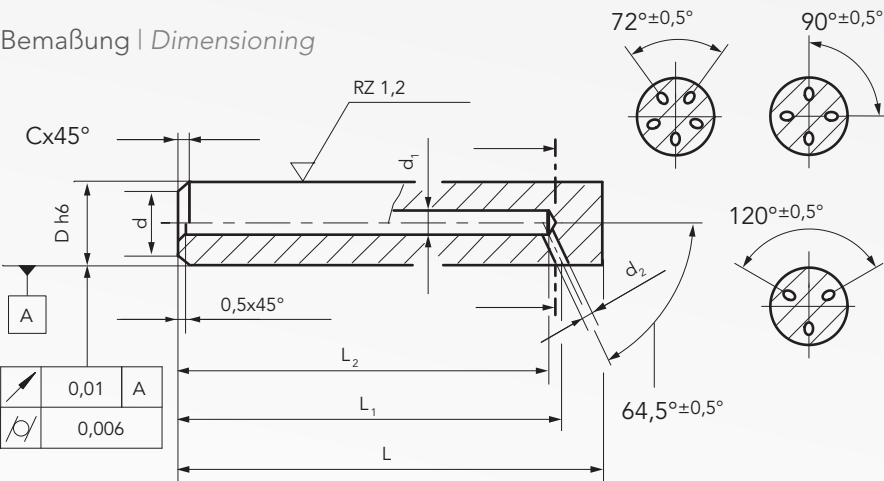
■ mit zentralem Kühlkanal, rad. Austritten, einseitiger Fase

Milling cutter blanks,
ground to tolerance h6

■ with axial coolant duct, lat. exits, chamfered one end



D h6	L	d	d ₁	d ₂	L ₁	L ₂	Code	DK460UF		
								7923 3 exits	7924 4 exits	7925 5 exits
mm	mm	mm	mm	mm	mm	mm				
6.0	58.0 +0.80	5.0	1.75	1.0	55.0	54.6	6.058	•	•	
6.0	76.5 +0.90	5.0	1.75	1.0	73.0	72.6	6.076	•	•	
8.0	64.2 +0.80	6.0	1.75	1.2	60.0	59.1	8.064	•	•	
8.0	101.2 +1.00	6.0	1.75	1.2	97.0	96.1	8.101	•	•	•
10.0	67.2 +0.80	8.0	2.00	1.2	62.0	60.6	10.067		•	
10.0	73.2 +0.90	8.0	2.00	1.2	68.0	66.6	10.073	•	•	
10.0	101.2 +1.00	8.0	2.00	1.2	96.0	94.6	10.101	•	•	
12.0	74.2 +0.90	10.0	2.00	1.5	68.0	66.1	12.074		•	
12.0	84.2 +0.90	10.0	2.00	1.5	78.0	76.1	12.084	•	•	•
12.0	101.1 +1.00	10.0	2.00	1.5	95.0	93.1	12.101	•	•	•
14.0	84.2 +0.90	12.0	2.00	1.5	77.0	74.7	14.084	•	•	
14.0	101.2 +1.00	12.0	2.00	1.5	94.0	91.7	14.101	•	•	•
16.0	83.2 +0.90	13.0	4.00	1.5	75.0	72.2	16.083		•	•
16.0	93.2 +1.00	13.0	4.00	1.5	85.0	82.2	16.093	•	•	•
16.0	101.2 +1.00	13.0	4.00	1.5	93.0	90.2	16.101	•	•	•
18.0	93.0 +1.00	15.0	4.00	2.0	84.0	80.7	18.093	•	•	
18.0	102.0 +1.00	15.0	4.00	2.0	93.0	89.7	18.102	•	•	
18.0	151.3 +1.60	15.0	4.00	2.0	142.0	138.7	18.151	•	•	
20.0	93.2 +1.00	17.0	4.00	2.0	83.0	79.2	20.093	•	•	
20.0	105.0 +1.10	17.0	4.00	2.0	95.0	91.2	20.105	•	•	•
20.0	151.2 +1.60	17.0	4.00	2.0	141.0	137.2	20.151	•	•	•
25.0	122.0 +1.20	22.0	4.00	2.0	109.5	104.5	25.122	•	•	•
25.0	152.0 +1.60	22.0	4.00	2.0	139.5	134.5	25.152	•	•	•

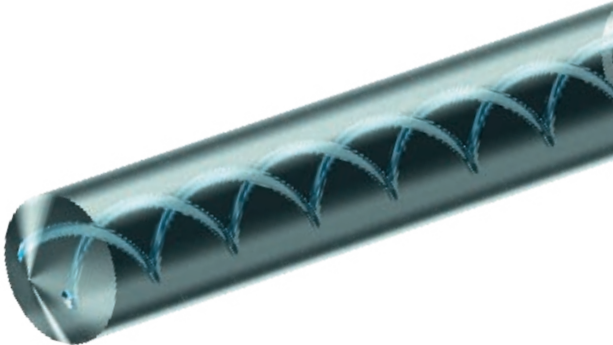


Bohrerrohlinge, geschliffen h6

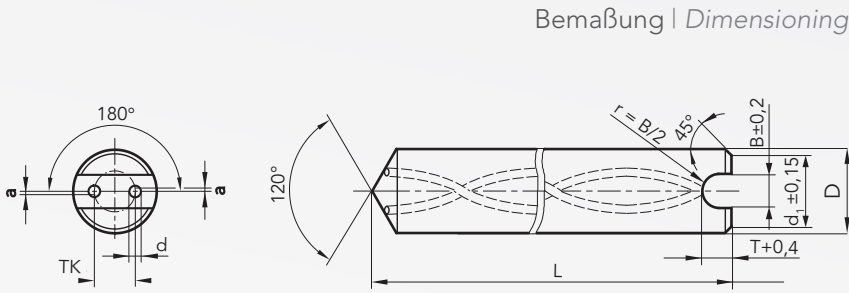
■ 3 x D, mit 2 Kühlkanälen, 30° verdreht, einseitiger Fase

Drill blanks, ground to tolerance h6

■ 3 x D, with 2 coolant ducts, 30° helix, chamfered one end



D h6	d1	L	TK BC	B	T	d	a	30° ±0.5°	Code	3 x D
										DK460UF 7915
mm	mm	mm	mm	mm	mm	mm	mm	mm		
6.0	4.8	67.0 +1.50	2.60 -0.40	1.0	1.20	0.70 ±0.10	0.15	32.65 +0.67/-0.65	6.000	•
6.0	4.8	67.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.15	32.65 +0.67/-0.65	6.001	•
6.0	4.8	63.0 +1.50	1.50 -0.20	1.0	1.20	0.60 ±0.05	0.08	*20.40 +0.42/-0.40	6.002	•
6.0	4.8	67.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.10	**25.84 +0.54/-0.51	6.003	•
6.0	4.8	63.0 +1.50	1.75 -0.20	1.0	1.20	0.40 ±0.05	0.15	20.40 +0.42/-0.40	6.004	•
6.0	4.8	67.0 +1.50	2.10 -0.20	1.0	1.20	0.50 ±0.05	0.15	25.84 +0.54/-0.51	6.005	•
6.0	4.8	67.0 +1.50	2.60 -0.40	1.0	1.20	0.60 ±0.10	0.15	25.84 +0.54/-0.51	6.006	•
8.0	6.8	80.5 +1.50	3.60 -0.60	1.5	1.75	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.000	•
10.0	8.8	90.5 +1.50	4.80 -0.80	2.0	1.90	1.40 ±0.15	0.20	54.41 +1.11/-1.08	10.000	•
12.0	10.5	104.0 +1.50	6.25 -0.80	2.0	2.05	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.000	•
12.0	10.5	77.0 +0.90	6.25 -0.80	2.0	2.05	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.001	•
14.0	12.5	109.0 +1.50	6.70 -0.80	2.5	2.40	1.90 ±0.20	0.37	76.18 +1.56/-1.51	14.000	•
16.0	14.5	117.5 +1.50	8.00 -0.80	2.5	2.60	2.10 ±0.25	0.40	87.06 +1.78/-1.73	16.000	•
18.0	16.5	125.5 +2.00	9.00 -0.80	3.0	2.80	2.30 ±0.25	0.50	97.95 +2.00/-1.94	18.000	•
20.0	18.5	134.0 +2.00	10.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	108.83 +2.23/-2.16	20.000	•
25.0	23.0	150.0 +2.00	12.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	136.03 +2.78/-2.70	25.000	•
25.0	23.0	157.7 +2.00	12.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	136.03 +2.78/-2.70	25.001	•



Bohrerrohlinge, geschliffen h6

■ 5 x D, mit 2 Kühlkanälen, 30° verdreht, einseitiger Fase

Drill blanks, ground to tolerance h6

■ 5 x D, with 2 coolant ducts, 30° helix, chamfered one end

										5 x D
D h6	d1	L	TK BC	B	T	d	a	30° ±0.5°	Code	DK460UF 7916
mm	mm	mm	mm	mm	mm	mm	mm	mm		
6.0	4.8	83.0 +1.50	2.60 -0.40	1.0	1.20	0.70 ±0.10	0.15	32.65 +0.67/-0.65	6.000	•
6.0	4.8	75.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.15	32.65 +0.67/-0.65	6.001	•
6.0	4.8	67.0 +1.50	1.50 -0.20	1.0	1.20	0.60 ±0.05	0.08	*20.40 +0.42/-0.40	6.002	•
6.0	4.8	75.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.10	**25.84 +0.54/-0.51	6.003	•
6.0	4.8	67.0 +1.50	1.75 -0.20	1.0	1.20	0.40 ±0.05	0.15	20.40 +0.42/-0.40	6.004	•
6.0	4.8	75.0 +1.50	2.10 -0.20	1.0	1.20	0.50 ±0.05	0.15	25.84 +0.54/-0.51	6.005	•
6.0	4.8	75.0 +1.50	2.60 -0.40	1.0	1.20	0.60 ±0.10	0.15	25.84 +0.54/-0.51	6.006	•
8.0	6.8	92.5 +1.50	3.60 -0.60	1.5	1.75	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.000	•
10.0	8.8	104.5 +1.50	4.80 -0.80	2.0	1.90	1.40 ±0.15	0.20	54.41 +1.11/-1.08	10.000	•
12.0	10.5	120.0 +2.00	6.25 -0.80	2.0	2.05	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.000	•
14.0	12.5	126.0 +2.00	6.70 -0.80	2.5	2.40	1.90 ±0.20	0.37	76.18 +1.56/-1.51	14.000	•
16.0	14.5	135.5 +2.00	8.00 -0.80	2.5	2.60	2.10 ±0.25	0.40	87.06 +1.78/-1.73	16.000	•
18.0	16.5	145.5 +2.00	9.00 -0.80	3.0	2.80	2.30 ±0.25	0.50	97.95 +2.00/-1.94	18.000	•
20.0	18.5	156.0 +2.00	10.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	108.83 +2.23/-2.16	20.000	•
25.0	23.0	169.0 +2.00	12.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	136.03 +2.78/-2.70	25.000	•
25.0	23.0	184.0 +2.00	12.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	136.03 +2.78/-2.70	25.001	•

Bohrerrohlinge, geschliffen h6

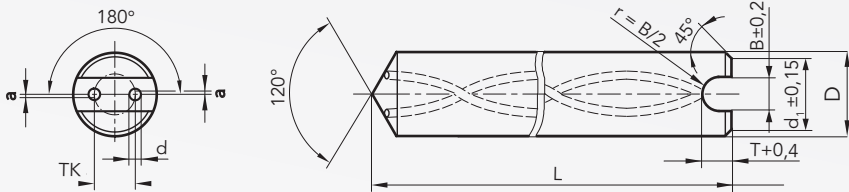
■ 7 x D, mit 2 Kühlkanälen, 30° verdreht, einseitiger Fase

Drill blanks, ground to tolerance h6

■ 7 x D, with 2 coolant ducts, 30° helix, chamfered one end

										7 x D
D h6	d1	L	TK BC	B	T	d	a	30° ±0.5°	Code	DK460UF 7349
mm	mm	mm	mm	mm	mm	mm	mm	mm		
6.0	4.8	98.0 +1.50	2.60 -0.20	1.0	1.20	0.70 ±0.10	0.15	32.65 +0.54/-0.51	6.000	•
6.0	4.8	91.0 +1.50	2.60 -0.20	1.0	1.20	0.70 ±0.10	0.15	32.65 +0.54/-0.51	6.001	•
6.0	4.8	76.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.15	32.65 +0.54/-0.51	6.002	•
6.0	4.8	86.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.15	32.65 +0.54/-0.51	6.003	•
6.0	4.8	71.0 +1.50	1.50 -0.20	1.0	1.20	0.60 ±0.05	0.15	20.40 +0.42/-0.40	6.004	•
6.0	4.8	76.0 +1.50	1.50 -0.20	1.0	1.20	0.60 ±0.05	0.15	20.40 +0.42/-0.40	6.005	•
6.0	4.8	76.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.15	25.84 +0.42/-0.40	6.008	•
6.0	4.8	86.0 +1.50	2.00 -0.20	1.0	1.20	0.80 ±0.10	0.15	25.84 +0.42/-0.40	6.009	•
6.0	4.8	71.0 +1.50	1.75 -0.20	1.0	1.20	0.40 ±0.05	0.15	20.40 +0.42/-0.40	6.010	•
6.0	4.8	76.0 +1.50	1.75 -0.20	1.0	1.20	0.40 ±0.05	0.15	20.40 +0.42/-0.40	6.011	•
6.0	4.8	76.0 +1.50	2.10 -0.20	1.0	1.20	0.50 ±0.05	0.15	25.84 +0.42/-0.40	6.012	•
6.0	4.8	86.0 +1.50	2.60 -0.40	1.0	1.20	0.60 ±0.10	0.15	25.84 +0.42/-0.40	6.013	•
8.0	6.8	107.5 +1.50	3.60 -0.40	1.5	1.75	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.000	•
8.0	6.8	117.5 +1.50	3.60 -0.40	1.5	1.75	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.001	•
10.0	8.8	132.5 +1.50	4.80 -0.60	2.0	1.90	1.40 ±0.15	0.20	54.41 +1.11/-1.08	10.000	•
10.0	8.8	140.5 +1.50	4.80 -0.60	2.0	1.90	1.40 ±0.15	0.20	54.41 +1.11/-1.08	10.001	•
12.0	10.5	157.0 +2.00	6.25 -0.80	2.0	2.05	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.000	•
12.0	10.5	165.0 +2.00	6.25 -0.80	2.0	2.05	1.55 ±0.15	0.30	65.30 +1.34/-1.30	12.001	•
14.0	12.5	184.0 +2.00	6.70 -0.80	2.5	2.40	1.90 ±0.20	0.37	76.18 +1.56/-1.51	14.000	•
16.0	14.5	206.5 +2.00	8.00 -0.80	2.5	2.60	2.10 ±0.25	0.40	87.06 +1.78/-1.73	16.000	•
18.0	16.5	225.5 +2.00	9.00 -0.80	3.0	2.80	2.30 ±0.25	0.50	97.95 +2.00/-1.94	18.000	•
20.0	18.5	247.0 +2.00	10.00 -1.00	3.0	3.00	2.50 ±0.30	0.50	108.83 +2.23/-2.16	20.000	•

Bemaßung | Dimensioning



*30° für Fertigdurchmesser bis 3,75
**30° für Fertigdurchmesser bis 4,75
*30° for finished diameter up to 3.75
**30° for finished diameter up to 4.75

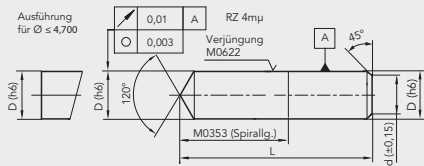
Bohrerrohlinge, geschliffen h6

Drill blanks, ground to tolerance h6

DIN 338

DIN 338

DK460UF 7501	D h6: Ø 2,00–12,00mm um 0,1 mm steigend plus Kernloch-Ø
	D h6: Ø 2.00–12.00mm in increments of 0.1 mm plus tapping hole size diameters



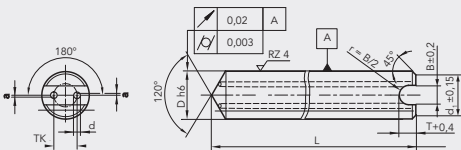
Bohrerrohlinge, geschliffen h6/h8

Drill blanks, ground to tolerance h6/h8

mit 2 parallelen Kühlkanälen, normalem Teilkreis

with 2 parallel coolant ducts, standard pitch circle

DK460UF 7537 4xD	DK460UF 7551 7xD	DK460UF 7538 10xD
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Bohrerrohlinge, geschliffen h6

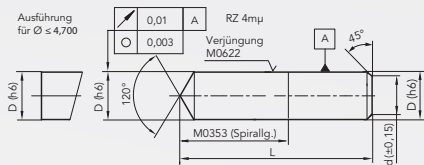
Drill blanks, ground to tolerance h6

DIN 1897/6539

DIN 1897/6539

DK460UF 7502	DK460UF 7542	DK460UF 7547	DK460UF 7356
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D h6: Ø 2,00–12,00mm um 0,1 mm steigend plus Kernloch-Ø
D h6: Ø 2.00–12.00mm in increments of 0.1 mm plus tapping hole size diameters



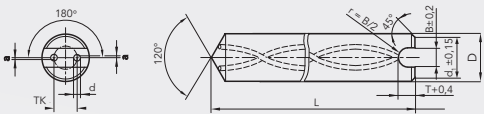
Bohrerrohlinge, geschliffen h6

Drill blanks, ground to tolerance h6

mit 2 Kühlkanälen, einseitiger Fase, 30° verdreht

with 2 coolant ducts, chamfered one end, 30° helix

DK460UF 7943 15xD	DK460UF 7579 20xD	DK460UF 7580 25xD
DK460UF 7581 30xD	DK460UF 7598 40xD	



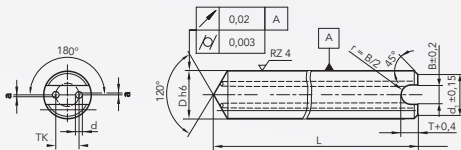
Bohrerrohlinge, geschliffen h6/h8

Drill blanks, ground to tolerance h6/h8

mit 2 parallelen Kühlkanälen, eingengtem Teilkreis

with 2 parallel coolant ducts, restricted pitch circle

DK460UF 7539 4xD	DK460UF 7546 10xD
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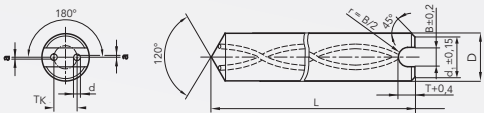
Bohrerrohlinge, geschliffen h6

Drill blanks, ground to tolerance h6

mit 2 Kühlkanälen, einseitiger Fase, 40° verdreht

with 2 coolant ducts, chamfered one end, 40° helix

DK460UF 7567 3xD	DK460UF 7568 5xD	DK460UF 7569 7xD
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Zertifizierte Qualität *Certified quality*

Wir sind überzeugt: Qualität beginnt beim Rohstoff. Deshalb stellen wir höchste Anforderungen an unsere Lieferanten. Vom Mischen der Pulver bis hin zum Schleifen der gesinterten Hartmetallprodukte sorgen wir für eine hochwertige Herstellung Ihrer Produkte. Unser nach DIN EN ISO 9001 zertifiziertes Qualitätsmanagementsystem und unser Beitrag zum Umweltschutz durch unsere DIN EN ISO 50001 sind wegweisend für eine zukunftsorientierte und nachhaltige Produktion.

We are convinced that quality starts with the raw material. That is why we place the highest demands on our suppliers. From powder preparation to grinding of sintered carbide products, we ensure a high-quality production of your products. Our quality management system certified according to DIN ISO 9001 and our contribution to environmental protection by certification to DIN EN ISO 50001 lead the way to a future-oriented and sustainable production.

Wareneingangskontrolle *Incoming quality control*

Wir wollen Ihnen die beste Qualität bieten – und das von Anfang an. Deshalb werden unsere Rohstoffe von namhaften Herstellern bezogen. Bereits beim Wareneingang kontrolliert unser Labor die Korngrößenverteilung, die spezifische Oberfläche und den Kohlenstoffhaushalt der Pulver.

We want to offer you the best quality – right from the start. Therefore our raw materials are sourced from reputable manufacturers. As soon as the goods are received, our laboratory checks the particle size distribution, the specific surface and the carbon balance of the powders.

Metallurgische Qualitätskontrolle *Metallurgical quality control*

Die korrekte Einstellung der magnetischen und physikalischen Kennwerte und die Untersuchung der Mikrostruktur (Gefüge) der verschiedenen Hartmetallsorten während des gesamten Produktionsprozesses sichert die hohe Qualität unserer Endprodukte.

The proper setting of the magnetic and physical characteristics as well as the screening of the microstructure of the different carbide grades during the entire production process ensures high quality of our end products.

Geometrische Qualitätskontrolle *Geometrical quality control*

Im Rahmen der geometrischen Qualitätssicherung werden durch innovative Messtechniken und hochauflösende Kamerasysteme die vielfältigen geometrischen Werte kontrolliert (z. B. Außendurchmesser, Steigung, Kühlkanaldurchmesser, Teilkreisversatz usw.).

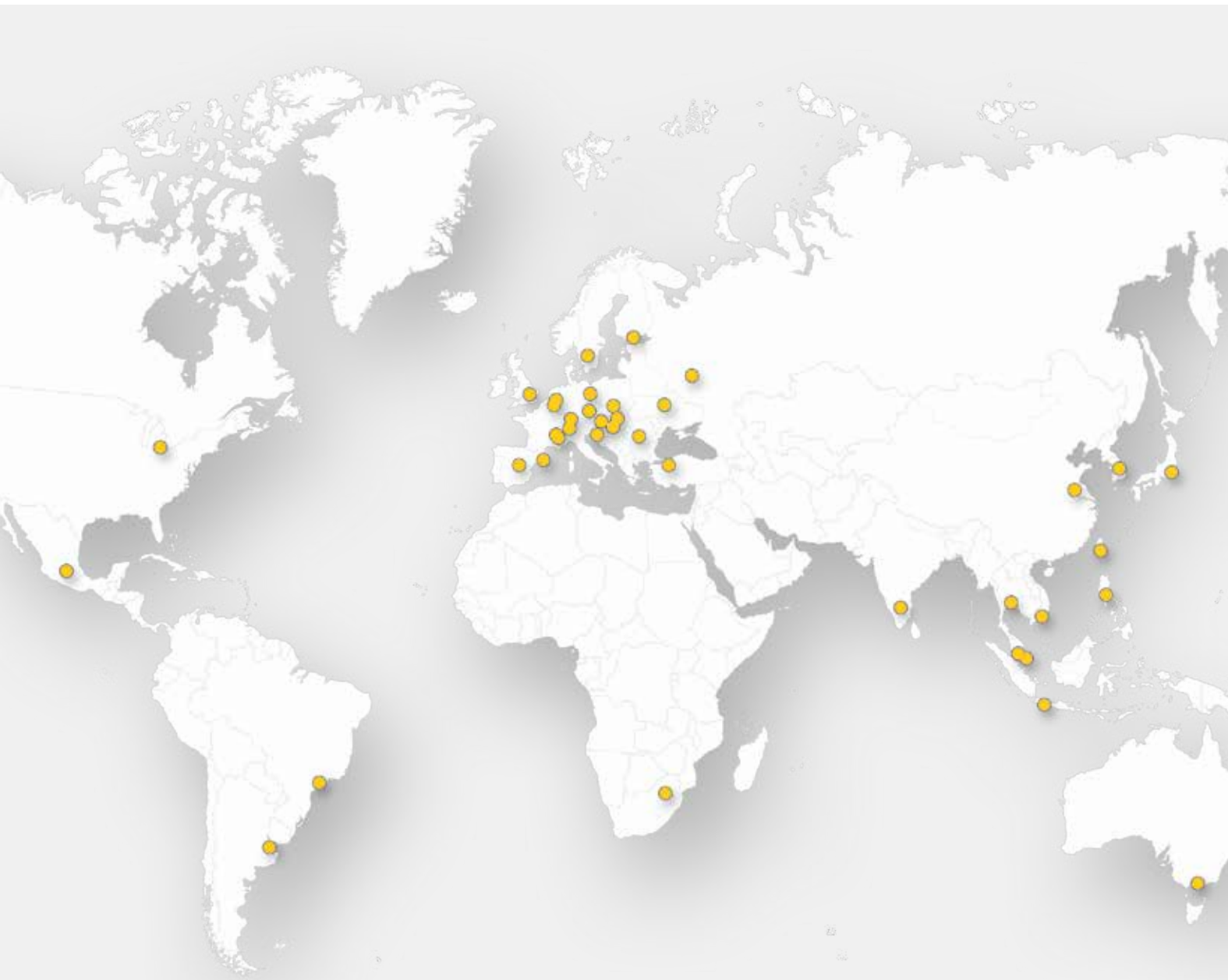
As part of geometric quality assurance, innovative measurement techniques and high-resolution camera systems are used to control the various geometric values (for example, outer diameter, pitch, cooling channel diameter, pitch offset, etc.).





Weltweit vertreten

Represented worldwide



Durch unsere Zugehörigkeit zum größten deutschen Werkzeughersteller – der Gühring KG – sind wir auch Teil des weltweit bestehenden Vertriebsnetzes mit seinen zahlreichen Ländergesellschaften und Partnern. Maßgeschneiderte Lösungen für Ihre individuellen Ansprüche – nah am Kunden – immer für Sie vor Ort.

Due to our affiliation to the Gühring KG, the largest German tool manufacturer, we are also part of the worldwide existing sales network with its numerous national subsidiaries and partners. Tailor-made solutions for your individual requirements – close to the customers – always on site.

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Sorten-Spezifikationen | *Grade specifications*

Sorte Grade		DK400N	DK120	DK460UF	DK500UF	DK255F	DK256EH	DK120UF	K55SF
Klassifizierung Classification		K20-K40	K15-K20	K20-K40	K20-K30	K20	K20	K10	K05-K10
Co	%	10.0	6.0	10.0	12.0	8.0	8.0	7.0	9.0
Härte HV30 Hardness HV30	kg/mm²	1580	1620	1620	1690	1720	1790	1850	1920
Mittlere Korngröße Average Grain Size	µm	0.70	1.20	0.60	0.50	0.70	0.60	0.70	0.20

Toleranzen | *Tolerances*

L mm	$\nearrow$ mm
330	$^{+10}_0$
415	$^{+26}_0$
700	$^{+70}_0$

Rundstäbe, roh,
ohne und mit Kühlkanal
*Rods, raw,
solid or with coolant ducts*

D h6 mm	$\nearrow$ mm	○ mm
6.0	0.10	0.002
8.0	0.06	0.003
10.0	0.06	0.003
12.0	0.03	0.003
14.0	0.03	0.003
16.0	0.03	0.003
18.0	0.02	0.003
20.0	0.03	0.004

Rundstäbe, geschliffen
h6, 415 mm $^{+26}_0$, ohne
und mit Kühlkanal
*Rods, ground to
tolerance h6, 415 mm $^{+26}_0$,
solid or with cool-
ant ducts*

Rundstäbe, geschliffen
h6, 330 mm $^{+10}_0$, ohne und mit Kühlkanal
*Rods, ground to tolerance h6,
330 mm $^{+10}_0$, solid or with coolant ducts*

D h6 mm	$\nearrow$ mm	○ mm
1.0	0.25	0.030
1.5	0.25	0.030
2.0	0.25	0.030
3.0	0.11	0.002
3.175	0.11	0.002
3.5	0.11	0.002
4.0	0.11	0.002
4.5	0.11	0.002
4.763	0.11	0.002
5.0	0.11	0.002
5.5	0.11	0.002
6.0	0.11	0.002
6.350	0.11	0.003
6.5	0.11	0.003
7.0	0.11	0.003
7.5	0.06	0.003
7.938	0.06	0.003
8.0	0.06	0.003
8.5	0.06	0.003
9.0	0.06	0.003
9.5	0.06	0.003
9.525	0.06	0.003

D h6 mm	$\nearrow$ mm	○ mm
10.0	0.06	0.003
10.5	0.05	0.003
11.0	0.05	0.003
11.113	0.05	0.003
11.5	0.05	0.003
12.0	0.05	0.003
12.5	0.05	0.003
12.700	0.05	0.003
13.0	0.05	0.003
13.5	0.05	0.003
14.0	0.04	0.003
14.288	0.04	0.003
14.5	0.04	0.003
15.0	0.04	0.003
15.5	0.04	0.003
15.875	0.04	0.003
16.0	0.04	0.003
16.5	0.04	0.003
17.0	0.02	0.003
17.5	0.02	0.003
18.0	0.02	0.003
18.5	0.02	0.004

D h6 mm	$\nearrow$ mm	○ mm
19.0	0.02	0.004
19.050	0.02	0.004
19.5	0.02	0.004
20.0	0.02	0.004
21.0	0.02	0.004
22.0	0.02	0.004
22.225	0.02	0.004
23.0	0.02	0.004
24.0	0.02	0.004
25.0	0.02	0.004
25.400	0.02	0.004
26.0	0.02	0.005
27.0	0.02	0.005
28.0	0.02	0.005
29.0	0.02	0.005
30.0	0.02	0.005
31.0	0.02	0.005
32.0	0.02	0.005
34.0	0.02	0.006
40.0	0.02	0.006

$\nearrow$ Rundlauf | *Circular run-out*
○ Rundheit | *Roundness*

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Artikelübersicht | Item overview

Sorte Grade	DK400N	DK120	DK460UF				DK500UF	DK255F	DK256EH	DK120UF	K55SF	Seite Page
Vollstäbe <i>Solid rods</i>												
Länge <i>Length</i>		330mm	330 mm	415 mm	100mm	700mm	330mm	330mm	330mm	330mm	330mm	
roh <i>raw</i>		7021	7014									14 – 15
geschliffen h6 <i>ground h6</i>		7031	7075	7354	7085		7372	7032			7187	16 – 17
geschliffen h6, in Zoll <i>ground h6, in inches</i>			7932									17
Rundstäbe mit Kühlkanälen <i>Rods with coolant ducts</i>												
Länge <i>Length</i>		330mm	330 mm	415 mm	100mm	700mm	330mm	330mm	330mm	330mm	330mm	
roh, zentral <i>raw, central</i>			7387	7987						7380		18
geschliffen h6, zentral <i>ground h6, central</i>			7339									19
roh, parallel <i>raw, parallel</i>			7301	7309								20 – 21
geschliffen h6, parallel <i>ground h6, parallel</i>			7302									22 – 23
roh, 2x15° <i>raw, 2x15°</i>			7945	7947								24
geschliffen h6, 2x15° <i>ground h6, 2x15°</i>			7583									25
roh, 2x30° <i>raw, 2x30°</i>			7940	7353		7074		7370				26 – 28
geschliffen h6, 2x30° <i>ground h6, 2x30°</i>			7328	7355								29
roh, 2x40° <i>raw, 2x40°</i>			7935	7385				7397				30 – 31
geschliffen h6, 2x40° <i>ground h6, 2x40°</i>			7330									32
kleinstverdrallt <i>microtwisted</i>			7039									33
roh, 3x30° <i>raw, 3x30°</i>			7933	7383								34
geschliffen h6, 3x30° <i>ground h6, 3x30°</i>			7358									35
roh, 3x40° <i>raw, 3x40°</i>			7934	7384								36
geschliffen h6, 3x40° <i>ground h6, 3x40°</i>			7359									37
Fräserrohlinge <i>Milling cutter blanks</i>												
geschl. h6, einseitige Fase <i>ground h6, chamfered one end</i>			7540					7556				38 – 42
geschl. h6, in Zoll, einseitige Fase <i>ground h6, in inches, chamfered one end</i>	7541											44
geschl. h6, zentraler Kühlkanal + 3 rad. Austritte <i>ground h6, axial coolant duct + 3 lat. exits</i>			7923									46
geschl. h6, zentraler Kühlkanal + 4 rad. Austritte <i>ground h6, axial coolant duct + 4 lat. exits</i>			7924									46
geschl. h6, zentraler Kühlkanal + 5 rad. Austritte <i>ground h6, axial coolant duct + 5 lat. exits</i>			7925									46
Bohrerrohlinge <i>Drill blanks</i>												
geschl. h6, 3xD, 2x30°, einseitige Fase <i>ground h6, 3xD, 2x30°, chamfered one end</i>			7915									47
geschl. h6, 5xD, 2x30°, einseitige Fase <i>ground h6, 5xD, 2x30°, chamfered one end</i>			7916									48
geschl. h6, 7xD, 2x30°, einseitige Fase <i>ground h6, 7xD, 2x30°, chamfered one end</i>			7349									49
Auf Anfrage <i>On request</i>												50 – 51





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