



BERLIN CARBIDE

by Gühring



**PRODUCT
CATALOGUE**

HARTMETALLE
FÜR PRÄZISIONSWERKZEUGE

CARBIDES
FOR PRECISION CUTTING TOOLS

Sinterei



Sorte Grade	DK120	DK120UF	DK255F	DK400N	DK460UF	DK460UF	DK460UF	DK460UF	DK256EH	DK500UF	K555F	Seite Page
Rundstäbe Rods												
Länge Length	330 mm	330 mm	330 mm		330 mm	415 mm	700 mm	100 mm	330 mm	330 mm	330 mm	
roh raw	7021	7016	7022		7014	7352			7857	7367	7187	10–11
h6	7031		7032		7075	7354		7085		7372	7187	12–13
h6, in Zoll h6, in inch					7932							13
roh, zentral raw, axial		7380			7387	7987						14
roh, zentral raw, axial					7339							15
roh, parallel raw, parallel			7401		7301	7309						16–17
h6, parallel					7302							18–19
roh, 2x15° raw, 2x15°					7945	7947						20
h6, 2x15°					7583							21
roh, 2x30° raw, 2x30°			7370		7940	7353	7074					22–24
h6 2x30°					7328	7355						25
kleinstverdrallt microtisted					7039							26
roh, 2x40° raw, 2x40°			7397		7935	7385						27–28
h6, 2x40°					7330							29
roh, 3x30° raw, 3x30°					7933	7383						30
h6, 3x30°					7358							31
roh, 3x40° raw, 3x40°					7934	7384						32
h6, 3x40°					7359							33
Fräserrohlinge Milling Cutter Blanks												
h6, DIN 6527 / 6528					7540				7556			34–36, 38
h6, DIN 6535-HB + Weldon					7410							37
h6, in Zoll h6, in inch				7541								39–40
h6, zentral, 3 rad. Austritte h6, axial, 3 lat. exits					7923							41
h6, zentral, 4 rad. Austritte h6, axial, 4 lat. exits					7924							41
h6, zentral, 5 rad. Austritte h6, axial, 5 lat. exits					7925							41
Bohrerrohlinge Drill Blanks												
h6, 3xD					7915							42
h6, 5xD					7916							43
h6, 7xD					7349							44
h6, DIN 338					7501							46
h6, DIN 1879 / 6539					7502	7542	7547	7556				46
h6/h8, 4xD, parallel, eingengter TK h6/h8, 4xD, parallel, narrow BC					7539							46
h6/h8, 10xD, parallel, eingengter TK h6/h8, 10xD, parallel, narrow BC					7546							46
h6/h8, 4xD, parallel					7537							46
h6/h8, 7xD, parallel					7551							46
h6/h8, 10xD, parallel					7538							46
h6, 15xD, 2x30°					7943							47
h6, 20xD, 2x30°					7579							47
h6, 25xD, 2x30°					7580							47
h6, 30xD, 2x30°					7581							47
h6, 40xD, 2x30°					7598							47
h6, 3xD, 2x40°					7567							47
h6, 5xD, 2x40°					7568							47
h6, 7xD, 2x40°					7569							47
h8, 3xD 2x30°					7915							47
h8, 5xD 2x30°					7916							47
h8, 7xD 2x30°					7349							47
Zentrierbohrer-Rohlinge Center Drill Blanks												
h7					7533							45
Rohlinge für Frässtifte roh und ungeschliffen DK105 Carbide burr blanks raw and unground DK105												
	ZYA	WRC	SKM	KEL	KSK	KUD	SPG	RBF	TRE	FLII		
DIN 8033	7233	7234	7235	7236	7238	7240	7241	7242	7243	7244		48–49

DK120

Rundlaufende Werkzeuge:

Einsatz bei Bohrern, Senkern, Zentrierbohrern, Gewindebohrern, Gewindeschneidern, Schneideisen, Gewindeschneidplatten u.v.m. Feinkornsorte mit hoher Zähigkeit gepaart mit hoher Härte. Gute Schneidkantenstabilität.

Umformtechnik:

Einsatz als Rohr- und Profildrehwerkzeug, besonders in der Buntmetallbearbeitung, Spüllochkern.

Rotating tools:

Used for drills, countersinkers, centering drills, tapping cutters, thread cutters, cutting plates and more. Fine-grained grade with high toughness, high hardness and a good cutting edge stability.

Forming:

Used as pipe and profile drawing tool, especially in non-ferrous metalworking, cavity pit core.

DK105

Feinkornsorte für Universalanwendungen mit hohen Ansprüchen an die Verschleißfestigkeit, z.B. für die Bearbeitung von kurzspannenden Werkstoffen sowie für Verschleißschutzanwendungen.

Fine-grain grade for special applications with high demands on the wear resistance, e.g. for working short-chipping materials and wear protection.

DK120UF

Rundlaufende Werkzeuge:

Einsatz bei Bohrern, Senkern, Zentrierbohrern, Gewindebohrern, Gewindeschneidern, Schneideisen, Gewindeschneidplatten u.v.m. Feinkornsorte mit hoher Zähigkeit gepaart mit hoher Härte. Gute Schneidkantenstabilität.

Umformtechnik:

Einsatz als Rohr- und Profildrehwerkzeug, besonders in der Buntmetallbearbeitung, Spüllochkern.

Rotating tools:

Used for drills, countersinkers, centering drills, tapping cutters, thread cutters, cutting plates and more. Fine-grained grade with high toughness, high hardness and a good cutting edge stability.

Forming:

Used as pipe and profile drawing tool, especially in non-ferrous metalworking, cavity pit core.

DK255F

Feinstkornsorte mit hohen Verschleiß- und Schneidkantenfestigkeiten für Bohr- und Fräswerkzeuge zur Bearbeitung von Guss, Hartguss, gehärtetem Stahl, harten Al-Legierungen und GFK.

Fine-grained grade with high wear resistance and cutting edge stability, used for drilling and milling tools, applicable to cast iron, chilled cast iron, hardened steel, hard aluminium alloys and fiberglass reinforced plastics.

DK256EH

Verbesserte Kombination von Härte und Risszähigkeit. Hervorragende Schneidkantenstabilität und Verschleißfestigkeit bei gleichzeitig verbesserter Zähigkeit. Ideal für Bearbeitung von Sonderlegierungen wie Nickel-, Kobaltbasislegierungen, hochfeste Edelstähle und Komposit-Materialien.

Improved combination of hardness and crack resistance. Excellent cutting edge stability, wear resistance and toughness. Ideal for working special alloys with nickel or cobalt base, high strength stainless steel and composites.

DK400N

Rundlaufende Werkzeuge:

Einsatz bei Bohrern, Schruppfräsern, Senkern, Zentrierbohrern, Gewindebohrern, Gewindeschneidern, Schneideisen, Gewindeschneidplatten u.v.m. Ultrafeinstkornsorte mit hoher Zähigkeit gepaart mit hoher Härte. Gute Schneidkantenstabilität.

Umformtechnik:

Einsatz als Kaltwalze, Kalandrier- oder Glättwalze.

Schneid- und Stanztechnik:

Einsatz als Stempel, Messer in der Gummi- und Kunststoffbearbeitung, auch in der Buntmetallbearbeitung.

Rotating tools:

Used for drills, roughing cutters, countersinkers, centering drills, tapping cutters, thread cutters, cutting plates and more. Ultrafine-grained grade with high toughness, high hardness and a good cutting edge stability.

Forming:

Used as cold roll, calender or smoothing roll.

Cutting and punching:

Used as stamps or knives for working rubber, plastics and nonferrous metals.

DK460UF

Umformtechnik:

Einsatz als Kaltwalze, Kalandrier- oder Glättwalze.

Schneid- und Stanztechnik:

Einsatz als Stempel, Messer in der Gummi- und Kunststoffbearbeitung, auch in der Buntmetallbearbeitung.

Rundlaufende Werkzeuge:

Einsatz bei Bohrern, Schlicht- und Schruppfräsern, Senkern, Zentrierbohrern, Gewindebohrern, Gewindeschneidern, Schneideisen, Gewindeschneidplatten u.v.m. Ultrafeinstkornsorte mit hoher Zähigkeit gepaart mit hoher Härte. Gute Schneidkantenstabilität. Universalsorte, einsetzbar in Guss, Hartguss, Stahl, gehärtetem Stahl, Titanlegierungen, harten Al-Legierungen, GFK etc.

Papier und Holzindustrie:

Einsatz als Papierschneidmesser mit höchsten Ansprüchen an Kantenstabilität und Langlebigkeit.

Schneiden und Schälen:

Einsatz als Stabmesser in der Getriebeherstellung. Trockenbearbeitung. Einsatz als Flachform und Innenrundformmeißel. Einsatz als Wälzfräser für das Trockenfräsen bei der Getriebe- bzw. der Zahnradherstellung.

Forming:

Used as cold roll, calender or smoothing roll.

Cutting and punching:

Used as stamps or knives for working rubber, plastics and nonferrous metals.

Rotating tools:

Used for drills, milling cutters, roughing cutters, countersinkers, centering drills, tapping cutters, thread cutters, cutting plates and more. Ultrafinegrained grade with high toughness, high hardness and a good cutting edge stability. Applicable to cast iron, chilled cast iron, steel, hardened steel, titanium alloys, hard aluminium alloys, fiberglass reinforced plastics and more.

Paper and wood working:

Used as cutting knife with highest demands on cutting edge stability and long-life cycle.

Cutting and scalping:

Used as bar blades in gear productions, for dry processing, as flat shape, internal form chisel, for gear hobbing in transmission and gear wheel productions.

K55SF

Für hochverschleißfeste Materialien, z.B. gehärtete Stähle, Graphit, Aluminiumlegierungen und Verbundwerkstoffe wie Kevlar und CFK. Geeignet für Hochgeschwindigkeitszerspanung und Trockenbearbeitung.

For high wear resistant materials, e.g. hardened steel, graphite, aluminium alloys and composites like Kevlar or carbon fibre reinforced plastics. Applicable for high-speed chipping and dry processing.

DK500UF

Rundlaufende Werkzeuge:

Einsatz bei Bohrern, Schrupp- und Schlichtfräsern, Senkern, Zentrierbohrern, Gewindebohrern, Gewindeschneidern, Schneideisen, Gewindeschneidplatten u.v.m. Ultrafeinstkornsorte mit hoher Zähigkeit gepaart mit hoher Härte. Gute Schneidkantenstabilität. Besonders geeignet zur Hartbearbeitung.

Umformtechnik:

Einsatz als Kaltwalze, Kalandrier- oder Glättwalze.

Schneid- und Stanztechnik:

Einsatz als Stempel, Messer in der Gummi- und Kunststoffbearbeitung, auch in der Buntmetallbearbeitung. Einsatz als Wälzfräser für das Trockenfräsen bei der Getriebe- bzw. der Zahnradherstellung.

Rotating tools:

Used for drills, milling cutters, roughing cutters, countersinkers, centering drills, tapping cutters, thread cutters, cutting plates and more. Ultrafinegrained grade with high toughness, high hardness and a good cutting edge stability. Applicable especially for hard processing.

Forming:

Used as cold roll, calender or smoothing roll.

Cutting and punching:

Used as stamps or knives for working rubber, plastics and nonferrous metals, for gear hobbing in transmission and gear wheel productions.

Inhalt

Content

Rundstäbe ohne Kühlkanal roh und geschliffen <i>Rods without coolant ducts raw and ground</i>	10
Rundstäbe mit Kühlkanal zentral/parallel roh und geschliffen <i>Rods with axial/parallel coolant ducts raw and ground</i>	14
Rundstäbe mit Kühlkanal, 15° – 40° verdreht roh und geschliffen <i>Rods with spiralised coolant ducts raw and ground</i>	20
Fräserrohlinge mit und ohne Kühlkanal <i>Milling cutter blanks with and without coolant ducts</i>	34
Bohrerrohlinge mit und ohne Kühlkanal <i>Drill blanks with and without coolant ducts</i>	42
Rohlinge für Frässtifte roh <i>Carbide burr blanks raw</i>	48
Toleranzen <i>Tolerances</i>	50



Die Geschichte und Entwicklung von BERLIN CARBIDE by Gühring

Wir – BERLIN CARBIDE – bieten Ihnen verschiedenste Hartmetallqualitäten für höchste Anforderungen – Made in Germany. Unser Anspruch ist und bleibt, für jeden Kundenwunsch und jede Anwendung eine individuelle Lösung zu bieten, die rundum zufriedenstellt.

In unserem Hartmetallwerk in Berlin produzieren wir mit einem Team von ca. 330 Mitarbeitern jährlich rund 1400 Tonnen Hartmetall. Egal, ob Rohlinge für rotierende Werkzeuge oder speziell auf Sie zugeschnittene Geometrien: Dank unserer modernsten, teilautomatisierten Strang- und Trockenpressen in Verbindung mit unserer flexiblen Formgebung realisieren wir für Sie selbst schwierigste Formen und Geometrien.

Alles, was Sie tun müssen, ist sich für eine unserer ausgeklügelten Hartmetallsorten zu entscheiden.

Wir sind überzeugt: Qualität beginnt beim Rohstoff. Deshalb stellen wir höchste Anforderungen an unsere Lieferanten. Unsere moderne Produktion und unser nach DIN ISO 9001 zertifiziertes Qualitätsmanagementsystem ermöglichen es uns, von der Pulveraufbereitung an bis hin zum Schleifen der gesinterten Hartmetallprodukte eine absolut hochwertige Herstellung der Werkstoffe zu gewährleisten. Gemäß unseres Qualitätsanspruchs kontrollieren wir bei allen Aufträgen jeden einzelnen der zahlreichen Fertigungsschritte in unserem Labor.

Überzeugen Sie sich gerne selbst von unserer Leistung und besuchen Sie uns in der Hauptstadt Berlin!



The history and progress of BERLIN CARBIDE by Gühring

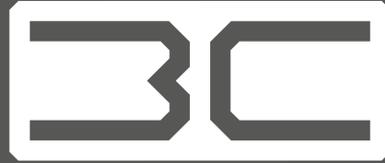
We – BERLIN CARBIDE – offer you different carbide grades for highest requirements – Made in Germany. Our goal has been and remains to offer an individual solution that is completely satisfying for every customer and every application.

In our carbide factory in Berlin we produce around 1400 tons of tungsten carbide annually with a team of approximately 330 employees. No matter if blanks for rotating tools or specially tailored geometries: thanks to our modern, partially automated extrusion and dry pressing linked to our shaping department, we realize even the most difficult shapes and geometries for you.

All you have to do is to choose one of our sophisticated carbide grades.

We are convinced: quality begins with the raw materials. Therefore, we put highest demands to our suppliers. Our modern production and our DIN ISO 9001 certified quality management system enable us to ensure a high-quality production of materials from the powder preparation up to the grinding of sintered tungsten carbide products. In accordance to our quality standards, we control each of the numerous production steps at all order in our laboratory.

Visit us in Berlin, the attractive capital of Germany and convince yourself of our services!



BERLIN CARBIDE

by Gühring



BERLIN CARBIDE – ein Unternehmen mit starker Verwurzelung und gleichzeitig geprägt von stetigem Innovationsdrang. Die vier Kanten unseres Logos stehen deshalb für die vier Säulen unserer Unternehmenskultur: Unsere Verankerung in der Bundeshauptstadt, unser Streben nach innovativen Materialien, Prozessen und Anwendungen, unsere Selbstverpflichtung zur Forschung und Entwicklung neuer Lösungen und den hohen Qualitätsanspruch, der über all unserem Tun steht. Die im Logo integrierten, stilisierten Buchstaben B und C sind nach beiden Seiten geöffnet und spiegeln die Offenheit wider, die wir von BERLIN CARBIDE unseren Kunden genauso entgegenbringen, wie innovativen Materialien oder Fertigungsmethoden.

BERLIN CARBIDE – a company with strong roots and at the same time showing a strong drive for innovation. The four edges of our logo represent the four pillars of our corporate culture: our roots that lie within the federal capital Berlin, our pursuit for innovative materials, processes and applications, our commitment to research and the development of new solutions, and our high demand for quality. The stylized letters B and C which are integrated into our logo are open to both sides and reflect our own openness which we show to our BERLIN CARBIDE customers, as well as to innovative materials or production processes.

Technische Daten

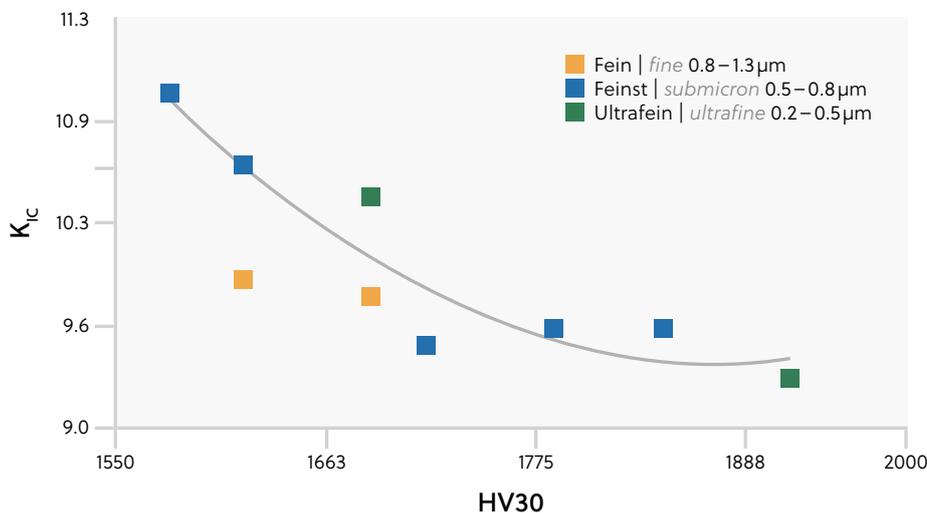
Technical Data

Sorte Grade		DK120	DK105	DK120UF	DK255F	DK256EH	DK400N	DK460UF	K55SF	DK500UF
Klassifizierung Classification		K15-K20	K10	K10	K20	K20	K20-K40	K20-K40	K05-K10	K20-K30
Mittlere Korngröße Average Grain Size	μm	1.20	0.90	0.70	0.70	0.60	0.70	0.60	0.20	0.50
Mittlere Korngröße Average Grain Size		fein <i>fine</i>	fein <i>fine</i>	feinst <i>submicron</i>	feinst <i>submicron</i>	feinst <i>submicron</i>	feinst <i>submicron</i>	feinst <i>submicron</i>	ultrafein <i>ultrafine</i>	ultrafein <i>ultrafine</i>
Härte Hardness	HV30	1620	1690	1850	1720	1790	1580	1620	1920	1690
Biegebruch- festigkeit Transverse Rupture Strength	N/mm^2	3200	3300	3500	3800	3700	4100	4100	3800	4200
Dichte Density	g/cm^3	14.95	14.85	14.70	14.55	14.60	14.50	14.45	14.35	14.05
WC inkl. Dotierung WC incl. Doping	%	94.0	94.0	93.0	92.0	92.0	90.0	90.0	91.0	88.0
Co	%	6.0	6.0	7.0	8.0	8.0	10.0	10.0	9.0	12.0
Bruchzähigkeit K_{IC} Fracture Toughness	$\text{MPa} \cdot \text{m}^{1/2}$	9.9	9.8	9.6	9.5	9.6	11.0	10.6	9.3	10.4

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.
 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.

Risszähigkeit vs. Härte

Fracture Toughness vs. Hardness



Anwendungen

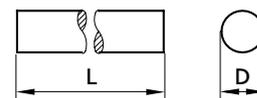
Applications

Werkstück-Werkstoff Work piece-Material	weich / zäh week / tough	hart / spröde hard / refractory
Stahl Steel	DK400N	DK460UF, DK256EH
Aluminium-Legierungen Aluminium alloys	DK460UF	DK255F
Gusseisen Cast iron	DK255F	
Gehärteter Stahl <58 HRC 58 HRC < Härte <62 HRC Härte >62 HRC Hardened steel <58 HRC 58 HRC < Hardness <62 HRC Hardness >62 HRC	DK500UF	DK256EH, KFK55SF
Titan-Legierungen Titanium Alloys	DK400N	DK460UF
Nickelbasis-Superlegierungen Nickel-base Superalloys	DK400N	DK256EH
Graphit Graphite	DK120 diamantbeschichtet DK120 diamond-coated	
CFK (kohlenstofffaser- verstärkter Kunststoff) CFRP (carbon-fibrereinforced plastic)	DK256EH	
GFK (glasfaserverstärkter Kunststoff) GFRP (glass-fibrereinforced plastic)	DK256EH, DK120UF	
Kunststoff Plastics	DK460UF	
Buntmetall Non-ferrous metal	DK255F	
Holz Wood	DK460UF	

Rundstäbe, roh

Rods, raw

D mm	Code	DK460UF 7014 330 mm	DK460UF 7352 415 mm	DK120 7021 330 mm	DK120UF 7016 330 mm	DK255F 7022 330 mm	DK500UF 7367 330 mm	K55SF 7187 330 mm
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	☑		☑				

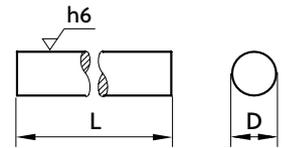


D mm	Code	DK460UF 7014 330 mm	DK460UF 7352 415 mm	DK120 7021 330 mm	DK120UF 7016 330 mm	DK255F 7022 330 mm	DK500UF 7367 330 mm	K55SF 7187 330 mm
19.2 +0.60	19.200	✓		✓				✓
19.7 +0.60	19.700	✓		✓				
20.2 +0.60	20.200	✓	✓	✓	✓	✓	✓	
20.7 +0.60	20.700	✓		✓				
21.2 +0.60	21.200	✓		✓				
21.7 +0.60	21.700	✓		✓				
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	✓	✓	✓				
31.2 +0.80	31.200	✓						
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	✓		✓				

Rundstäbe, geschliffen h6

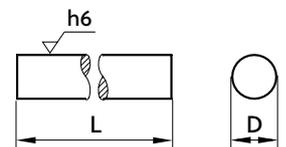
Rods, ground to tolerance h6

D h6 mm	Code	DK460UF 7075 330 mm	DK460UF 7354 415 mm	DK460UF 7085 100 mm	DK120 7031 330 mm	DK255F 7032 330 mm	DK500UF 7372 330 mm	K55SF 7187 330 mm
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	DK460UF 7075 330 mm	DK460UF 7354 415 mm	DK460UF 7085 100 mm	DK120 7031 330 mm	DK255F 7032 330 mm	DK500UF 7372 330 mm	K55SF 7187 330 mm
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	☑						
40.0	40.000	☑						

Rundstäbe, geschliffen h6 Rods, ground to tolerance h6

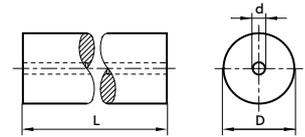


in Zoll | in inch

D h6 inch/mm	Code	DK460UF 7932 330 mm/13 inch
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	☑
5/8 14.288	14.280	☑
3/4 15.875	15.870	☑
7/8 19.050	19.050	☑
1 22.225	22.220	☑
1 25.400	25.400	☑

Rundstäbe, roh

Rods, raw

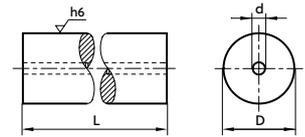


mit 1 Zentralbohrung | *with 1 axial coolant duct*

D mm	d mm	a mm	Code	DK460UF	DK460UF	DK120UF
				7387	7987	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

Rods, ground to tolerance h6



mit 1 Zentralbohrung | with 1 axial coolant duct

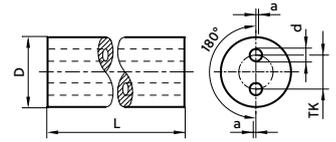
D h6 mm	d mm	a mm	Code	DK460UF 7339 330mm
4.0	0.60 ±0.10	0.07	4.000	✓
6.0	1.00 ±0.15	0.07	6.000	✓
6.0	1.80 ±0.15	0.07	6.001	✓
8.0	1.30 ±0.15	0.07	8.000	✓
8.0	2.50 ±0.20	0.07	8.001	✓
10.0	2.00 ±0.20	0.10	10.000	✓
10.0	3.00 ±0.25	0.10	10.001	✓
12.0	2.00 ±0.20	0.10	12.000	✓
12.0	3.00 ±0.25	0.10	12.001	✓
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

Rods, raw

mit 2 parallelen Kühlkanälen | with 2 parallel coolant ducts

D mm	BC/TK mm	d mm	a mm	Code	DK460UF	DK460UF
					7301 330 mm	7309 415 mm
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	☑	
18.3 +0.50	6.20 -0.30	2.00 ±0.20	0.50	18.300	☑	☑



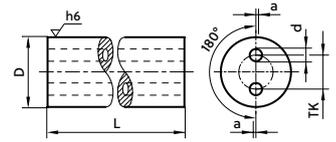
D mm	BC / TK mm	d mm	a mm	Code	DK460UF 7301	DK460UF 7309	
					330 mm	415 mm	
18.3	+0.50	9.00 -0.30	2.00 ±0.20	0.50	18.301	✓	✓
19.3	+0.50	6.20 -0.30	2.00 ±0.20	0.50	19.300	✓	
19.3	+0.50	9.00 -0.30	2.00 ±0.20	0.50	19.301	✓	
20.4	+0.50	3.50 -0.30	1.50 ±0.15	0.34	20.402	✓	
20.4	+0.50	6.20 -0.40	2.00 ±0.20	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	✓	✓

Rundstäbe, geschliffen h6

Rods, ground to tolerance h6

mit 2 parallelen Kühlkanälen | *with 2 parallel coolant ducts*

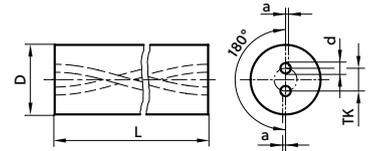
D h6 mm	BC/TK mm	d mm	a mm	Code	DK460UF 7302 330mm
4.0	1.80 -0.15	0.80 ±0.10	0.10	4.000	☑
5.0	2.00 -0.15	0.80 ±0.10	0.13	5.000	☑
6.0	1.50 -0.20	0.80 ±0.10	0.15	6.000	☑
6.0	3.00 -0.20	1.00 ±0.10	0.15	6.001	☑
6.0	2.00 -0.15	0.80 ±0.05	0.15	6.005	☑
6.0	2.40 -0.30	1.00 ±0.15	0.15	6.006	☑
7.0	1.80 -0.20	0.80 ±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	☑
9.5	2.60 -0.30	1.00 ±0.15	0.20	9.520	☑
9.5	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	☑
12.7	3.50 -0.30	1.20 ±0.15	0.30	12.700	☑
12.7	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	☑
15.9	5.00 -0.30	1.50 ±0.15	0.40	15.870	☑
15.9	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	☑
17.0	6.20 -0.30	2.00 ±0.20	0.47	17.000	☑



D h6 mm	BC/TK mm	d mm	a mm	Code	DK460UF 7302 330mm
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	6.20 -0.30	2.00 ±0.20	0.50	19.000	☑
19.0	9.00 -0.30	2.00 ±0.20	0.50	19.001	☑
19.1	6.20 -0.30	2.00 ±0.20	0.50	19.050	☑
19.1	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	☑
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	☑

Rundstäbe, roh

Rods, raw

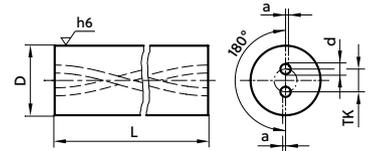


mit 2 Kühlkanälen, 15° verdreht | with 2 coolant ducts, 15° spiral

D mm	BC/TK mm	d mm	a mm	15° ±0.5° mm	Code	DK460UF 7945 330mm	DK460UF 7947 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

Rods, ground to tolerance h6



mit 2 Kühlkanälen, 15° verdrallt | with 2 coolant ducts, 15° spiral

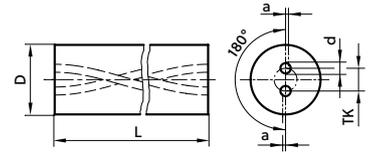
D h6 mm	BC/TK mm	d mm	a mm	15° ±0.5° mm	Code	DK460UF 7583 330 mm
6.0	2.60 -0.40	0.70 ±0.10	0.15	70.35 +2.54/-2.38	6.000	☑
8.0	3.60 -0.40	1.25 ±0.15	0.15	93.80 +3.38/-3.17	8.000	☑
10.0	4.80 -0.60	1.40 ±0.15	0.20	117.25 +4.23/-3.96	10.000	☑
12.0	6.25 -0.80	1.55 ±0.15	0.30	140.70 +5.08/-4.76	12.000	☑
14.0	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	☑
23.0	12.00 -1.00	2.50 ±0.30	0.50	269.67 +9.73/-9.12	23.000	☑
26.0	12.00 -1.00	2.50 ±0.30	0.50	304.84 +11.00/-10.31	26.000	☑

Rundstäbe, roh

Rods, raw

mit 2 Kühlkanälen, 30° verdreht | with 2 coolant ducts, 30° spiral

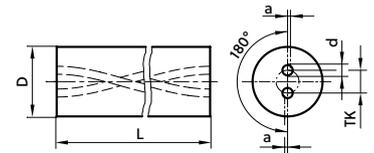
D mm	BC/TK mm	d mm	a mm	30° ±0.5° mm	Code	DK460UF	DK460UF	DK255F
						7940 330 mm	7353 415 mm	7370 330 mm
3.3	+0.30	1.60 ±0.10	0.40 ±0.10	0.08	16.32 +0.33/-0.32	3.300	✓	
3.8	+0.30	1.80 ±0.10	0.50 ±0.10	0.09	19.04 +0.39/-0.38	3.800	✓	
4.3	+0.30	2.10 ±0.10	0.60 ±0.10	0.10	21.77 +0.45/-0.43	4.300	✓	
4.8	+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	✓	
18.3	+0.50	9.00 -0.80	2.30 ±0.25	0.50	97.95 +2.00/-1.94	18.300	✓	✓



D mm	BC/TK mm		d mm	a mm	30° ±0.5° mm		Code	DK460UF	DK460UF	DK255F
								7940	7353	7370
								330 mm	415 mm	330 mm
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	☑		
31.3	+0.50	16.60 -1.20	2.50 ±0.30	0.70	168.68	+3.45/-3.35	31.300	☑		
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	☑		
34.3	+0.50	18.00 -1.20	3.00 ±0.30	0.80	185.01	+3.79/-3.67	34.300	☑		

Rundstäbe, roh

Rods, raw

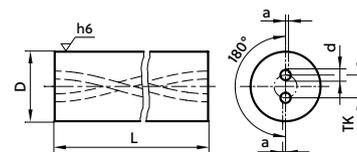


mit 2 Kühlkanälen, 30° verdreht | with 2 coolant ducts, 30° spiral

D mm	BC/TK mm	d mm	a mm	Steigung 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

Rods, ground to tolerance h6

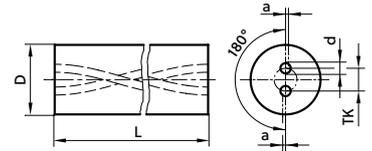


mit 2 Kühlkanälen, 30° verdreht | with 2 coolant ducts, 30° spiral

D h6 mm	BC/TK mm		d mm	a mm	30° ±0.5° mm		Code	DK460UF 7328 330 mm	DK460UF 7355 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	☑	☑
19.0	9.00	-0.80	2.30 ±0.25	0.50	103.39	+2.12/-2.05	19.000	☑	
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	10.00	-1.00	2.50 ±0.25	0.50	136.03	+2.78/-2.70	25.000	☑	
26.0	10.00	-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	☑	

Rundstäbe, roh

Rods, raw

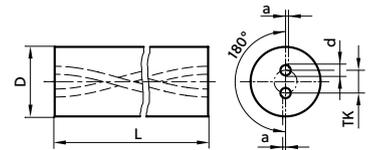


mit 2 Kühlkanälen, kleinstverdrallt | with 2 coolant ducts, microtwisted

D mm	BC/TK mm	d mm	a mm	Steigung mm	Code	DK460UF 7039 330 mm
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	☑

Rundstäbe, roh

Rods, raw

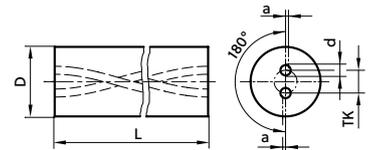


mit 2 Kühlkanälen, 40° verdrallt | with 2 coolant ducts, 40° spiral

D mm	BC/TK mm	d mm	a mm	40° ±0.5° mm	Code	DK460UF 7935 330 mm	DK460UF 7385 415 mm	DK255F 7397 330 mm			
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	✓		
13.8	+0.40	4.50	-0.80	1.00 ±0.20	0.35	50.54	+0.91/-0.89	13.800	✓		
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	✓		
15.8	+0.50	5.30	-0.80	1.10 ±0.20	0.40	58.03	+1.04/-1.02	15.800	✓		
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	✓		
17.8	+0.50	6.10	-0.80	1.30 ±0.25	0.48	65.52	+1.17/-1.15	17.800	✓		
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	✓		

Rundstäbe, roh

Rods, raw

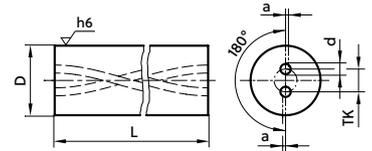


mit 2 Kühlkanälen, 40° verdreht | with 2 coolant ducts, 40° spiral

D mm	BC/TK mm	d mm	a mm	40° ±0.5° mm	Code	DK460UF	DK460UF	DK255F
						7935 330 mm	7385 415 mm	7397 330 mm
18.8	+0.50	6.50	1.40 ±0.25	0.50	69.26 +1.24/-1.21	18.800	✓	
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	✓	

Rundstäbe, geschliffen h6

Rods, ground to tolerance h6

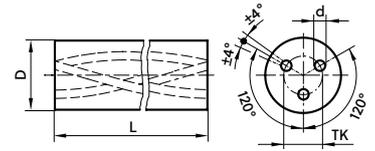


mit 2 Kühlkanälen, 40° verdreht | with 2 coolant ducts, 40° spiral

D h6 mm	BC/TK 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	☑
24.0	8.00 -1.00	1.75 ±0.25	0.50	89.86 +1.61/-1.58	24.000	☑
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	☑
32.0	6.50 -0.80	1.60 ±0.20	0.25	119.81 +2.15/-2.10	32.001	☑

Rundstäbe, roh

Rods, raw

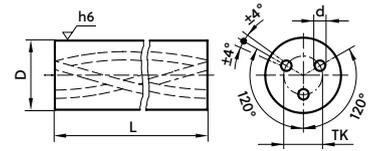


mit 3 Kühlkanälen, 30° verdrallt | with 3 coolant ducts, 30° spiral

D mm	BC/TK mm		d mm	a	30° ±0.5° mm		Code	DK460UF 7933	DK460UF 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	☑	
7.3	+0.30	4.00 -0.30	0.65 ±0.10	±4°	38.09	+0.78/-0.76	7.300	☑	
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	☑	
9.8	+0.30	5.10 -0.30	0.85 ±0.15	±4°	51.69	+1.06/-1.03	9.800	☑	
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	☑	
13.8	+0.40	7.00 -0.50	1.20 ±0.15	±4°	73.46	+1.50/-1.46	13.800	☑	
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	☑	☑
18.8	+0.50	9.50 -0.50	1.70 ±0.20	±4°	100.67	+2.06/-2.00	18.800	☑	
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	☑	
30.3	+0.50	15.10 -1.20	2.50 ±0.30	±4°	163.24	+3.34/-3.24	30.300	☑	
31.3	+0.50	15.60 -1.20	3.00 ±0.30	±4°	168.68	+3.45/-3.35	31.300	☑	
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

Rods, ground to tolerance h6

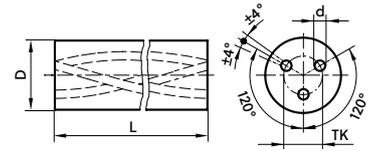


mit 3 Kühlkanälen, 30° verdrallt | with 3 coolant ducts, 30° spiral

D h6 mm	BC/TK 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	☑
30.0	15.10 -1.20	2.50 ±0.30	±4°	163.24 +3.34/-3.24	30.000	☑
32.0	16.10 -1.20	3.00 ±0.30	±4°	174.12 +3.56/-3.46	32.000	☑

Rundstäbe, roh

Rods, raw

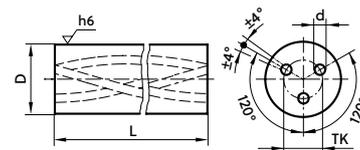


mit 3 Kühlkanälen, 40° verdreht | with 3 coolant ducts, 40° spiral

D mm	BC/TK mm		d mm	a	40° ±0.5° mm		Code	DK460UF 7934	DK460UF 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	☑	☑
6.8	+0.30	2.30 -0.30	0.50 ±0.15	±4°	24.34	+0.44/-0.43	6.800	☑	
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	☑	☑
10.8	+0.40	3.50 -0.50	0.80 ±0.15	±4°	39.31	+0.70/-0.69	10.800	☑	
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	☑	☑
14.8	+0.40	4.90 -0.50	1.00 ±0.20	±4°	54.29	+0.97/-0.95	14.800	☑	
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

Rods, ground to tolerance h6



mit 3 Kühlkanälen, 40° verdreht | with 3 coolant ducts, 40° spiral

D h6 mm	BC/TK 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	☑

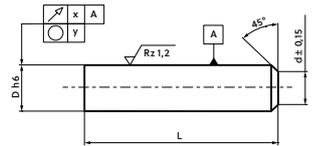
Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6

mit einseitiger Fase, nach Werksnorm | *chamfered one end, to internal standard*

D h6 mm	d ±0.15 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	☑
3.5	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	☑
*6.5	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	☑
*8.0	6.0	59.0 +0.80	0.006	0.003	8.000	☑

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

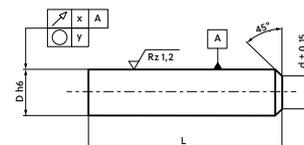


D h6 mm	d ±0.15 mm	L mm	x mm	y mm	Code	DK460UF 7540
*8.0	6.0	64.2 +0.80	0.006	0.003	8.001	☑
8.0	6.0	44.0 +0.70	0.005	0.003	8.002	☑
8.0	6.0	62.0 +0.80	0.006	0.003	8.003	☑
8.0	6.0	76.2 +0.90	0.007	0.003	8.004	☑
8.0	6.0	101.2 +1.00	0.008	0.003	8.005	☑
8.0	6.0	56.2 +0.80	0.006	0.003	8.006	☑
8.0	6.0	82.0 +0.90	0.008	0.003	8.007	☑
8.0	6.0	87.2 +0.90	0.008	0.003	8.008	☑
8.5	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	72.0 +0.90	0.008	0.003	9.500	☑
*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	☑
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	☑
*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	☑
13.0	11.0	77.0 +0.90	0.008	0.003	13.000	☑

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

Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6



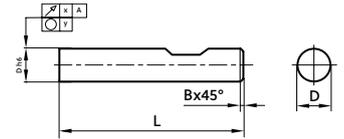
mit einseitiger Fase, nach Werksnorm | *chamfered one end, to internal standard*

D h6 mm	d ±0.15 mm	L mm	x mm	y mm	Code	DK460UF 7540
*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	☑
*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	☑

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

Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6

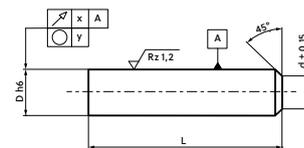


mit Fläche DIN 6535-HB | with flat DIN 6535-HB

D h6 mm	d ±0.15 mm	L mm	x mm	y mm	Code	DK460UF 7410
6.0	5.0	58.2 +0.80	0.006	0.002	6.000	☑
8.0	6.0	64.2 +0.80	0.006	0.003	8.000	☑
10.0	8.0	73.2 +0.90	0.008	0.003	10.000	☑
12.0	10.0	84.2 +0.90	0.008	0.003	12.000	☑
14.0	12.0	84.2 +0.90	0.008	0.003	14.000	☑
16.0	13.0	93.2 +1.00	0.008	0.003	16.000	☑
18.0	15.0	93.0 +1.00	0.008	0.003	18.000	☑
20.0	17.0	105.0 +1.00	0.008	0.004	20.000	☑

Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6

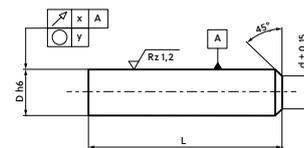


mit einseitiger Fase | *chamfered one end*

D h6 mm	d ±0.15 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	☑

Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6

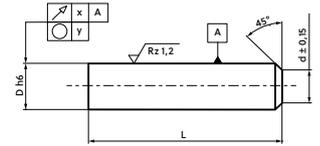


in Zoll, mit einseitiger Fase | in inch, chamfered one end

	D h6 inch/mm	d ±0.15 mm	L inch/mm		x mm	y mm	Code	DK400N 7541
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	1 1/2	38.1 +0.60	0.005	0.003	14.112	☑
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	3 1/2	88.9 +1.00	0.008	0.003	14.312	☑
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	3 1/2	88.9 +1.00	0.008	0.003	516.312	☑
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	☑
7/16	11.113	9.113	5	127.0 +1.30	0.010	0.003	716.500	☑
7/16	11.113	9.113	6	152.4 +1.60	0.010	0.003	716.600	☑
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	☑

Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6

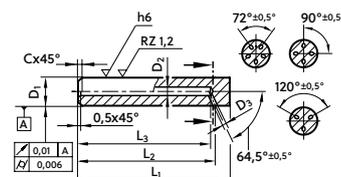


in Zoll, mit einseitiger Fase | in inch, chamfered one end

D h6 inch/mm	d ±0.15 mm	L inch/mm	x mm	y mm	Code	DK400N 7541
½ 12.700	10.700	3 ¼ 79.4 +0.90	0.008	0.003	12.318	✓
½ 12.700	10.700	4 101.6 +1.00	0.008	0.003	12.400	✓
½ 12.700	10.700	4 ½ 114.3 +1.10	0.010	0.003	12.412	✓
½ 12.700	10.700	5 127.0 +1.30	0.010	0.003	12.500	✓
½ 12.700	10.700	6 152.4 +1.60	0.010	0.003	12.600	✓
⅝ 14.288	12.288	3 76.2 +0.90	0.008	0.003	916.300	✓
⅝ 14.288	12.288	3 ½ 88.9 +1.00	0.008	0.003	916.312	✓
⅝ 14.288	12.288	6 152.4 +1.60	0.010	0.003	916.600	✓
¾ 15.875	12.875	3 76.2 +0.90	0.008	0.004	58.300	✓
¾ 15.875	12.875	3 ½ 88.9 +1.00	0.008	0.004	58.312	✓
¾ 15.875	12.875	3 ¾ 95.3 +1.00	0.008	0.004	58.334	✓
¾ 15.875	12.875	4 101.6 +1.00	0.008	0.004	58.400	✓
¾ 15.875	12.875	4 ½ 104.8 +1.10	0.010	0.004	58.418	✓
¾ 15.875	12.875	5 127.0 +1.30	0.010	0.004	58.500	✓
¾ 15.875	12.875	6 152.4 +1.60	0.010	0.004	58.600	✓
¾ 15.875	12.875	8 203.2 +2.90	0.010	0.004	58.800	✓
¾ 19.050	16.050	3 76.2 +0.90	0.008	0.004	34.300	✓
¾ 19.050	16.050	3 ½ 88.9 +1.00	0.008	0.004	34.312	✓
¾ 19.050	16.050	4 101.6 +1.00	0.008	0.004	34.400	✓
¾ 19.050	16.050	4 ½ 114.3 +1.10	0.010	0.004	34.412	✓
¾ 19.050	16.050	5 127.0 +1.30	0.010	0.004	34.500	✓
¾ 19.050	16.050	6 152.4 +1.60	0.010	0.004	34.600	✓
¾ 19.050	16.050	6 ½ 165.1 +1.80	0.010	0.004	34.612	✓
⅞ 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	3 ½ 88.9 +1.00	0.008	0.005	1.312	✓
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 ¼ 31.750	28.750	4 ½ 114.3 +1.10	0.010	0.005	114.412	✓
1 ¼ 31.750	28.750	6 152.4 +1.60	0.010	0.005	114.600	✓
1 ¼ 31.750	28.750	7 ½ 190.5 +2.50	0.010	0.005	114.712	✓

Fräserrohlinge, geschliffen h6

Milling cutter blanks, ground to tolerance h6

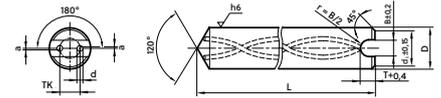


mit zentralem Kühlkanal, rad. Austritten, einseitiger Fase | with axial coolant duct, lat. exits, chamfered one end

D h6	L ₁	D ₁ ±0.15	D ₂ +0.30	L ₂ ±0.30	D ₃ +0.25	C	L ₃	Code	DK460UF 7923 3 exits	DK460UF 7924 4 exits	DK460UF 7925 5 exits
mm	mm	mm	mm	mm	mm	mm	mm				
6.0	58.0	+0.80	5.0	1.75	55.0	1.0	0.5	6.058	☑	☑	☑
6.0	76.5	+0.90	5.0	1.75	73.0	1.0	0.5	6.076	☑	☑	☑
8.0	64.2	+0.80	6.0	1.75	60.0	1.2	1.0	8.064	☑	☑	
8.0	101.2	+1.00	6.0	1.75	97.0	1.2	1.0	8.101	☑	☑	☑
10.0	67.2	+0.80	8.0	2.00	62.0	1.2	1.0	10.067		☑	
10.0	73.2	+0.90	8.0	2.00	68.0	1.2	1.0	10.073	☑	☑	☑
10.0	101.2	+1.00	8.0	2.00	96.0	1.2	1.0	10.101	☑	☑	☑
12.0	74.2	+0.90	10.0	2.00	68.0	1.5	1.0	12.074	☑	☑	
12.0	84.2	+0.90	10.0	2.00	78.0	1.5	1.0	12.084	☑	☑	☑
12.0	101.1	+1.00	10.0	2.00	95.0	1.5	1.0	12.101	☑	☑	☑
14.0	84.2	+0.90	12.0	2.00	77.0	1.5	1.0	14.084	☑	☑	
14.0	101.2	+1.00	12.0	2.00	94.0	1.5	1.0	14.101	☑	☑	
16.0	83.2	+0.90	13.0	4.00	75.0	1.5	1.5	16.083			☑
16.0	93.2	+1.00	13.0	4.00	85.0	1.5	1.5	16.093	☑	☑	☑
16.0	101.2	+1.00	13.0	4.00	93.0	1.5	1.5	16.101	☑	☑	☑
18.0	93.0	+1.00	15.0	4.00	84.0	2.0	1.5	18.093	☑	☑	
18.0	102.0	+1.00	15.0	4.00	93.0	2.0	1.5	18.102	☑	☑	
18.0	151.3	+1.60	15.0	4.00	142.0	2.0	1.5	18.151	☑	☑	
20.0	93.2	+1.00	17.0	4.00	83.0	2.0	1.5	20.093	☑	☑	
20.0	105.0	+1.10	17.0	4.00	95.0	2.0	1.5	20.105	☑	☑	☑
20.0	151.2	+1.60	17.0	4.00	141.0	2.0	1.5	20.151	☑	☑	☑
25.0	122.0	+1.20	22.0	4.00	109.5	2.0	1.5	25.122	☑	☑	☑
25.0	152.0	+1.60	22.0	4.00	139.5	2.0	1.5	25.152	☑	☑	☑

Bohrerrohlinge, geschliffen h6

Drill blanks, ground to tolerance h6



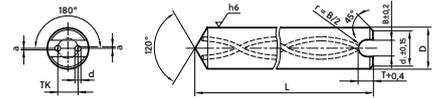
3xD, mit Kühlkanälen, einseitiger Fase, 30° verdrallt | 3xD, with 2 coolant ducts, chamfered one end, 30° spiral

D h6 mm	d _i ±0.15° mm	L mm	BC/TK mm	d mm	a mm	30° ±0.5° mm	Code	DK460UF 7915
6.0	4.8	67.0 +1.50	2.60 -0.40	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	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	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	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	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	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	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	1.25 ±0.15	0.15	43.53 +0.89/-0.86	8.000	✓
10.0	8.8	90.5 +1.50	4.80 -0.80	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	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	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	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	2.10 ±0.25	0.40	87.06 +1.78/-1.73	16.000	✓
18.0	16.5	125.5 +2.00	9.00 -0.80	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	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	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	2.50 ±0.30	0.50	136.03 +2.78/-2.70	25.001	✓

*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



5xD, mit Kühlkanälen, einseitiger Fase, 30° verdrallt | 5xD, with 2 coolant ducts, chamfered one end, 30° spiral

D h6 mm	d ₁ ±0.15° mm	L mm	BC/TK mm	B ±0.2 mm	T +0.4 mm	d mm	a mm	30° ±0.5° mm	Code	DK460UF 7916
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	☑

*30° für Fertigdurchmesser bis 3,75

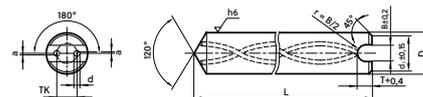
**30° für Fertigdurchmesser bis 4,75

*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

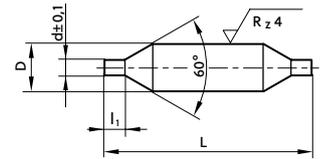


7xD, mit Kühlkanälen, einseitiger Fase, 30° verdreht | 7xD, with 2 coolant ducts, chamfered one end, 30° spiral

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

Zentrierbohrer-Rohlinge, geschliffen h7

Center drill blanks, ground to tolerance h7



D h6 mm	L mm	d mm	l ₁ mm	Code	DK460UF 7533
*3.15	25.5 +1.00	1.10	1.3 ±0.20	3.150	☑
3.15	32.5 +1.20	1.60	1.9 ±0.30	3.151	☑
4.00	36.5 +1.20	2.00	2.4 ±0.30	4.000	☑
5.00	41.0 +1.20	2.50	3.3 ±0.30	5.000	☑
6.30	46.0 +1.20	3.00	4.1 ±0.30	6.300	☑
8.00	51.0 +1.20	3.65	5.0 ±0.30	8.000	☑
10.00	57.0 +1.20	4.50	6.2 ±0.30	10.000	☑
12.50	64.0 +1.20	5.50	7.5 ±0.30	12.500	☑
16.00	72.0 +1.20	6.80	9.2 ±0.30	16.000	☑

*Ist nur einseitig bearbeitet
*Only one side is processed

Auf Anfrage

On Request

Bohrerrohlinge, geschliffen h6

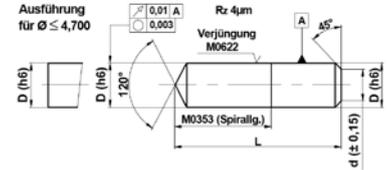
Drill blanks, ground to tolerance h6

DIN 338 | DIN 338

DK460UF
7501

D h6: \varnothing 2,00–12,00 mm um 0,1mm steigend plus Kernloch- \varnothing

D h6: \varnothing 2.00–12.00 mm in increments of 0.1 mm plus tapping hole size diameters



Bohrerrohlinge, geschliffen h6

Drill blanks, ground to tolerance h6

DIN 1897/6539 | DIN 1897/6539

D h6: \varnothing 2,00–12,00 mm um 0,1mm steigend plus Kernloch- \varnothing

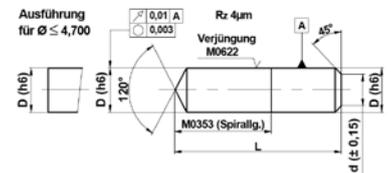
D h6: \varnothing 2.00–12.00 mm in increments of 0.1 mm plus tapping hole size diameters

DK460UF
7502

DK460UF
7542

DK460UF
7547

DK460UF
7556



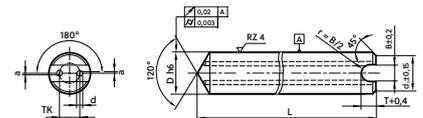
Bohrerrohlinge, geschliffen h6/h8

Drill blanks, ground to tolerance h6/h8

mit 2 parallelen Kühlkanälen, eingengtem Teilkreis | with 2 parallel coolant ducts, restricted pitch circle

DK460UF
7539 4 x D

DK460UF
7546 10 x D



Bohrerrohlinge, geschliffen h6/h8

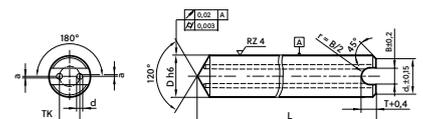
Drill blanks, ground to tolerance h6/h8

mit 2 parallelen Kühlkanälen, normalem Teilkreis | with 2 parallel coolant ducts, standard pitch circle

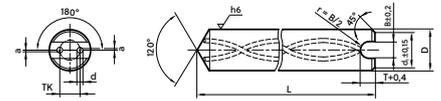
DK460UF
7537 4 x D

DK460UF
7551 7 x D

DK460UF
7538 10 x D



Bohrerrohlinge, geschliffen h6 Drill blanks, ground to tolerance h6



mit 2 Kühlkanälen, einseitiger Fase, 30° verdrallt | with 2 coolant ducts, camfered one end, 30° spiral

DK460UF
7943 15xD

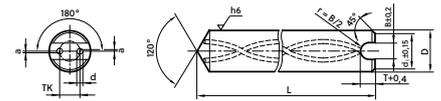
DK460UF
7579 20xD

DK460UF
7580 25xD

DK460UF
7581 30xD

DK460UF
7598 40xD

Bohrerrohlinge, geschliffen h6 Drill blanks, ground to tolerance h6



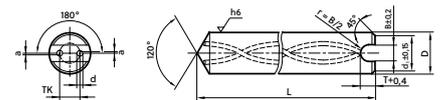
mit 2 Kühlkanälen, einseitiger Fase, 40° verdrallt | with 2 coolant ducts, camfered one end, 40° spiral

DK460UF
7567 3xD

DK460UF
7568 5xD

DK460UF
7569 7xD

Bohrerrohlinge, geschliffen h8 Drill blanks, ground to tolerance h8



mit 2 Kühlkanälen, einseitiger Fase, 30° verdrallt | with 2 coolant ducts, camfered one end, 30° spiral

DK460UF
7915 3xD

DK460UF
7916 5xD

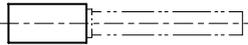
DK460UF
7349 7xD

Rohlinge für Frässtifte roh und ungeschliffen DK105

Carbide burr blanks raw and underground DK105

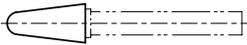
Lieferprogramm DIN 8033 | Manufacturing program in accordance with DIN 8033

Kurzzeichen Abbreviation	D mm	Länge Length mm	Code
-----------------------------	---------	-----------------------	------

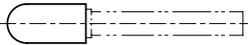
7233 

ZYA 820..	8	20	8.20
ZYA 1013..	10	13	10.13
ZYA 1020..	10	20	10.20
ZYA 1025..	10	25	10.25
ZYA 1225..	12	25	12.25
ZYA 1625..	16	25	16.25

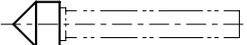
Kurzzeichen Abbreviation	D mm	Länge Length mm	Code
-----------------------------	---------	-----------------------	------

7236 

KEL 1020..	10	20	10.20
KEL 1225..	12	25	12.25
KEL 1630..	16	30	16.30

7234 

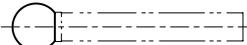
WRC 613..	6	13	6.13
WRC 820..	8	20	8.20
WRC 1020..	10	20	10.20
WRC 1025..	10	25	10.25
WRC 1225..	12	25	12.25
WRC 1625..	16	25	16.25

7238 

KSK 1010..	10	10	10.10
KSK 1613..	16	13	16.08

7235 

SKM 613..	6	13	6.13
SKM 1020..	10	20	10.20
SKM 1225..	12	25	12.25

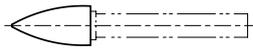
7240 

KUD 8072..	8	7.2	8.072
KUD 10090..	10	9.0	10.090
KUD 12108..	12	10.8	12.108
KUD 16144..	16	14.4	16.144
KUD 20180..	20	18.0	20.180

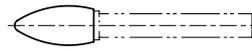
Kurzzeichen Abbreviation	D mm	Länge Length mm	Code
-----------------------------	---------	-----------------------	------

Kurzzeichen Abbreviation	D mm	Länge Length mm	Code
-----------------------------	---------	-----------------------	------

7241			
SPG 613..	6	13	6.13
SPG 1020..	10	20	10.20
SPG 1225..	12	25	12.25
SPG 1630..	16	30	16.30

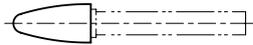


7244*			
FLII 613..	6	13	6.13
FLII 820..	8	20	8.20
FLII 1025..	10	25	10.25
FLII 1230..	12	30	12.30
FLII 1630..	16	35	16.35

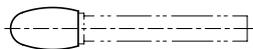


*Werksnorm
*Standard

7242			
RBF 507..	5	7	5.07
RBF 613..	6	13	6.13
RBF 820..	8	20	8.20
RBF 1020..	10	20	10.20
RBF 1225..	12	25	12.25
RBF 1630..	16	30	16.30



7243			
TRE 610..	6	10	6.10
TRE 813..	8	13	8.13
TRE 1016..	10	16	10.16
TRE 1220..	12	20	12.20
TRE 1225..	12	25	12.25
TRE 1625..	16	25	16.25



Toleranzen

Tolerances

Rundstäbe, roh, ohne und mit Kühlkanal

Rods, raw, solid or with coolant ducts

L mm	Rundlauf Circular run-out ↗ mm	Rundheit Roundness O mm
330 +10	0.25	0.100
415 +26	0.35	0.100
700 +70	0.40	0.100

Rundstäbe, geschliffen h6, 330 mm +10, ohne und mit Kühlkanal

Rods, ground to tolerance h6, 330mm +10, solid or with coolant ducts

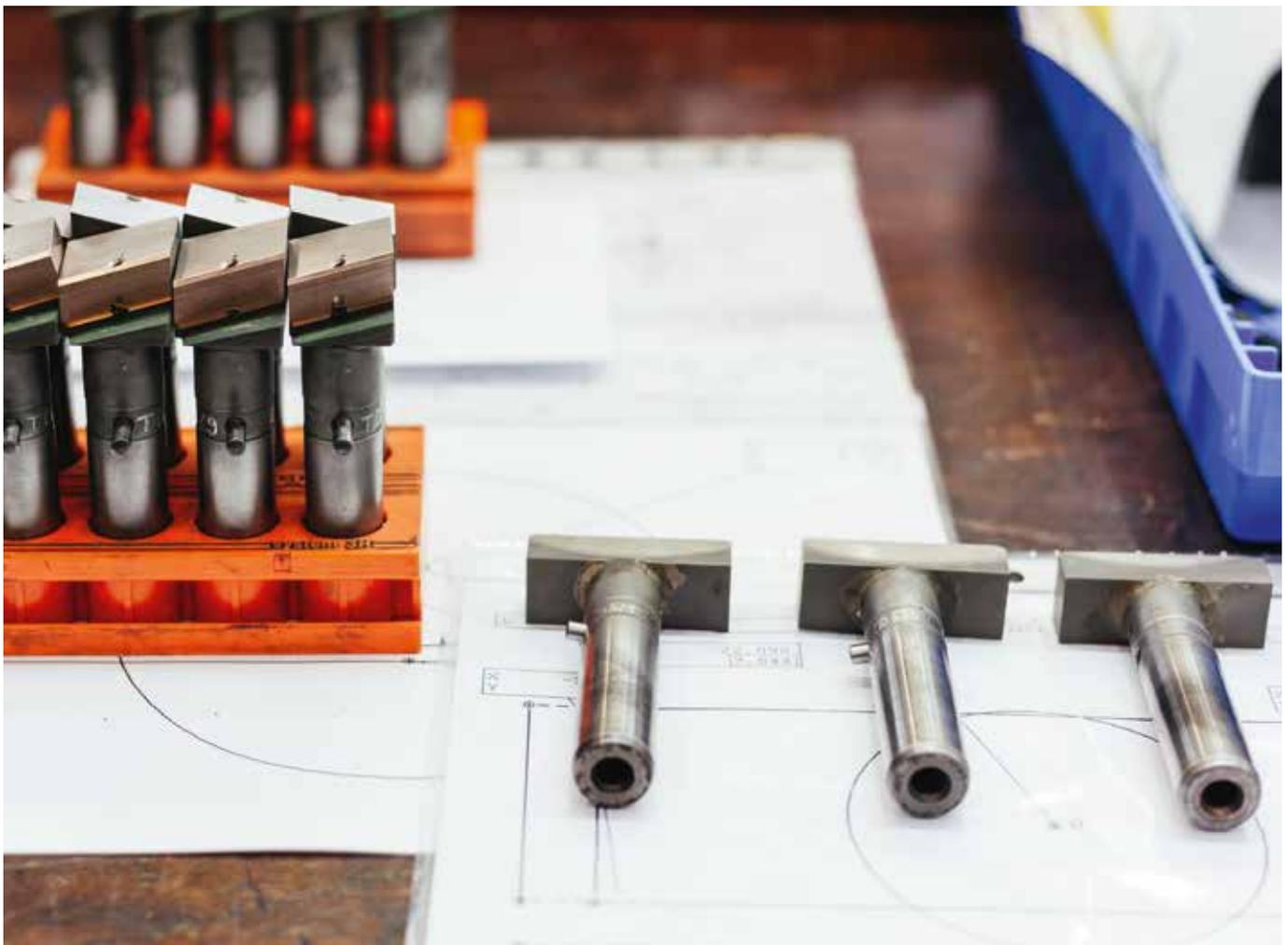
D h6 mm	Rundlauf Circular run-out ↗ mm	Rundheit Roundness O mm	D h6 mm	Rundlauf Circular run-out ↗ mm	Rundheit Roundness O mm	D h6 mm	Rundlauf Circular run-out ↗ mm	Rundheit Roundness O mm
1.0	0.25	0.030	10.0	0.06	0.003	19.0	0.02	0.004
1.5	0.25	0.030	10.5	0.05	0.003	19.050	0.02	0.004
2.0	0.25	0.030	11.0	0.05	0.003	19.5	0.02	0.004
3.0	0.11	0.002	11.113	0.05	0.003	20.0	0.02	0.004
3.175	0.11	0.002	11.5	0.05	0.003	21.0	0.02	0.004
3.5	0.11	0.002	12.0	0.05	0.003	22.0	0.02	0.004
4.0	0.11	0.002	12.5	0.05	0.003	22.225	0.02	0.004
4.5	0.11	0.002	12.700	0.05	0.003	23.0	0.02	0.004
4.763	0.11	0.002	13.0	0.05	0.003	24.0	0.02	0.004
5.0	0.11	0.002	13.5	0.05	0.003	25.0	0.02	0.004
5.5	0.11	0.002	14.0	0.04	0.003	25.400	0.02	0.004
6.0	0.11	0.002	14.288	0.04	0.003	26.0	0.02	0.005
6.350	0.11	0.003	14.5	0.04	0.003	27.0	0.02	0.005
6.5	0.11	0.003	15.0	0.04	0.003	28.0	0.02	0.005
7.0	0.11	0.003	15.5	0.04	0.003	29.0	0.02	0.005
7.5	0.06	0.003	15.875	0.04	0.003	30.0	0.02	0.005
7.938	0.06	0.003	16.0	0.04	0.003	31.0	0.02	0.005
8.0	0.06	0.003	16.5	0.04	0.003	32.0	0.02	0.005
8.5	0.06	0.003	17.0	0.02	0.003	34.0	0.02	0.006
9.0	0.06	0.003	17.5	0.02	0.003	40.0	0.02	0.006
9.5	0.06	0.003	18.0	0.02	0.003			
9.525	0.06	0.003	18.5	0.02	0.004			

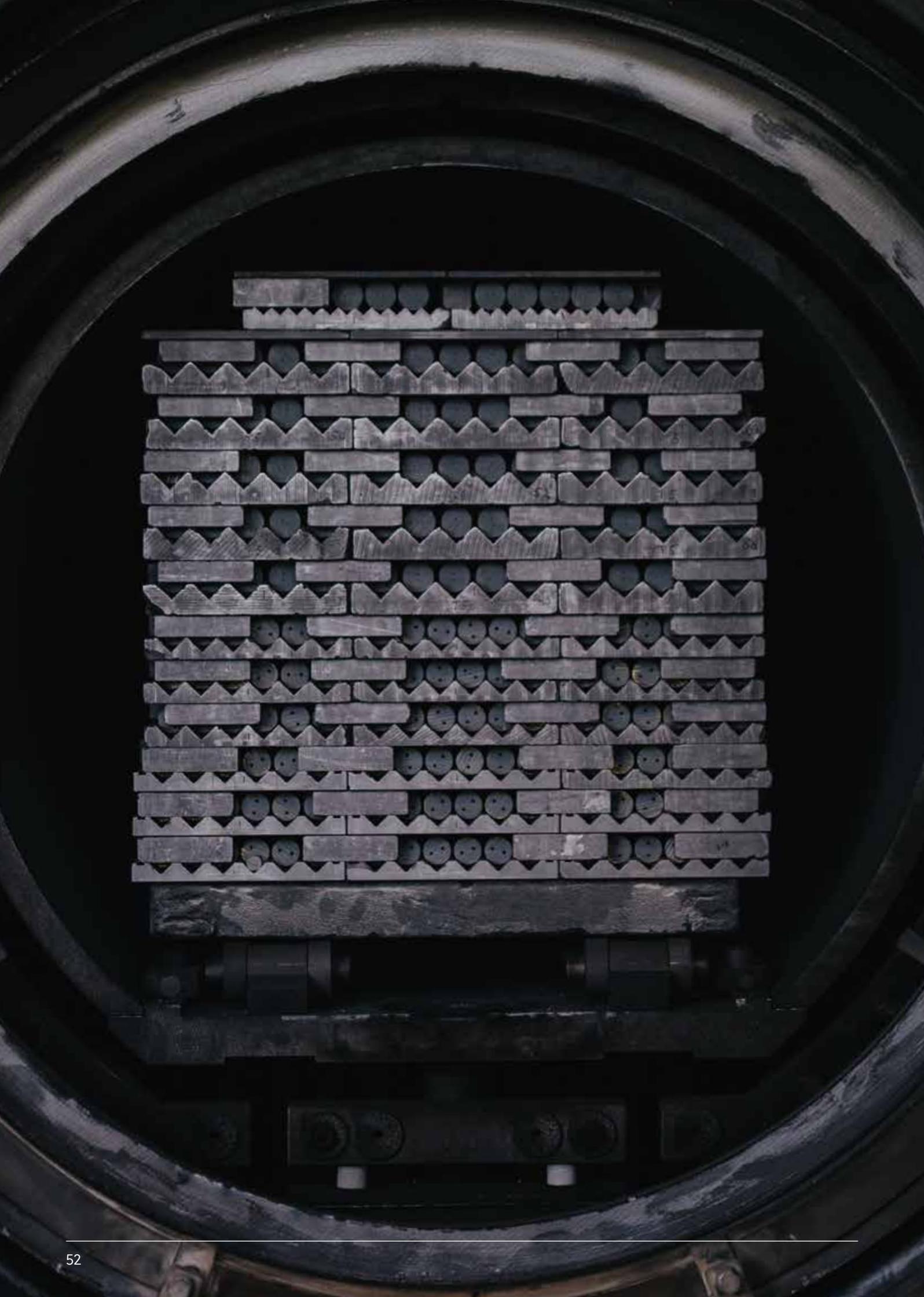
Toleranzen

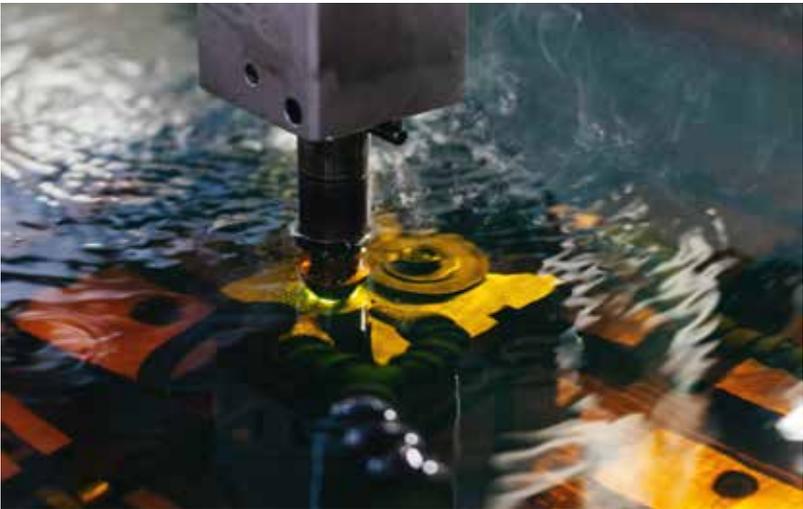
Tolerances

Rundstäbe, geschliffen h6, 415mm +26, ohne und mit Kühlkanal
Rods, ground to tolerance h6, 415mm +26, solid or with coolant ducts

D h6 mm	Rundlauf Circular run-out / mm	Rundheit Roundness O 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







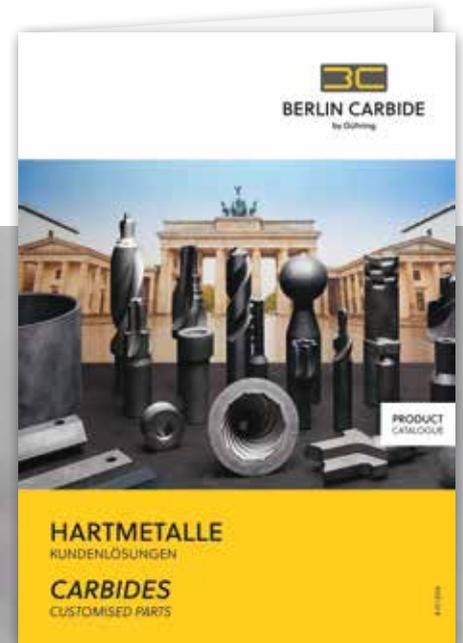
Unsere Sonderteile *Our customised parts*

Neben unserem Standard-Programm bieten wir Ihnen Hartmetalle für jede spezielle Anwendung an. Werfen Sie einen Blick in unseren Sonderteile-Katalog und nehmen Sie Kontakt mit uns auf.

Lieferbedingungen für Sonderteile: Werden Sonderteile in Auftrag gegeben, so darf die Bestellmenge um ca. 10%, mindestens jedoch um zwei Stück, über- oder unterschritten werden. Berechnet wird die Liefermenge.

In addition to our standard range, we offer carbides for any specific application. Take a look at our catalogue for special parts and contact us.

Terms and conditions for special parts: When ordering specials, the quantity delivered can deviate by approx. 10%, at least by two pieces plus or minus from the original order. Payment is for quantity supplied.



Zertifizierung Certification







ZERTIFIKAT



Hiermit wird bescheinigt, dass

GÜHRING

Gühring KG
Herderstraße 50-54
72458 Albstadt
Deutschland

ein **Qualitätsmanagementsystem** eingeführt hat und anwendet.

Geltungsbereich:
Forschung, Entwicklung, Produktion, Vertrieb und Instandhaltung von Werkzeugen,
Toolmanagement, verschleißfesten Beschichtungen, HM-Teilen, Maschinen und Vorrichtungen

Durch ein Audit, dokumentiert in einem Bericht, wurde der Nachweis erbracht,
dass das Managementsystem die Forderungen des folgenden Regelwerks erfüllt:

ISO 9001 : 2008

Zertifikat-Registrier-Nr. 000970 QM08



DQS GmbH

Götz Blechschmidt
Geschäftsführer

Akkreditierte Stelle: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main

Weltweit vertreten

Represented worldwide

Argentinien | *Argentina*

Guhring Argentina S. A.
Holmberg 2350
1430 CQC Buenos Aires,
Capital Federal

Australien | *Australia*

Guhring Pty. Ltd.
6 Jacks Road
Oakleigh South VIC 3167

Belgien | *Belgium*

N.V. Gühring S.A.
Metropoolstraat 1
2900 Schoten

Brasilien | *Brazil*

Guhring Brasil
Ferramentas Ltda.
Av. Tranquilo Giannini, 1051
Distrito Industrial
CEP 13329-600 – Salto – SP

Bulgarien | *Bulgaria*

Gühring Bulgarien Ltd.
Zanko-Zerkowski Str. 58
1164 Sofia

China | *China*

Guhring (Changzhou) Cutting Tools Co., Ltd.
No. 19, E Mei Shan Road
Xin Bei District
213022 Changzhou

Dänemark | *Denmark*

Gühring ApS
Bavnehoj 201
Vester Nebel
6040 Egtved

Deutschland | *Germany*

Gühring KG
Lübarser Straße 10 – 38
13435 Berlin

Finnland | *Finland*

OY Gühring AB
Lämmittäjäkatu 4A
00880 Helsinki

Frankreich | *France*

Gühring Alsace S. A. R. L.
P. A. rue des acacias
67870 Bischoffsheim

Guhring France S. A. R. L.
P. A. E. des Longeray
74370 Metz-Tessy

Großbritannien | *Great Britain*

Guhring Ltd.
Castle Bromwich Business Park
Tameside Drive
Birmingham B35 7AG

Indien | *India*

Guhring India Pvt. Ltd.
Plot No. 129, Bommasandra Ind. Area
Anekal Taluk 4th Phase
560 099 Bangalore

Indonesien | *Indonesia*

PT. Guhring Indonesia
Jababeka Industrial Estate I
Jl. Jababeka XIIB Blok W36 – 37 No. C-1 Cikarang
Bekasi – 17550 Indonesia

Italien | *Italy*

KF Carbide Italia
Corso Europa 603
10088 Volpiano TO

Japan | *Japan*

Guhring Japan Co., Ltd.
NR Building 5F, 3-24-5
Tsukishima, Chuo-Ku
104-0052 Tokyo

Kanada | *Canada*

Guhring Corp.
20 Steckle Place, Unit #14
Kitchener, ON N2E 2C3

Korea | *Korea*

Gühring Korea Co. Ltd.
Gwangmyung-Si
8th Floor, ACE-GWANGMYUNG Tower
Soha-Dong
423-050 Kyunggi-Do

Mexiko | *Mexico*

Guhring Mexicana S.A. de C.V.
Lateral de la Carretera Estatal 431,
Km 2 200, Interior 10
Parque Tecnológico
Innovación Querétaro, El Marqués
76246 Queretaro

Niederlande | *The Netherlands*

Gühring Nederland B.V.
Achtseweg Noord 12F
5651 GG Eindhoven

Österreich | *Austria*

Gühring Ges. m. b. H.
Zetschegasse 17
1230 Wien

Philippinen | *Philippines*

3/F Unit 303
Admiralty Building Zapote Road
Ayala Alabang, Madrigal Business Park
Muntinlupa City, Philippines 1780
1101 Alabang

Polen | *Poland*

Guhring Sp. z o. o.
Aleja Zagłębia Dąbrowskiego 21
41-300 Dąbrowa Górnicza

Rumänien | *Romania*

Gühring s. r. l.
Str. Europa Unita Nr. 6
550018 Sibiu

Russland | *Russia*

Guhring – Russland
Zeleniy prospect, 20
111397 Moskau

Schweden | *Sweden*

Guhring Sweden AB
Plastgatan 14
531 55 Lidköping

Schweiz | *Switzerland*

Gühring Schweiz AG
Grundstraße 16
6343 Rotkreuz

Singapur | *Singapore*

Guhring (Singapore) Pte. Ltd.
21 Bukit Batok Crescent #22 – 80 & 81,
Wcega Tower
Singapore 658065

Weltweit vertreten

Represented worldwide

Slowakei | *Slovakia*

Gühring Slovakia, s. r. o.
Hliny 1412/4
01707 Považská Bystrica

Slowenien | *Slovenia*

Gühring d. o. o.
ul. Simona Jenka 003
1215 Medvode

Spanien | *Spain*

Gühring S. A.
Avda. de Cordoba, 15
28026 Madrid

Gühring Cataluna S. A. U.
Calle Vinaros 12
L'Hospitalet de Llobregat
08906 Barcelona

Südafrika | *South Africa*

Gühring Cutting Tools (Pty) Ltd. – Gauteng
Office 26, Eden Plaza
18 van Riebeeck Avenue
1610 Edenvale

Taiwan | *Taiwan*

Gühring Taiwan Ltd.
No. 200, Sec. 2
Zhong Ai Rd., Guanyin Township
Taoyuan County 328

Thailand | *Thailand*

Guehring (Thailand) Co., Ltd.
999/107 Moo 20, Soi Boonmeesab 4
Bangplee-Tamru Road
Bangpleeyai, Bangplee
10540 Samutprakam

Tschechien | *Czech Republic*

Gühring S. r. o.
Na Perkách 608
330 21 Líně-Sulkov

Türkei | *Turkey*

Gühring Takim San. Tic. Ltd.Sti.
Ankara Subesi
Ivedik Osb. Mah. 1467 Cad. No: 2/14–4
Elektrokent
Yenimahalle/Ankara

USA | *USA*

Gühring Inc.
1445 Commerce Ave.
Brookfield, WI 53045

Usbekistan | *Uzbekistan*

Guehring Tool Management Projects GmbH
Amir Temur Street
95a, Yunusabad district
100084 Tashkent Uzbekistan

Ukraine | *Ukraine*

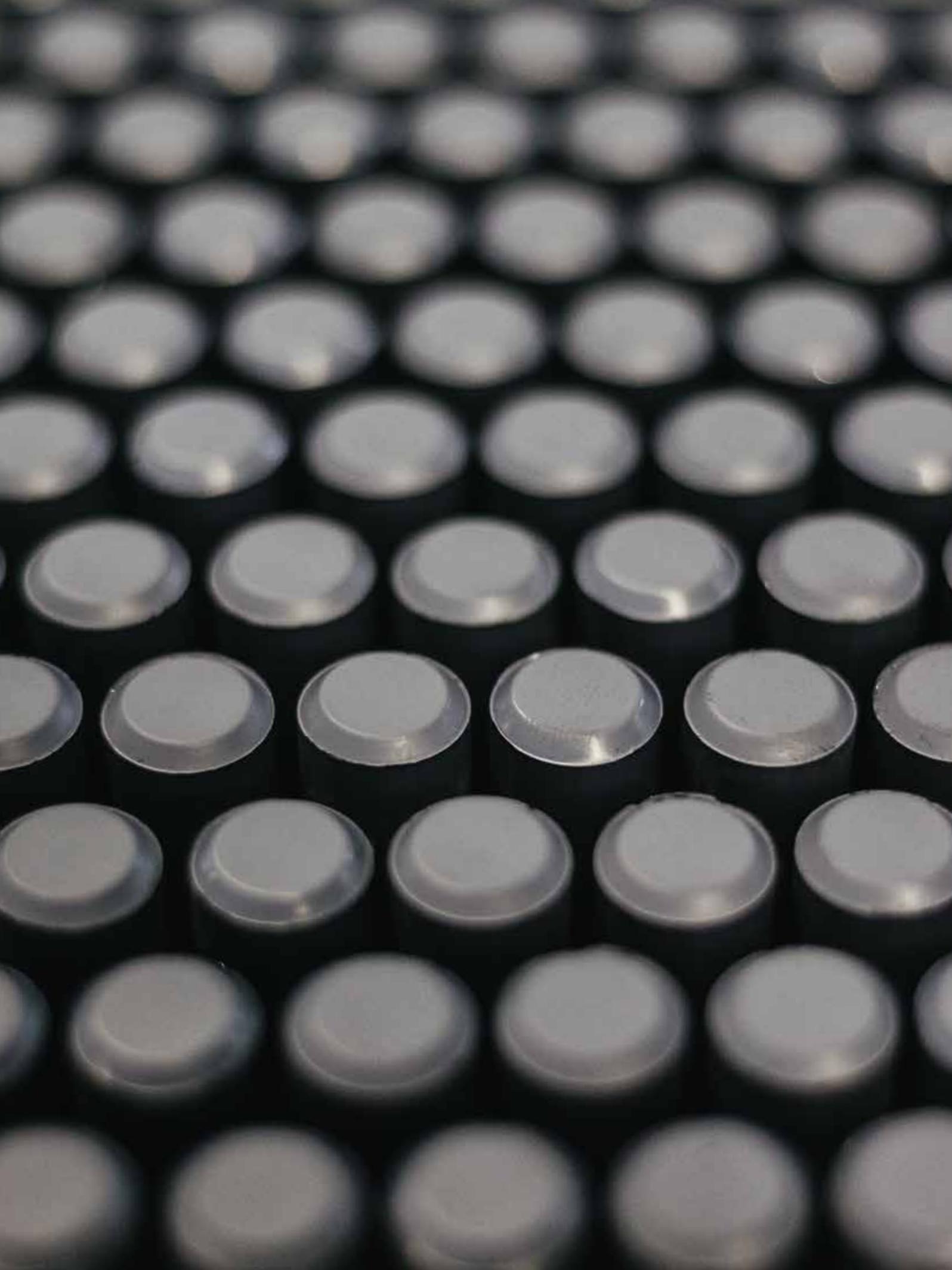
Gühring
Darnytskyi boulevard 5
02192 Kiev

Ungarn | *Hungary*

Tritán-Gühring Kft.
Gyár u. 2
2040 Budaörs

Vietnam | *Vietnam*

Gühring Vietnam LLC
No. 5, Street 14
Vietnam-Singapore Industrial Park II-A
Tan Uyen District
Binh Duong Province
72000 Binh Duong



Eventuelle Druckfehler oder zwischenzeitlich eingetretene Änderungen berechtigen nicht zu Ansprüchen. Wir liefern ausschließlich zu unseren Liefer- und Zahlungsbedingungen. Diese können bei uns angefordert werden.

Potential misprints or changes since the day of print do not entitle any rights for claims. Delivery is always made in accordance with our conditions for delivery and payment, a copy of which can be requested from us.

GÜHRING KG

Vertrieb Hartmetall
Division Carbides

Office Berlin

Lübarser Straße 10 – 38
13435 Berlin
Telefon +49 30 40803-31117
Fax +49 30 40803-31118
info@berlin-carbide.com
berlin-carbide.com

Office Albstadt

Hahnstraße 53
72461 Albstadt
Telefon +49 7431 17-25298
Fax +49 7431 17-25189
info@berlin-carbide.com
berlin-carbide.com