

# SINAMASTER® Cutting Tools



**Solid Carbide Drills**

# 图标说明

# Icon Explain

图标 Icon	说明 Explanation	图标 Icon	说明 Explanation
	圆柱平头立铣刀刀尖 Tool nose of cylindrical flattened end mill	$\beta = 18^\circ$	18° 螺旋角 Helix angle 18°
	圆弧头立铣刀刀尖 Toric end mill nose	$\beta = 25^\circ$	25° 螺旋角 Helix angle 25°
	球头立铣刀 Ball nose end mills	$\beta = 28^\circ$	28° 螺旋角 Helix angle 28°
	两齿铣刀中心铣削一齿过中心 2-tooth mill with one teeth overpass the center	$\beta = 35^\circ$	35° 螺旋角 Helix angle 35°
	两齿铣刀中心铣削 2-tooth mill for center milling	$\beta = 30^\circ$	30° 螺旋角 Helix angle 30°
	三齿铣刀中心铣削一齿过中心 3-tooth mill with one teeth overpass the center	$\beta = 40^\circ$	40° 螺旋角 Helix angle 40°
	三齿铣刀 齿不过中心 3-tooth mill with teeth non-overpass the center	$\beta = 45^\circ$	45° 螺旋角 Helix angle 45°
	四齿铣刀中心铣削 4-tooth mill for center milling	$\beta = 50^\circ$	50° 螺旋角 Helix angle 50°
	五齿及五齿以上铣刀非中心铣削 Mills with 5 teeth or above not for center milling	<b>3D</b>	钻孔深度为钻头直径的3倍 The maximum depth of drilling is 3D
	DIN6535HA 圆柱直柄 DIN6535HA straight shank	<b>5D</b>	钻孔深度为钻头直径的5倍 The maximum depth of drilling is 5D
	DIN6535HB 削平直柄 DIN6535HB Weldon		小径多用途麻花钻 Small diameter twist drills
	DIN6535HE 斜削直柄 DIN6535HE whistle notch shank		小径多用途麻花钻 Small diameter twist drills
	普通圆柱直柄 Straight shank		普通麻花钻 General twist drills
	方头直柄 Square and straight shank		外冷多用途麻花钻 Multi-purpose twist drill with outer cooling
<b>H7</b>	铰刀被加工孔精度等级 Precision class for hole with reamers		内冷多用途麻花钻 Multi-purpose twist drill with inner cooling
<b>H8</b>	铰刀被加工孔精度等级 Precision class for hole with reamers		三刃钻 3-lip drills
<b>P</b>	钢 Steel		内冷直槽钻 Straight flute Drills with inner cooling
<b>M</b>	不锈钢 Stainless steel		丝锥切削锥长度 Cutting length of the tap
<b>K</b>	铸铁 Cast iron		丝锥牙型角 The tooth-like angle of tap
<b>N</b>	非铁材料 Non-ferrous materials	<b>4HX</b>	丝锥精度 Tap precision
<b>S</b>	高温合金, 钛合金 Superalloy and Titanium alloy.	<b>6GX</b>	丝锥精度 Tap precision
<b>H</b>	硬材料 Hardened material	<b>6HX</b>	丝锥精度 Tap precision

## 抗拉强度、布氏硬度、洛氏硬度对照表

### 抗拉强度、布氏硬度、洛氏硬度对照表








Comparison Table for tensile strength, Vickers hardness, Brinell hardness and Rockwell hardness

N/mm <sup>2</sup>	HV10	HB	HRC
240	75	71	
255	80	76	
270	85	81	
285	90	86	
305	95	90	
320	100	95	
335	105	100	
350	110	105	
370	115	109	
385	120	114	
400	125	119	
415	130	124	
430	135	128	
450	140	133	
465	145	138	
480	150	143	
495	155	147	
510	160	152	
530	165	157	
545	170	162	
560	175	166	
575	180	171	
595	185	176	
610	190	181	
625	195	185	
640	200	190	
660	205	195	
675	210	199	
690	215	204	
705	220	209	
720	225	214	
740	230	219	
755	235	223	
770	240	228	
785	245	233	
800	250	238	22
820	255	242	23
835	260	247	24
860	268	255	25
870	272	258	26
900	280	266	27

N/mm <sup>2</sup>	HV10	HB	HRC
920	287	273	28
940	293	278	29
970	302	287	30
995	310	295	31
1020	317	301	32
1050	327	311	33
1080	336	319	34
1110	345	328	35
1140	355	337	36
1170	364	346	37
1200	373	354	38
1230	382	363	39
1260	392	372	40
1260	403	383	41
1330	413	393	42
1360	423	402	43
1400	434	413	44
1440	446	424	45
1480	458	435	46
1530	473	449	47
1570	484	460	48
1620	497	472	49
1680	514	488	50
1730	527	501	51
1790	544	517	52
1845	560	632	53
1910	578	549	54
1980	596	567	55
2050	615	584	56
2140	639	607	57
	655	622	58
	675		59
	698		60
	720		61
	745		62
	773		63
	800		64
	829		65
	864		66
	900		67
	940		68

# 整体硬质合金钻头 Solid carbide drills

钻头目录 Content for drill

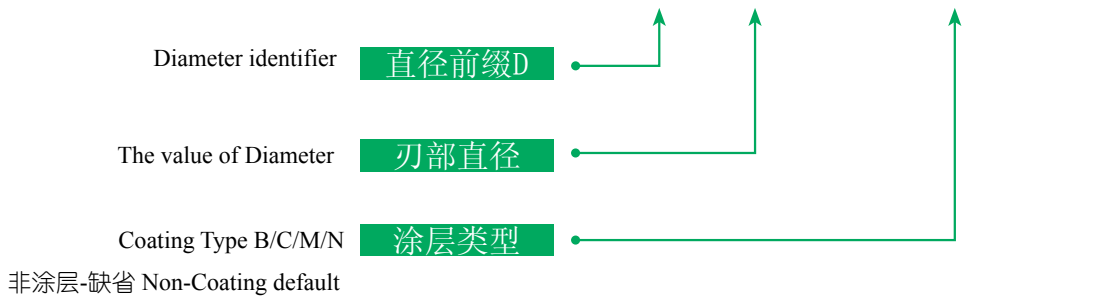
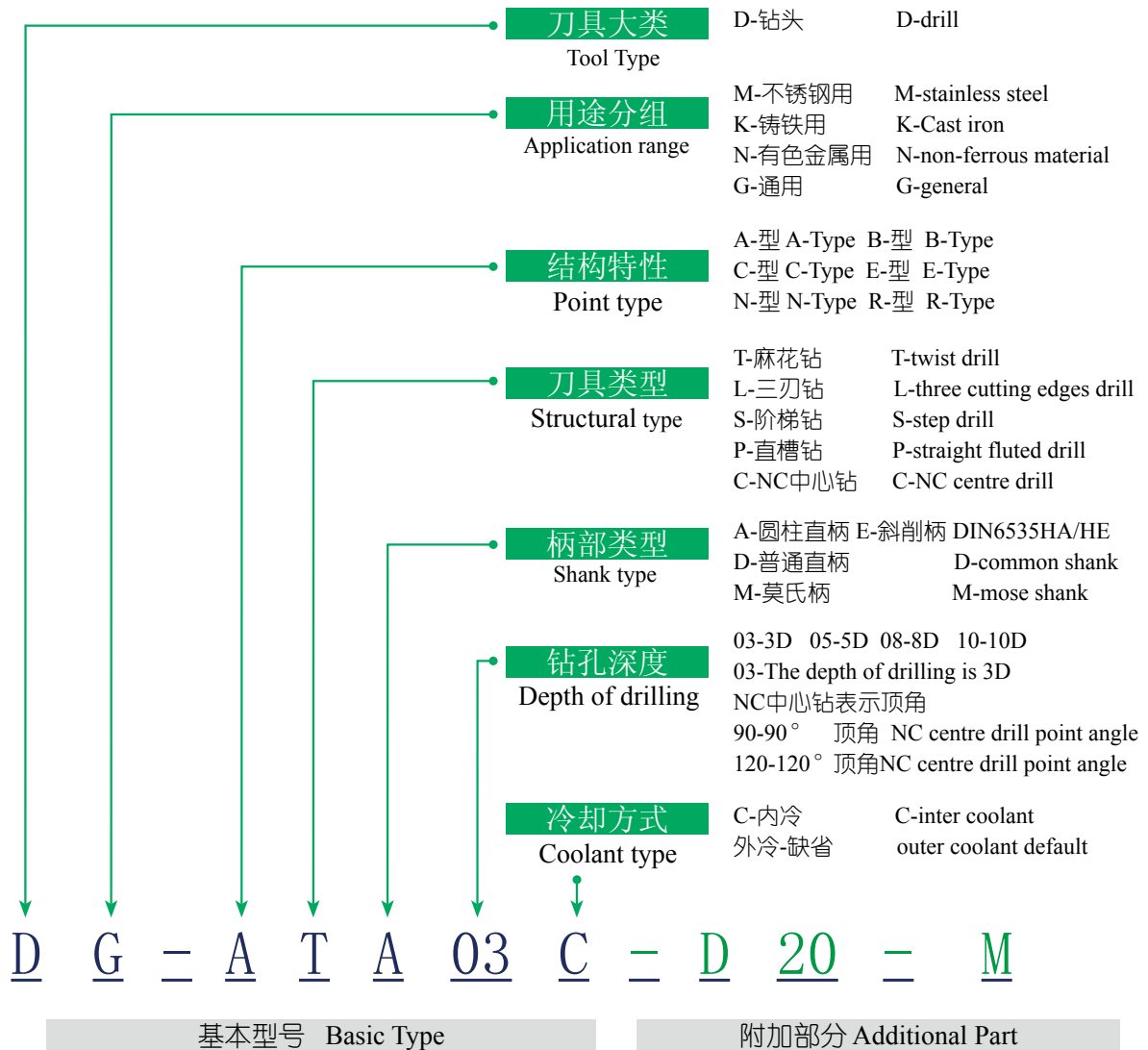
工件材料 Work-piece material						型号 Type	图形 Profile	类型 Type of geometries	刃径 Dimension	顶角 Point angle	切削深度 Depth of drilling	内冷 Centre coolant	涂层牌号 Coating type	页次 Page
钢 Steel	不锈钢 Stainless steel	铸铁 Cast iron	有色金属 Non-ferrous material	高温合金 Superalloys	淬硬材料 Hardened material									
P	M	K	N	S	H				D(mm)	$\delta^\circ$	mm			
NC中心钻 NC centre drill														
		K	N			DK-NCA90		N	5-20	90				D3
		K	N			DK-NCA120		N	5-20	120				D4
三刃钻 Three cutting edges drill														
		K				DK-CLA03		C	3-20	150	3×D			D5
	M		N	S		DM-CLA03		C	3-20	150	3×D			D7
麻花钻 Twist drill														
P	M	K	N	S		DG-PTA05		P	0.5-2.95	140	5×D		M	D9
P	M	K	N	S		DG-ATA03		A	3-20	140	3×D		M	D15
P	M	K	N	S		DG-ATA03C		A	5-20	140	3×D	○	M	D18
P	M	K	N	S		DG-ATE03C		A	5-20	140	3×D	○	M	D21
P	M	K	N	S		DG-ATA05		A	3-20	140	5×D		M	D24
P	M	K	N	S		DG-ATA05C		A	5-20	140	5×D	○	M	D27
P	M	K	N	S		DG-ATE05C		A	5-20	140	5×D	○	M	D30
		K	N			DK-NTD03		N	2-12	120	3×D			D33
阶梯钻 Step drill														
		K	N			DK-BSA03		D	M4-M16	90	3×D			D36
直槽钻 Straight fluted drill														
		K	N			DK-EPA05C		E	4-20	120	5×D	○		D37



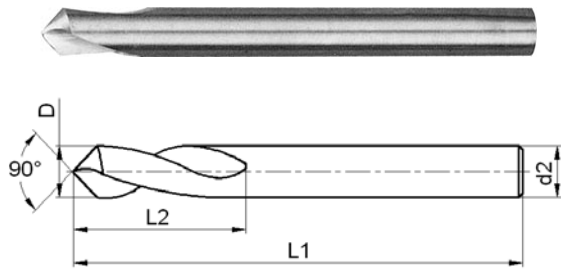
# 整体硬质合金钻头 Solid carbide drills

## 整体硬质合金钻头编码规则

Code rule of the solid carbide drill



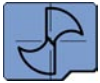
## NC中心钻 NC centre drill



### DK-NCA90

#### 90° NC中心钻 90°NC centre drill

冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适合于在数控机床上打中心孔和倒角。 Suitable for drilling the center hole and chamfer



型号 Type	规格尺寸 Dimension						涂层Coating		
	D (h6)	d2 (h6)	L1	L2			未涂层 Non-Coating	牌号 Grade	库存 stock
DK-NCA90-D5	5.00	5.00	62	10			○		
DK-NCA90-D6	6.00	6.00	66	15			○		
DK-NCA90-D8	8.00	8.00	79	17			○		
DK-NCA90-D10	10.00	10.00	89	20			○		
DK-NCA90-D12	12.00	12.00	102	25			○		
DK-NCA90-D14	14.00	14.00	107	30			○		
DK-NCA90-D16	16.00	16.00	115	35			○		
DK-NCA90-D20	20.00	20.00	131	40			○		

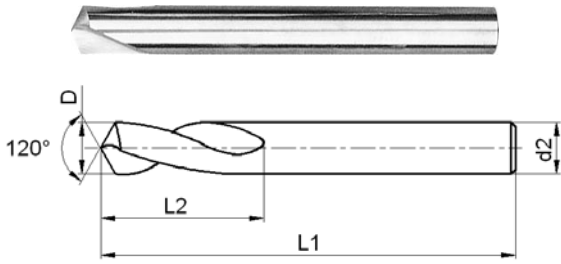
订货示例: DK-NCA90-D14  
Ordering guide: DK-NCA90-D14

推荐切削用量见D38页。The page D38 for the recommendable cutting date.

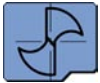
●: 表示有库存



# NC中心钻 NC centre drill



DK-NCA120	
120° NC中心钻 <b>90°NC centre drill</b>	
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适合于在数控机床上打中心孔和倒角。 Suitable for drilling the center hole and chamfer



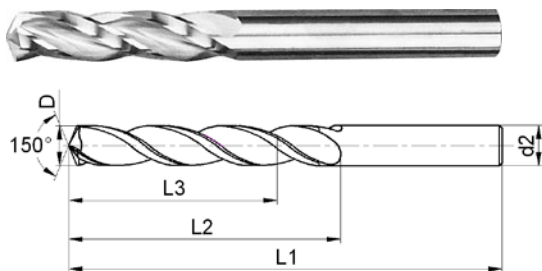
型号 Type	规格尺寸 Dimension					涂层Coating		
	D (h6)	d2 (h6)	L1	L2		未涂层 Non-Coating	牌号 Grade	库存 Stock
DK-NCA120-D5	5.00	5.00	62	10		○		
DK-NCA120-D6	6.00	6.00	66	15		○		
DK-NCA120-D8	8.00	8.00	79	17		○		
DK-NCA120-D10	10.00	10.00	89	20		○		
DK-NCA120-D12	12.00	12.00	102	25		○		
DK-NCA120-D14	14.00	14.00	107	30		○		
DK-NCA120-D16	16.00	16.00	115	35		○		
DK-NCA120-D20	20.00	20.00	131	40		○		

订货示例: DK-NCA120-D14  
Ordering guide: DK-NCA120-D14

推荐切削用量见D38页。The page D38 for the recommendable cutting date.

●: 表示有库存

## 三刃钻 Three cutting edges drill

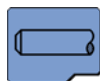


DK-CLA03

加工铸铁用三刃钻

Three cutting edge drill for cast iron

钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	普通直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁钻孔 Suitable for drilling cast iron.



型号 Type	规格尺寸 Dimension						涂层Coating		库存 Stock
	D (h7)	d2 (h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade		
DK-CLA03-D3	3.00	3.00	46	16	12	○			
DK-CLA03-D3.1	3.10	3.10	49	18	14	○			
DK-CLA03-D3.2	3.20	3.20	49	18	14	○			
DK-CLA03-D3.3	3.30	3.30	49	18	14	○			
DK-CLA03-D3.4	3.40	3.40	52	20	15	○			
DK-CLA03-D3.5	3.50	3.50	52	20	15	○			
DK-CLA03-D3.6	3.60	3.60	52	20	15	○			
DK-CLA03-D3.7	3.70	3.70	52	20	15	○			
DK-CLA03-D3.8	3.80	3.80	55	22	17	○			
DK-CLA03-D4	4.00	4.00	55	22	17	○			
DK-CLA03-D4.1	4.10	4.10	55	22	17	○			
DK-CLA03-D4.2	4.20	4.20	55	22	17	○			
DK-CLA03-D4.5	4.50	4.50	58	24	18	○			
DK-CLA03-D4.8	4.80	4.80	62	26	20	○			
DK-CLA03-D5	5.00	5.00	62	26	20	○			
DK-CLA03-D5.1	5.10	5.10	62	26	20	○			
DK-CLA03-D5.2	5.20	5.20	62	26	20	○			
DK-CLA03-D5.3	5.30	5.30	62	26	20	○			
DK-CLA03-D5.5	5.50	5.50	66	28	21	○			
DK-CLA03-D5.8	5.80	5.80	66	28	21	○			
DK-CLA03-D6	6.00	6.00	66	28	21	○			
DK-CLA03-D6.1	6.10	6.10	70	31	23	○			
DK-CLA03-D6.2	6.20	6.20	70	31	23	○			
DK-CLA03-D6.4	6.40	6.40	70	31	23	○			
DK-CLA03-D6.5	6.50	6.50	70	31	23	○			
DK-CLA03-D6.7	6.70	6.70	70	31	23	○			
DK-CLA03-D6.8	6.80	6.80	74	34	25	○			
DK-CLA03-D7	7.00	7.00	74	34	25	○			
DK-CLA03-D7.1	7.10	7.10	74	34	25	○			
DK-CLA03-D7.4	7.40	7.40	74	34	25	○			

订货示例: DK-CLA03-D9

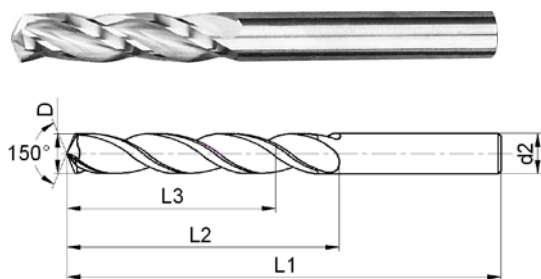
Ordering guide: DK-CLA03-D9

推荐切削用量见D38页。The page D38 for the recommendable cutting date.

●: 表示有库存



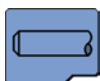
## 三刃钻 Three cutting edges drill



### DK-CLA03

#### 加工铸铁用三刃钻 Three cutting edge drill for cast iron

钻孔深度 The depth of drilling	(2-3)×D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	普通直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁钻孔 Suitable for drilling cast iron.



型号 Type	规格尺寸 Dimension						涂层Coating		
	D (h7)	d2 (h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	库存 Stock	
DK-CLA03-D7.5	7.50	7.50	74	34	25	○			
DK-CLA03-D7.8	7.80	7.80	79	37	27	○			
DK-CLA03-D8	8.00	8.00	79	37	27	○			
DK-CLA03-D8.1	8.10	8.10	79	37	27	○			
DK-CLA03-D8.2	8.20	8.20	79	37	27	○			
DK-CLA03-D8.4	8.40	8.40	79	37	27	○			
DK-CLA03-D8.5	8.50	8.50	79	37	27	○			
DK-CLA03-D8.6	8.60	8.60	84	40	29	○			
DK-CLA03-D8.7	8.70	8.70	84	40	29	○			
DK-CLA03-D8.8	8.80	8.80	84	40	29	○			
DK-CLA03-D9	9.00	9.00	84	40	29	○			
DK-CLA03-D9.5	9.50	9.50	84	40	29	○			
DK-CLA03-D9.8	9.80	9.80	89	43	31	○			
DK-CLA03-D10	10.00	10.00	89	43	31	○			
DK-CLA03-D10.1	10.10	10.10	89	43	31	○			
DK-CLA03-D10.2	10.20	10.20	89	43	31	○			
DK-CLA03-D10.4	10.40	10.40	89	43	31	○			
DK-CLA03-D10.5	10.50	10.50	89	43	31	○			
DK-CLA03-D11	11.00	11.00	95	47	33	○			
DK-CLA03-D12	12.00	12.00	102	51	35	○			
DK-CLA03-D13	13.00	13.00	102	51	35	○			
DK-CLA03-D14	14.00	14.00	107	54	37	○			
DK-CLA03-D15	15.00	15.00	111	54	37	○			
DK-CLA03-D17.5	17.50	17.50	123	62	40	○			
DK-CLA03-D19.5	19.50	19.50	131	66	42	○			
DK-CLA03-D20	20.00	20.00	131	66	42	○			

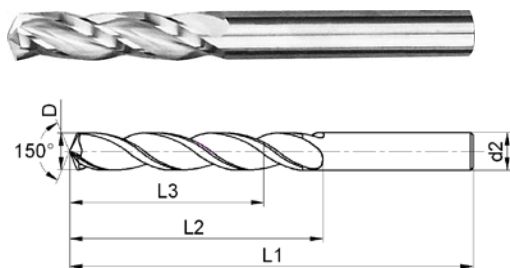
订货示例: DK-CLA03-D9

Ordering guide: DK-CLA03-D9

推荐切削用量见D38页。The page D38 for the recommendable cutting date.

●: 表示有库存

## 三刃钻 Three cutting edges drill

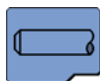


DM-CLA03

三刃钻

Three cutting edge drill

钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	普通直柄 d2 Straight shank d2
适应场合 Application	适用于不锈钢、高温合金和铝合金钻孔。 Suitable for drilling stainless steels, superalloys, Aluminium alloys.



型号 Type	规格尺寸 Dimension					涂层Coating		
	D (h7)	d2 (h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	库存 Stock
DM-CLA03-D3	3.00	3.00	46	16	12	○		
DM-CLA03-D3.1	3.10	3.10	49	18	14	○		
DM-CLA03-D3.2	3.20	3.20	49	18	14	○		
DM-CLA03-D3.3	3.30	3.30	49	18	14	○		
DM-CLA03-D3.4	3.40	3.40	52	20	15	○		
DM-CLA03-D3.5	3.50	3.50	52	20	15	○		
DM-CLA03-D3.6	3.60	3.60	52	20	15	○		
DM-CLA03-D3.7	3.70	3.70	52	20	15	○		
DM-CLA03-D3.8	3.80	3.80	55	22	17	○		
DM-CLA03-D4	4.00	4.00	55	22	17	○		
DM-CLA03-D4.1	4.10	4.10	55	22	17	○		
DM-CLA03-D4.2	4.20	4.20	55	22	17	○		
DM-CLA03-D4.5	4.50	4.50	58	24	18	○		
DM-CLA03-D4.8	4.80	4.80	62	26	20	○		
DM-CLA03-D5	5.00	5.00	62	26	20	○		
DM-CLA03-D5.1	5.10	5.10	62	26	20	○		
DM-CLA03-D5.2	5.20	5.20	62	26	20	○		
DM-CLA03-D5.3	5.30	5.30	62	26	20	○		
DM-CLA03-D5.5	5.50	5.50	66	28	21	○		
DM-CLA03-D5.8	5.80	5.80	66	28	21	○		
DM-CLA03-D6	6.00	6.00	66	28	21	○		
DM-CLA03-D6.1	6.10	6.10	70	31	23	○		
DM-CLA03-D6.2	6.20	6.20	70	31	23	○		
DM-CLA03-D6.4	6.40	6.40	70	31	23	○		
DM-CLA03-D6.5	6.50	6.50	70	31	23	○		
DM-CLA03-D6.7	6.70	6.70	70	31	23	○		
DM-CLA03-D6.8	6.80	6.80	74	34	25	○		
DM-CLA03-D7	7.00	7.00	74	34	25	○		
DM-CLA03-D7.1	7.10	7.10	74	34	25	○		
DM-CLA03-D7.4	7.40	7.40	74	34	25	○		

订货示例: DM-CLA03-D3

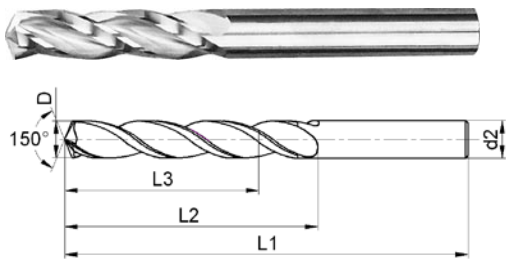
Ordering guide: DM-CLA03-D3

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

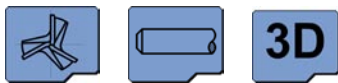
●: 表示有库存



## 三刃钻 Three cutting edges drill



DM-CLA03	
三刃钻 Three cutting edge drill	
钻孔深度 The depth of drilling	(2-3)×D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	普通直柄 d2 Straight shank d2
适应场合 Application	适用于不锈钢、高温合金和铝合金 钻孔。 Suitable for drilling stainless steels, superalloys, Aluminium alloys.



型号 Type	规格尺寸 Dimension					涂层Coating		库存 Stock
	D (h7)	d2 (h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	
DM-CLA03-D7.5	7.50	7.50	74	34	25	○		
DM-CLA03-D7.8	7.80	7.80	79	37	27	○		
DM-CLA03-D8	8.00	8.00	79	37	27	○		
DM-CLA03-D8.1	8.10	8.10	79	37	27	○		
DM-CLA03-D8.2	8.20	8.20	79	37	27	○		
DM-CLA03-D8.4	8.40	8.40	79	37	27	○		
DM-CLA03-D8.5	8.50	8.50	79	37	27	○		
DM-CLA03-D8.6	8.60	8.60	84	40	29	○		
DM-CLA03-D8.7	8.70	8.70	84	40	29	○		
DM-CLA03-D8.8	8.80	8.80	84	40	29	○		
DM-CLA03-D9	9.00	9.00	84	40	29	○		
DM-CLA03-D9.5	9.50	9.50	84	40	29	○		
DM-CLA03-D9.8	9.80	9.80	89	43	31	○		
DM-CLA03-D10	10.00	10.00	89	43	31	○		
DM-CLA03-D10.1	10.10	10.10	89	43	31	○		
DM-CLA03-D10.2	10.20	10.20	89	43	31	○		
DM-CLA03-D10.4	10.40	10.40	89	43	31	○		
DM-CLA03-D10.5	10.50	10.50	89	43	31	○		
DM-CLA03-D11	11.00	11.00	95	47	33	○		
DM-CLA03-D12	12.00	12.00	102	51	35	○		
DM-CLA03-D13	13.00	13.00	102	51	35	○		
DM-CLA03-D14	14.00	14.00	107	54	37	○		
DM-CLA03-D15	15.00	15.00	111	54	37	○		
DM-CLA03-D17.5	17.50	17.50	123	62	40	○		
DM-CLA03-D19.5	19.50	19.50	131	66	42	○		
DM-CLA03-D20	20.00	20.00	131	66	42	○		

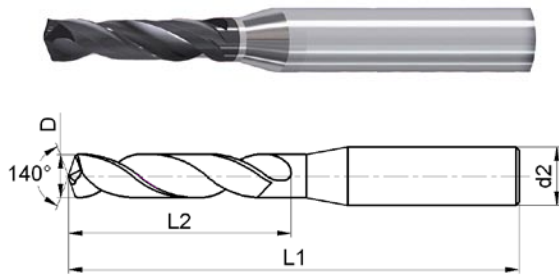
订货示例: DM-CLA03-D9

Ordering guide: DM-CLA03-D9

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



### DG-PTA05

#### 小径多用途麻花钻

#### Small diameter twist drills

钻孔深度 The depth of drilling	(4-5) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、铝合金、铜合金、钛合金。 Suitable for steels, stainless steels, Cast iron, Aluminium, Brass, Titanium alloys.



D

型号 Type	规格尺寸 Dimension					涂层Coating		
	D(h7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-PTA05-D0.5	0.50		3	38	3.0	○		●
DG-PTA05-D0.51	0.51		3	38	3.0	○		●
DG-PTA05-D0.52	0.52		3	38	3.0	○		●
DG-PTA05-D0.53	0.53		3	38	3.0	○		●
DG-PTA05-D0.54	0.54		3	38	3.5	○		●
DG-PTA05-D0.55	0.55		3	38	3.5	○		●
DG-PTA05-D0.56	0.56		3	38	3.5	○		●
DG-PTA05-D0.57	0.57		3	38	3.5	○		●
DG-PTA05-D0.58	0.58		3	38	3.5	○		●
DG-PTA05-D0.59	0.59		3	38	3.5	○		●
DG-PTA05-D0.6	0.60		3	38	3.5	○		●
DG-PTA05-D0.61	0.61		3	38	4.0	○		●
DG-PTA05-D0.62	0.62		3	38	4.0	○		●
DG-PTA05-D0.63	0.63		3	38	4.0	○		●
DG-PTA05-D0.64	0.64		3	38	4.0	○		●
DG-PTA05-D0.65	0.65		3	38	4.0	○		●
DG-PTA05-D0.66	0.66		3	38	4.0	○		●
DG-PTA05-D0.67	0.67		3	38	4.0	○		●
DG-PTA05-D0.68	0.68		3	38	4.5	○		●
DG-PTA05-D0.69	0.69		3	38	4.5	○		●
DG-PTA05-D0.7	0.70		3	38	4.5	○		●
DG-PTA05-D0.71	0.71		3	38	4.5	○		●
DG-PTA05-D0.72	0.72		3	38	4.5	○		●
DG-PTA05-D0.73	0.73		3	38	4.5	○		●
DG-PTA05-D0.74	0.74		3	38	4.5	○		●
DG-PTA05-D0.75	0.75	M1	3	38	4.5	○		●
DG-PTA05-D0.76	0.76		3	38	5.0	○		●
DG-PTA05-D0.77	0.77		3	38	5.0	○		●
DG-PTA05-D0.78	0.78		3	38	5.0	○		●
DG-PTA05-D0.79	0.79		3	38	5.0	○		●

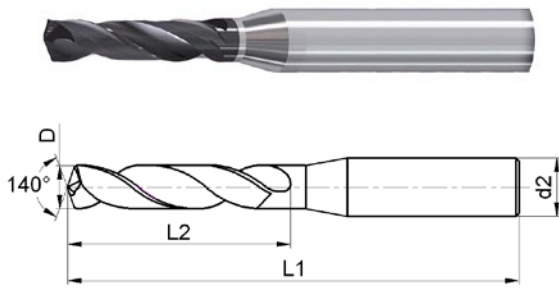
订货示例: DG-PTA05-D0.6-M

Ordering guide: DG-PTA05-D0.6-M

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



<b>DG-PTA05</b>	
小径多用途麻花钻 <i>Small diameter twist drills</i>	
钻孔深度 The depth of drilling	(4-5) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、铝合金、铜合金。 Suitable for steels, stainless steels, Cast iron, Aluminium, Brass.



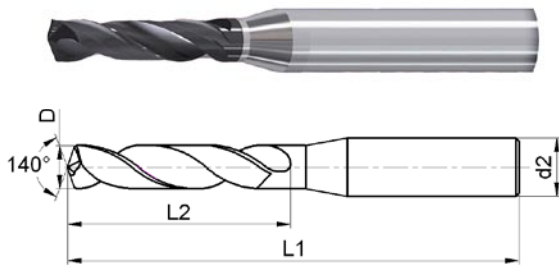
型号 Type	规格尺寸 Dimension					涂层Coating		库存 Stock
	D(h7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	未涂层 Non-Coating	牌号 Grade	
DG-PTA05-D0.8	0.80		3	38	5.0	○		●
DG-PTA05-D0.81	0.81		3	38	5.0	○		●
DG-PTA05-D0.82	0.82		3	38	5.0	○		●
DG-PTA05-D0.83	0.83		3	38	5.0	○		●
DG-PTA05-D0.84	0.84		3	38	5.0	○		●
DG-PTA05-D0.85	0.85		3	38	5.0	○		●
DG-PTA05-D0.86	0.86		3	38	5.5	○		●
DG-PTA05-D0.87	0.87		3	38	5.5	○		●
DG-PTA05-D0.88	0.88		3	38	5.5	○		●
DG-PTA05-D0.89	0.89		3	38	5.5	○		●
DG-PTA05-D0.9	0.90		3	38	5.5	○		●
DG-PTA05-D0.91	0.91		3	38	5.5	○		●
DG-PTA05-D0.92	0.92		3	38	5.5	○		●
DG-PTA05-D0.93	0.93		3	38	5.5	○		●
DG-PTA05-D0.94	0.94		3	38	5.5	○		●
DG-PTA05-D0.95	0.95	M1.2	3	38	5.5	○		●
DG-PTA05-D0.96	0.96		3	38	6.0	○		●
DG-PTA05-D0.97	0.97		3	38	6.0	○		●
DG-PTA05-D0.98	0.98		3	38	6.0	○		●
DG-PTA05-D0.99	0.99		3	38	6.0	○		●
DG-PTA05-D1	1.00		3	38	6.0	○		●
DG-PTA05-D1.01	1.01		3	38	6.0	○		●
DG-PTA05-D1.02	1.02		3	38	6.0	○		●
DG-PTA05-D1.03	1.03		3	38	6.0	○		●
DG-PTA05-D1.04	1.04		3	38	6.0	○		●
DG-PTA05-D1.05	1.05		3	38	6.0	○		●
DG-PTA05-D1.06	1.06		3	38	6.0	○		●
DG-PTA05-D1.07	1.07		3	42	7.0	○		●
DG-PTA05-D1.08	1.08		3	42	7.0	○		●
DG-PTA05-D1.09	1.09		3	42	7.0	○		●

订货示例: DG-PTA05-D0.6-M Ordering guide: DG-PTA05-D0.6-M

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



### DG-PTA05

#### 小径多用途麻花钻

#### Small diameter twist drills

钻孔深度 The depth of drilling	(4-5) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、铝合金、铜合金、钛合金。 Suitable for steels, stainless steels, Cast iron, Aluminium, Brass, Titanium alloys.



型号 Type	规格尺寸 Dimension					涂层Coating		库存 Stock
	D(h7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	未涂层 Non-Coating	牌号 Grade	
DG-PTA05-D1.1	1.10	M1.4	3	42	7.0	○		●
DG-PTA05-D1.11	1.11		3	42	7.0	○		●
DG-PTA05-D1.12	1.12		3	42	7.0	○		●
DG-PTA05-D1.13	1.13		3	42	7.0	○		●
DG-PTA05-D1.14	1.14		3	42	7.0	○		●
DG-PTA05-D1.15	1.15		3	42	7.0	○		●
DG-PTA05-D1.16	1.16		3	42	7.0	○		●
DG-PTA05-D1.17	1.17		3	42	7.0	○		●
DG-PTA05-D1.18	1.18		3	42	7.0	○		●
DG-PTA05-D1.19	1.19		3	42	8.0	○		●
DG-PTA05-D1.2	1.20		3	42	8.0	○		●
DG-PTA05-D1.21	1.21		3	42	8.0	○		●
DG-PTA05-D1.22	1.22		3	42	8.0	○		●
DG-PTA05-D1.23	1.23		3	42	8.0	○		●
DG-PTA05-D1.24	1.24		3	42	8.0	○		●
DG-PTA05-D1.25	1.25	M1.6	3	42	8.0	○		●
DG-PTA05-D1.26	1.26		3	42	8.0	○		●
DG-PTA05-D1.27	1.27		3	42	8.0	○		●
DG-PTA05-D1.28	1.28		3	42	8.0	○		●
DG-PTA05-D1.29	1.29		3	42	8.0	○		●
DG-PTA05-D1.3	1.30		3	42	8.0	○		●
DG-PTA05-D1.31	1.31		3	42	8.0	○		●
DG-PTA05-D1.32	1.32		3	42	8.0	○		●
DG-PTA05-D1.33	1.33		3	42	9.0	○		●
DG-PTA05-D1.34	1.34		3	42	9.0	○		●
DG-PTA05-D1.35	1.35		3	42	9.0	○		●
DG-PTA05-D1.36	1.36		3	42	9.0	○		●
DG-PTA05-D1.37	1.37		3	42	9.0	○		●
DG-PTA05-D1.38	1.38		3	42	9.0	○		●
DG-PTA05-D1.39	1.39		3	42	9.0	○		●

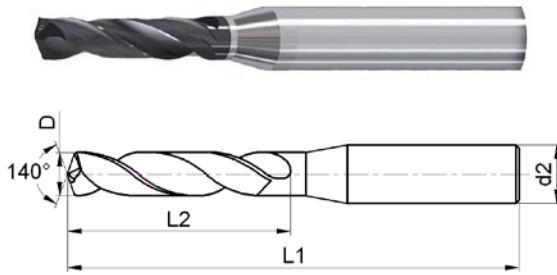
订货示例: DG-PTA05-D0.6-M

Ordering guide: DG-PTA05-D0.6-M

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



<b>DG-PTA05</b>	
小径多用途麻花钻 <i>Small diameter twist drills</i>	
钻孔深度 The depth of drilling	(4-5) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、铝合金、铜合金、钛合金。 Suitable for steels, stainless steels, Cast iron, Aluminium, Brass, Titanium alloys.



型号 Type	规格尺寸 Dimension					涂层Coating		
	D(h7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-PTA05-D1.4	1.40		3	42	9.0	○		●
DG-PTA05-D1.41	1.41		3	42	9.0	○		●
DG-PTA05-D1.42	1.42		3	42	9.0	○		●
DG-PTA05-D1.43	1.43		3	42	9.0	○		●
DG-PTA05-D1.44	1.44		3	42	9.0	○		●
DG-PTA05-D1.45	1.45	M1.8	3	42	9.0	○		●
DG-PTA05-D1.46	1.46		3	42	9.0	○		●
DG-PTA05-D1.47	1.47		3	42	9.0	○		●
DG-PTA05-D1.48	1.48		3	42	9.0	○		●
DG-PTA05-D1.49	1.49		3	42	9.0	○		●
DG-PTA05-D1.5	1.50		3	42	9.0	○		●
DG-PTA05-D1.51	1.51		3	42	10.0		M	●
DG-PTA05-D1.52	1.52		3	42	10.0		M	●
DG-PTA05-D1.53	1.53		3	42	10.0		M	●
DG-PTA05-D1.54	1.54		3	42	10.0		M	●
DG-PTA05-D1.55	1.55		3	42	10.0		M	●
DG-PTA05-D1.56	1.56		3	42	10.0		M	●
DG-PTA05-D1.57	1.57		3	42	10.0		M	●
DG-PTA05-D1.58	1.58		3	42	10.0		M	●
DG-PTA05-D1.59	1.59		3	42	10.0		M	●
DG-PTA05-D1.6	1.60	M2	3	42	10.0		M	●
DG-PTA05-D1.61	1.61		3	42	10.0		M	●
DG-PTA05-D1.62	1.62		3	42	10.0		M	●
DG-PTA05-D1.63	1.63		3	42	10.0		M	●
DG-PTA05-D1.64	1.64		3	42	10.0		M	●
DG-PTA05-D1.65	1.65		3	42	10.0		M	●
DG-PTA05-D1.66	1.66		3	42	10.0		M	●
DG-PTA05-D1.67	1.67		3	42	10.0		M	●
DG-PTA05-D1.68	1.68		3	42	10.0		M	●
DG-PTA05-D1.69	1.69		3	42	10.0		M	●

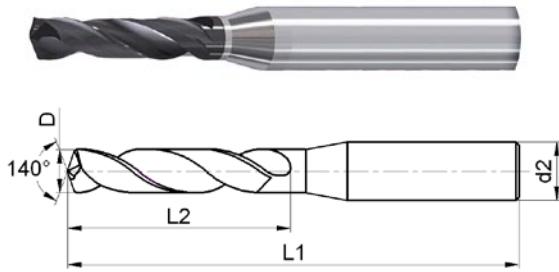
订货示例: DG-PTA05-D0.6-M

Ordering guide: DG-PTA05-D0.6-M

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill

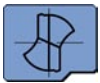


## DG-PTA05

### 小径多用途麻花钻

#### Small diameter twist drills

钻孔深度 The depth of drilling	(4-5) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、铝合金、铜合金、钛合金。 Suitable for steels, stainless steels, Cast iron, Aluminium, Brass, Titanium alloys.



型号 Type	规格尺寸 Dimension					涂层Coating		
	D(h7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-PTA05-D1.7	1.70		3	42	10.0		M	●
DG-PTA05-D1.71	1.71		3	42	11.0		M	●
DG-PTA05-D1.72	1.72		3	42	11.0		M	●
DG-PTA05-D1.73	1.73		3	42	11.0		M	●
DG-PTA05-D1.74	1.74		3	42	11.0		M	●
DG-PTA05-D1.75	1.75	M2.2	3	42	11.0		M	●
DG-PTA05-D1.76	1.76		3	42	11.0		M	●
DG-PTA05-D1.77	1.77		3	42	11.0		M	●
DG-PTA05-D1.78	1.78		3	42	11.0		M	●
DG-PTA05-D1.79	1.79		3	42	11.0		M	●
DG-PTA05-D1.8	1.80		3	42	11.0		M	●
DG-PTA05-D1.81	1.81		3	42	11.0		M	●
DG-PTA05-D1.82	1.82		3	42	11.0		M	●
DG-PTA05-D1.83	1.83		3	42	11.0		M	●
DG-PTA05-D1.84	1.84		3	42	11.0		M	●
DG-PTA05-D1.85	1.85		3	42	11.0		M	●
DG-PTA05-D1.86	1.86		3	42	11.0		M	●
DG-PTA05-D1.87	1.87		3	42	11.0		M	●
DG-PTA05-D1.88	1.88		3	42	11.0		M	●
DG-PTA05-D1.89	1.89		3	42	11.0		M	●
DG-PTA05-D1.9	1.90		3	42	11.0		M	●
DG-PTA05-D1.91	1.91		3	50	12.0		M	●
DG-PTA05-D1.92	1.92		3	50	12.0		M	●
DG-PTA05-D1.93	1.93		3	50	12.0		M	●
DG-PTA05-D1.94	1.94		3	50	12.0		M	●
DG-PTA05-D1.95	1.95		3	50	12.0		M	●
DG-PTA05-D1.96	1.96		3	50	12.0		M	●
DG-PTA05-D1.97	1.97		3	50	12.0		M	●
DG-PTA05-D1.98	1.98		3	50	12.0		M	●
DG-PTA05-D1.99	1.99		3	50	12.0		M	●

订货示例: DG-PTA05-D0.6-M

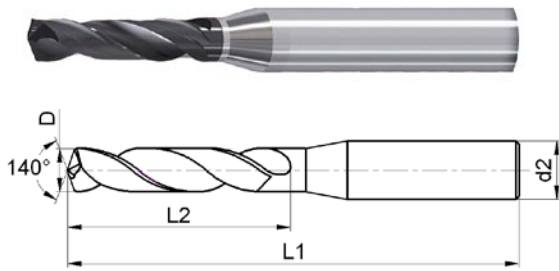
Ordering guide: DG-PTA05-D0.6-M

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存



# 麻花钻 Twist drill



<b>DG-PTA05</b>	
小径多用途麻花钻 <i>Small diameter twist drills</i>	
钻孔深度 The depth of drilling	(4-5) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、铝合金、铜合金、钛合金。 Suitable for steels, stainless steels, Cast iron, Aluminium, Brass, Titanium alloys.



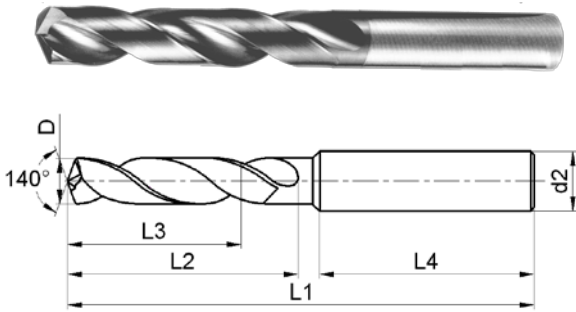
型号 Type	规格尺寸 Dimension					涂层Coating		库存 Stock
	D(h7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	未涂层 Non-Coating	牌号 Grade	
DG-PTA05-D2	2.00		3	50	12.0		M	●
DG-PTA05-D2.05	2.05		3	50	12.0		M	●
DG-PTA05-D2.1	2.10		3	50	12.0		M	●
DG-PTA05-D2.15	2.15		3	50	13.0		M	●
DG-PTA05-D2.2	2.20		3	50	13.0		M	●
DG-PTA05-D2.25	2.25		3	50	13.0		M	●
DG-PTA05-D2.3	2.30		3	50	13.0		M	●
DG-PTA05-D2.35	2.35		3	50	13.0		M	●
DG-PTA05-D2.4	2.40		3	50	14.0		M	●
DG-PTA05-D2.45	2.45		3	50	14.0		M	●
DG-PTA05-D2.5	2.50		3	50	14.0		M	●
DG-PTA05-D2.55	2.55		3	50	14.0		M	●
DG-PTA05-D2.6	2.60		3	50	14.0		M	●
DG-PTA05-D2.65	2.65		3	50	14.0		M	●
DG-PTA05-D2.7	2.70		3	50	16.0		M	●
DG-PTA05-D2.75	2.75		3	50	16.0		M	●
DG-PTA05-D2.8	2.80		3	50	16.0		M	●
DG-PTA05-D2.85	2.85		3	50	16.0		M	●
DG-PTA05-D2.9	2.90		3	50	16.0		M	●
DG-PTA05-D2.95	2.95		3	50	16.0		M	●

订货示例: DG-PTA05-D0.6-M

Ordering guide: DG-PTA05-D0.6-M

推荐切削用量见D39页。The page D39 for the recommendable cutting date.

●: 表示有库存



<b>DG-ATA03</b>	
<b>直柄麻花钻</b>	
<b>Straight shank twist drill</b>	
钻孔深度 The depth of drilling	(2-3) D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	普通直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



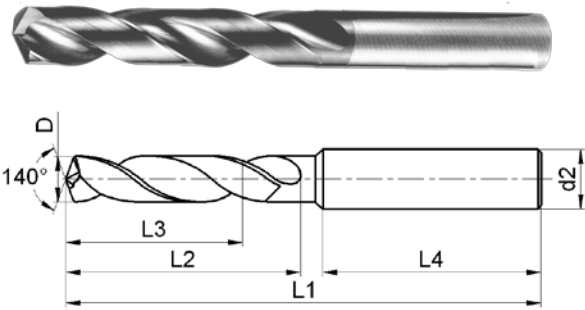
型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA03-D3	3.00		6.00	62	20	14	36		M	●
DG-ATA03-D3.25	3.25		6.00	62	20	14	36		M	●
DG-ATA03-D3.3	3.30	M4	6.00	62	20	14	36		M	●
DG-ATA03-D3.4	3.40		6.00	62	20	14	36		M	●
DG-ATA03-D3.5	3.50		6.00	62	20	14	36		M	●
DG-ATA03-D3.7	3.70		6.00	62	20	14	36		M	●
DG-ATA03-D4	4.00		6.00	66	24	17	36		M	●
DG-ATA03-D4.2	4.20	M5	6.00	66	24	17	36		M	●
DG-ATA03-D4.3	4.30		6.00	66	24	17	36		M	●
DG-ATA03-D4.5	4.50		6.00	66	24	17	36		M	●
DG-ATA03-D4.65	4.65		6.00	66	24	17	36		M	●
DG-ATA03-D4.8	4.80		6.00	66	28	20	36		M	●
DG-ATA03-D5	5.00	M6	6.00	66	28	20	36		M	●
DG-ATA03-D5.1	5.10		6.00	66	28	20	36		M	●
DG-ATA03-D5.2	5.20		6.00	66	28	20	36		M	●
DG-ATA03-D5.5	5.50		6.00	66	28	20	36		M	●
DG-ATA03-D5.55	5.55		6.00	66	28	20	36		M	●
DG-ATA03-D5.8	5.80		6.00	66	28	20	36		M	●
DG-ATA03-D6	6.00		6.00	66	28	20	36		M	●
DG-ATA03-D6.1	6.10		8.00	79	34	24	36		M	●
DG-ATA03-D6.2	6.20		8.00	79	34	24	36		M	●
DG-ATA03-D6.3	6.30		8.00	79	34	24	36		M	●
DG-ATA03-D6.5	6.50		8.00	79	34	24	36		M	●
DG-ATA03-D6.6	6.60		8.00	79	34	24	36		M	●
DG-ATA03-D6.75	6.75	M8	8.00	79	34	24	36		M	●
DG-ATA03-D6.9	6.90		8.00	79	34	24	36		M	●
DG-ATA03-D7	7.00	M8 × 1	8.00	79	34	24	36		M	●
DG-ATA03-D7.1	7.10		8.00	79	41	29	36		M	●
DG-ATA03-D7.4	7.40		8.00	79	41	29	36		M	●
DG-ATA03-D7.5	7.50		8.00	79	41	29	36		M	●

订货示例: DG-ATA03-D3-M  
Ordering guide: DG-ATA03-D3-M

推荐切削用量见D40页。The page D40 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DG-ATA03	
直柄麻花钻 Straight shank twist drill	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	普通直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



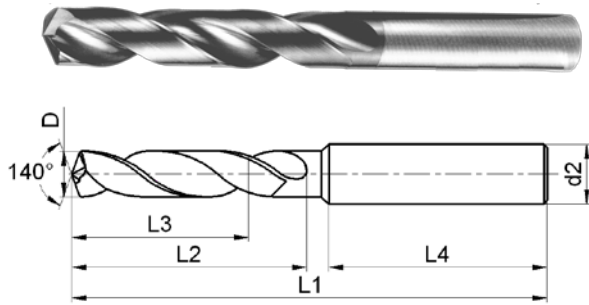
型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA03-D7.8	7.80		8.00	79	41	29	36		M	●
DG-ATA03-D8	8.00		8.00	79	41	29	36		M	●
DG-ATA03-D8.1	8.10		10.00	89	47	35	40		M	●
DG-ATA03-D8.4	8.40		10.00	89	47	35	40		M	●
DG-ATA03-D8.5	8.50	M10	10.00	89	47	35	40		M	●
DG-ATA03-D8.6	8.60		10.00	89	47	35	40		M	●
DG-ATA03-D8.7	8.70		10.00	89	47	35	40		M	●
DG-ATA03-D8.8	8.80		10.00	89	47	35	40		M	●
DG-ATA03-D9	9.00	M10 × 1	10.00	89	47	35	40		M	●
DG-ATA03-D9.3	9.30		10.00	89	47	35	40		M	●
DG-ATA03-D9.5	9.50		10.00	89	47	35	40		M	●
DG-ATA03-D9.6	9.60		10.00	89	47	35	40		M	●
DG-ATA03-D9.8	9.80		10.00	89	47	35	40		M	●
DG-ATA03-D10	10.00		10.00	89	47	35	40		M	●
DG-ATA03-D10.25	10.25	M12	12.00	102	55	40	45		M	●
DG-ATA03-D10.4	10.40		12.00	102	55	40	45		M	●
DG-ATA03-D10.5	10.50	M12 × 1.5	12.00	102	55	40	45		M	●
DG-ATA03-D10.6	10.60		12.00	102	55	40	45		M	●
DG-ATA03-D10.8	10.80		12.00	102	55	40	45		M	●
DG-ATA03-D11	11.00		12.00	102	55	40	45		M	●
DG-ATA03-D11.2	11.20		12.00	102	55	40	45		M	●
DG-ATA03-D11.5	11.50		12.00	102	55	40	45		M	●
DG-ATA03-D11.8	11.80		12.00	102	55	40	45		M	●
DG-ATA03-D12	12.00	M14	12.00	102	55	40	45		M	●
DG-ATA03-D12.25	12.25		14.00	107	60	43	45		M	●
DG-ATA03-D12.5	12.50	M14 × 1.5	14.00	107	60	43	45		M	●
DG-ATA03-D12.7	12.70		14.00	107	60	43	45		M	●
DG-ATA03-D12.75	12.75		14.00	107	60	43	45		M	●
DG-ATA03-D12.8	12.80		14.00	107	60	43	45		M	●
DG-ATA03-D13	13.00		14.00	107	60	43	45		M	●

订货示例: DG-ATA03-D10-M  
Ordering guide: DG-ATA03-D10-M

推荐切削用量见D40页。The page D40 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DG-ATA03	
直柄麻花钻	
Straight shank twist drill	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



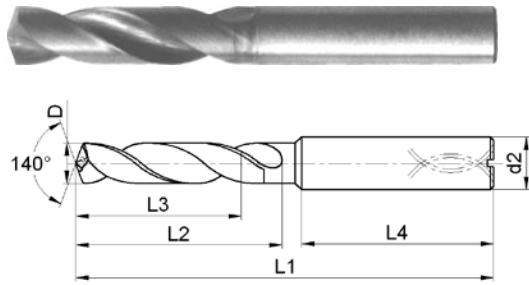
型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non- Coating	牌号 Grade	库存 Stock
DG-ATA03-D13.1	13.10		14.00	107	60	43	45		M	●
DG-ATA03-D13.5	13.50		14.00	107	60	43	45		M	●
DG-ATA03-D13.8	13.80		14.00	107	60	43	45		M	●
DG-ATA03-D14	14.00	M16	14.00	107	60	43	45		M	●
DG-ATA03-D14.25	14.25		16.00	115	65	45	48		M	●
DG-ATA03-D14.5	14.50	M16 × 1.5	16.00	115	65	45	48		M	●
DG-ATA03-D14.75	14.75		16.00	115	65	45	48		M	●
DG-ATA03-D14.8	14.80		16.00	115	65	45	48		M	●
DG-ATA03-D15	15.00		16.00	115	65	45	48		M	●
DG-ATA03-D15.1	15.10		16.00	115	65	45	48		M	●
DG-ATA03-D15.5	15.50		16.00	115	65	45	48		M	●
DG-ATA03-D15.8	15.80		16.00	115	65	45	48		M	●
DG-ATA03-D16	16.00		16.00	115	65	45	48		M	●
DG-ATA03-D16.5	16.50		18.00	123	73	51	48		M	●
DG-ATA03-D16.75	16.75		18.00	123	73	51	48		M	●
DG-ATA03-D16.8	16.80		18.00	123	73	51	48		M	●
DG-ATA03-D17	17.00		18.00	123	73	51	48		M	●
DG-ATA03-D17.5	17.50		18.00	123	73	51	48		M	●
DG-ATA03-D17.8	17.80		18.00	123	73	51	48		M	●
DG-ATA03-D18	18.00		18.00	123	73	51	48		M	●
DG-ATA03-D18.5	18.50		20.00	131	79	55	50		M	●
DG-ATA03-D18.8	18.80		20.00	131	79	55	50		M	●
DG-ATA03-D19	19.00		20.00	131	79	55	50		M	●
DG-ATA03-D19.5	19.50		20.00	131	79	55	50		M	●
DG-ATA03-D19.8	19.80		20.00	131	79	55	50		M	●
DG-ATA03-D20	20.00		20.00	131	79	55	50		M	●

订货示例: DG-ATA03-D20-M  
Ordering guide: DG-ATA03-D20-M

推荐切削用量见D40页。The page D40 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DG-ATA03C	
内冷直柄麻花钻	
Straight shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainlesssteels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA03C-D5	5.00	M6	6.00	66	28	20	36		M	
DG-ATA03C-D5.1	5.10		6.00	66	28	20	36		M	
DG-ATA03C-D5.2	5.20		6.00	66	28	20	36		M	
DG-ATA03C-D5.5	5.50		6.00	66	28	20	36		M	
DG-ATA03C-D5.55	5.55		6.00	66	28	20	36		M	
DG-ATA03C-D5.8	5.80		6.00	66	28	20	36		M	
DG-ATA03C-D6	6.00		6.00	66	28	20	36		M	
DG-ATA03C-D6.1	6.10		8.00	79	34	24	36		M	
DG-ATA03C-D6.2	6.20		8.00	79	34	24	36		M	
DG-ATA03C-D6.3	6.30		8.00	79	34	24	36		M	
DG-ATA03C-D6.5	6.50		8.00	79	34	24	36		M	
DG-ATA03C-D6.6	6.60		8.00	79	34	24	36		M	
DG-ATA03C-D6.75	6.75	M8	8.00	79	34	24	36		M	
DG-ATA03C-D6.9	6.90		8.00	79	34	24	36		M	
DG-ATA03C-D7	7.00	M8 × 1	8.00	79	34	24	36		M	
DG-ATA03C-D7.1	7.10		8.00	79	41	29	36		M	
DG-ATA03C-D7.4	7.40		8.00	79	41	29	36		M	
DG-ATA03C-D7.5	7.50		8.00	79	41	29	36		M	
DG-ATA03C-D7.8	7.80		8.00	79	41	29	36		M	
DG-ATA03C-D8	8.00		8.00	79	41	29	36		M	
DG-ATA03C-D8.1	8.10		10.00	89	47	35	40		M	
DG-ATA03C-D8.4	8.40		10.00	89	47	35	40		M	
DG-ATA03C-D8.5	8.50	M10	10.00	89	47	35	40		M	
DG-ATA03C-D8.6	8.60		10.00	89	47	35	40		M	
DG-ATA03C-D8.7	8.70		10.00	89	47	35	40		M	
DG-ATA03C-D8.8	8.80		10.00	89	47	35	40		M	
DG-ATA03C-D9	9.00	M10 × 1	10.00	89	47	35	40		M	
DG-ATA03C-D9.3	9.30		10.00	89	47	35	40		M	
DG-ATA03C-D9.5	9.50		10.00	89	47	35	40		M	
DG-ATA03C-D9.6	9.60		10.00	89	47	35	40		M	

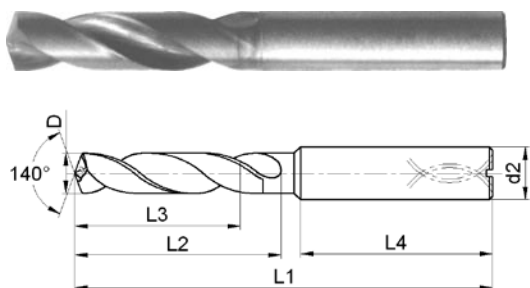
订货示例: DG-ATA03C-D5-M

Ordering guide: DG-ATA03C-D5-M

推荐切削用量见D41页。The page D41 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATA03C	
内冷直柄麻花钻	
Straight shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA03C-D9.8	9.80		10.00	89	47	35	40		M	
DG-ATA03C-D10	10.00		10.00	89	47	35	40		M	
DG-ATA03C-D10.25	10.25	M12	12.00	102	55	40	45		M	
DG-ATA03C-D10.4	10.40		12.00	102	55	40	45		M	
DG-ATA03C-D10.5	10.50	M12 × 1.5	12.00	102	55	40	45		M	
DG-ATA03C-D10.6	10.60		12.00	102	55	40	45		M	
DG-ATA03C-D10.8	10.80		12.00	102	55	40	45		M	
DG-ATA03C-D11	11.00		12.00	102	55	40	45		M	
DG-ATA03C-D11.2	11.20		12.00	102	55	40	45		M	
DG-ATA03C-D11.5	11.50		12.00	102	55	40	45		M	
DG-ATA03C-D11.8	11.80		12.00	102	55	40	45		M	
DG-ATA03C-D12	12.00	M14	12.00	102	55	40	45		M	
DG-ATA03C-D12.25	12.25		14.00	107	60	43	45		M	
DG-ATA03C-D12.5	12.50	M14 × 1.5	14.00	107	60	43	45		M	
DG-ATA03C-D12.7	12.70		14.00	107	60	43	45		M	
DG-ATA03C-D12.75	12.75		14.00	107	60	43	45		M	
DG-ATA03C-D12.8	12.80		14.00	107	60	43	45		M	
DG-ATA03C-D13	13.00		14.00	107	60	43	45		M	
DG-ATA03C-D13.1	13.10		14.00	107	60	43	45		M	
DG-ATA03C-D13.5	13.50		14.00	107	60	43	45		M	
DG-ATA03C-D13.8	13.80		14.00	107	60	43	45		M	
DG-ATA03C-D14	14.00	M16	14.00	107	60	43	45		M	
DG-ATA03C-D14.25	14.25		16.00	115	65	45	48		M	
DG-ATA03C-D14.5	14.50	M16 × 1.5	16.00	115	65	45	48		M	
DG-ATA03C-D14.75	14.75		16.00	115	65	45	48		M	
DG-ATA03C-D14.8	14.80		16.00	115	65	45	48		M	
DG-ATA03C-D15	15.00		16.00	115	65	45	48		M	
DG-ATA03C-D15.1	15.10		16.00	115	65	45	48		M	
DG-ATA03C-D15.5	15.50		16.00	115	65	45	48		M	
DG-ATA03C-D15.8	15.80		16.00	115	65	45	48		M	

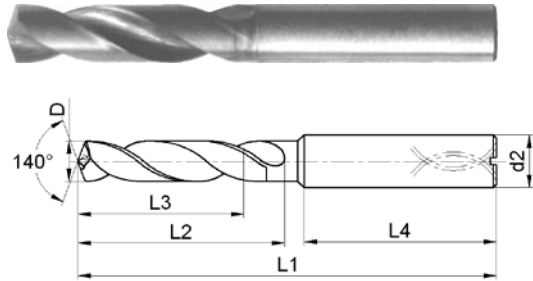
订货示例: DG-ATA03C-D10-M

Ordering guide: DG-ATA03C-D10-M

推荐切削用量见D41页。The page D41 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DG-ATA03C	
内冷直柄麻花钻	
Straight shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA03C-D16	16.00		16.00	115	65	45	48		M	
DG-ATA03C-D16.5	16.50		18.00	123	73	51	48		M	
DG-ATA03C-D16.75	16.75		18.00	123	73	51	48		M	
DG-ATA03C-D16.8	16.80		18.00	123	73	51	48		M	
DG-ATA03C-D17	17.00		18.00	123	73	51	48		M	
DG-ATA03C-D17.5	17.50		18.00	123	73	51	48		M	
DG-ATA03C-D17.8	17.80		18.00	123	73	51	48		M	
DG-ATA03C-D18	18.00		18.00	123	73	51	48		M	
DG-ATA03C-D18.5	18.50		20.00	131	79	55	50		M	
DG-ATA03C-D18.8	18.80		20.00	131	79	55	50		M	
DG-ATA03C-D19	19.00		20.00	131	79	55	50		M	
DG-ATA03C-D19.5	19.50		20.00	131	79	55	50		M	
DG-ATA03C-D19.8	19.80		20.00	131	79	55	50		M	
DG-ATA03C-D20	20.00		20.00	131	79	55	50		M	

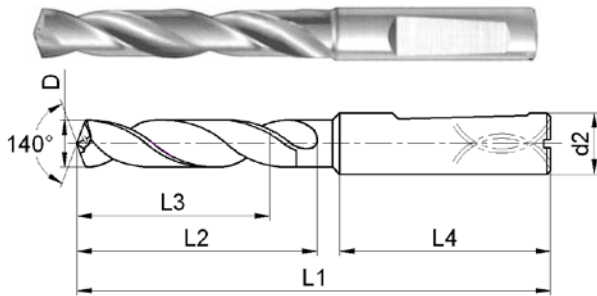
订货示例: DG-ATA03C-D20-M

Ordering guide: DG-ATA03C-D20-M

推荐切削用量见D41页。The page D41 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATE03C	
内冷斜削柄麻花钻 Inclined plane shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	斜削柄 d2 Inclined plane shank
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels. Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATE03C-D5	5.00	M6	6.00	66	28	20	36		M	
DG-ATE03C-D5.1	5.10		6.00	66	28	20	36		M	
DG-ATE03C-D5.2	5.20		6.00	66	28	20	36		M	
DG-ATE03C-D5.5	5.50		6.00	66	28	20	36		M	
DG-ATE03C-D5.55	5.55		6.00	66	28	20	36		M	
DG-ATE03C-D5.8	5.80		6.00	66	28	20	36		M	
DG-ATE03C-D6	6.00		6.00	66	28	20	36		M	
DG-ATE03C-D6.1	6.10		8.00	79	34	24	36		M	
DG-ATE03C-D6.2	6.20		8.00	79	34	24	36		M	
DG-ATE03C-D6.3	6.30		8.00	79	34	24	36		M	
DG-ATE03C-D6.5	6.50		8.00	79	34	24	36		M	
DG-ATE03C-D6.6	6.60		8.00	79	34	24	36		M	
DG-ATE03C-D6.75	6.75	M8	8.00	79	34	24	36		M	
DG-ATE03C-D6.9	6.90		8.00	79	34	24	36		M	
DG-ATE03C-D7	7.00	M8 × 1	8.00	79	34	24	36		M	
DG-ATE03C-D7.1	7.10		8.00	79	41	29	36		M	
DG-ATE03C-D7.4	7.40		8.00	79	41	29	36		M	
DG-ATE03C-D7.5	7.50		8.00	79	41	29	36		M	
DG-ATE03C-D7.8	7.80		8.00	79	41	29	36		M	
DG-ATE03C-D8	8.00		8.00	79	41	29	36		M	
DG-ATE03C-D8.1	8.10		10.00	89	47	35	40		M	
DG-ATE03C-D8.4	8.40		10.00	89	47	35	40		M	
DG-ATE03C-D8.5	8.50	M10	10.00	89	47	35	40		M	
DG-ATE03C-D8.6	8.60		10.00	89	47	35	40		M	
DG-ATE03C-D8.7	8.70		10.00	89	47	35	40		M	
DG-ATE03C-D8.8	8.80		10.00	89	47	35	40		M	
DG-ATE03C-D9	9.00	M10 × 1	10.00	89	47	35	40		M	
DG-ATE03C-D9.3	9.30		10.00	89	47	35	40		M	
DG-ATE03C-D9.5	9.50		10.00	89	47	35	40		M	
DG-ATE03C-D9.6	9.60		10.00	89	47	35	40		M	

订货示例: DG-ATE03C-D5-M

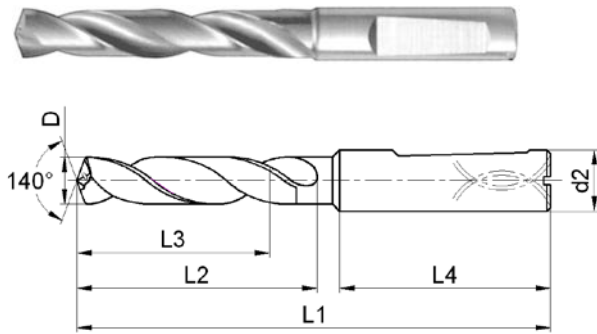
Ordering guide: DG-ATE03C-D5-M

推荐切削用量见D42页。The page D42 for the recommendable cutting date.

●: 表示有库存



# 麻花钻 Twist drill



<b>DG-ATE03C</b>	
内冷斜削柄麻花钻 <i>Inclined plane shank twist drill with inter coolant hole</i>	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	斜削柄 d2 Inclined plane shank
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATE03C-D9.8	9.80		10.00	89	47	35	40		M	
DG-ATE03C-D10	10.00		10.00	89	47	35	40		M	
DG-ATE03C-D10.25	10.25	M12	12.00	102	55	40	45		M	
DG-ATE03C-D10.4	10.40		12.00	102	55	40	45		M	
DG-ATE03C-D10.5	10.50	M12 × 1.5	12.00	102	55	40	45		M	
DG-ATE03C-D10.6	10.60		12.00	102	55	40	45		M	
DG-ATE03C-D10.8	10.80		12.00	102	55	40	45		M	
DG-ATE03C-D11	11.00		12.00	102	55	40	45		M	
DG-ATE03C-D11.2	11.20		12.00	102	55	40	45		M	
DG-ATE03C-D11.5	11.50		12.00	102	55	40	45		M	
DG-ATE03C-D11.8	11.80		12.00	102	55	40	45		M	
DG-ATE03C-D12	12.00	M14	12.00	102	55	40	45		M	
DG-ATE03C-D12.25	12.25		14.00	107	60	43	45		M	
DG-ATE03C-D12.5	12.50	M14 × 1.5	14.00	107	60	43	45		M	
DG-ATE03C-D12.7	12.70		14.00	107	60	43	45		M	
DG-ATE03C-D12.75	12.75		14.00	107	60	43	45		M	
DG-ATE03C-D12.8	12.80		14.00	107	60	43	45		M	
DG-ATE03C-D13	13.00		14.00	107	60	43	45		M	
DG-ATE03C-D13.1	13.10		14.00	107	60	43	45		M	
DG-ATE03C-D13.5	13.50		14.00	107	60	43	45		M	
DG-ATE03C-D13.8	13.80		14.00	107	60	43	45		M	
DG-ATE03C-D14	14.00	M16	14.00	107	60	43	45		M	
DG-ATE03C-D14.25	14.25		16.00	115	65	45	48		M	
DG-ATE03C-D14.5	14.50	M16 × 1.5	16.00	115	65	45	48		M	
DG-ATE03C-D14.75	14.75		16.00	115	65	45	48		M	
DG-ATE03C-D14.8	14.80		16.00	115	65	45	48		M	
DG-ATE03C-D15	15.00		16.00	115	65	45	48		M	
DG-ATE03C-D15.1	15.10		16.00	115	65	45	48		M	
DG-ATE03C-D15.5	15.50		16.00	115	65	45	48		M	
DG-ATE03C-D15.8	15.80		16.00	115	65	45	48		M	

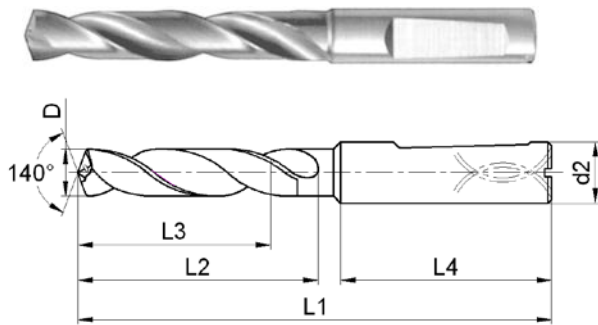
订货示例: DG-ATE03C-D10-M

Ordering guide: DG-ATE03C-D10-M

推荐切削用量见D42页。The page D42 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATE03C	
内冷斜削柄麻花钻	
Inclined plane shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	斜削柄 d2 Inclined plane shank
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels. Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	
DG-ATE03C-D16	16.00		16.00	115	65	45	48		M	
DG-ATE03C-D16.5	16.50		18.00	123	73	51	48		M	
DG-ATE03C-D16.75	16.75		18.00	123	73	51	48		M	
DG-ATE03C-D16.8	16.80		18.00	123	73	51	48		M	
DG-ATE03C-D17	17.00		18.00	123	73	51	48		M	
DG-ATE03C-D17.5	17.50		18.00	123	73	51	48		M	
DG-ATE03C-D17.8	17.80		18.00	123	73	51	48		M	
DG-ATE03C-D18	18.00		18.00	123	73	51	48		M	
DG-ATE03C-D18.5	18.50		20.00	131	79	55	50		M	
DG-ATE03C-D18.8	18.80		20.00	131	79	55	50		M	
DG-ATE03C-D19	19.00		20.00	131	79	55	50		M	
DG-ATE03C-D19.5	19.50		20.00	131	79	55	50		M	
DG-ATE03C-D19.8	19.80		20.00	131	79	55	50		M	
DG-ATE03C-D20	20.00		20.00	131	79	55	50		M	

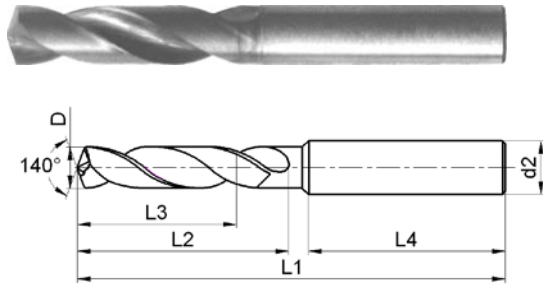
订货示例: DG-ATE03C-D20-M

Ordering guide: DG-ATE03C-D20-M

推荐切削用量见D42页。The page D42 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DG-ATA05	
直柄麻花钻 Straight shank twist drill	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels. Castiron, superalloys. Non-ferrous materials.



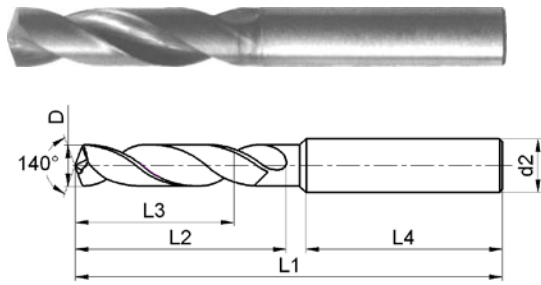
型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA05-D3	3.00		6.00	66	28	23	36		M	
DG-ATA05-D3.25	3.25		6.00	66	28	23	36		M	
DG-ATA05-D3.3	3.30	M4	6.00	66	28	23	36		M	
DG-ATA05-D3.4	3.40		6.00	66	28	23	36		M	
DG-ATA05-D3.5	3.50		6.00	66	28	23	36		M	
DG-ATA05-D3.7	3.70		6.00	66	28	23	36		M	
DG-ATA05-D4	4.00		6.00	74	36	29	36		M	
DG-ATA05-D4.2	4.20	M5	6.00	74	36	29	36		M	
DG-ATA05-D4.3	4.30		6.00	74	36	29	36		M	
DG-ATA05-D4.5	4.50		6.00	74	36	29	36		M	
DG-ATA05-D4.65	4.65		6.00	74	36	29	36		M	
DG-ATA05-D4.8	4.80		6.00	82	44	35	36		M	
DG-ATA05-D5	5.00	M6	6.00	82	44	35	36		M	
DG-ATA05-D5.1	5.10		6.00	82	44	35	36		M	
DG-ATA05-D5.2	5.20		6.00	82	44	35	36		M	
DG-ATA05-D5.5	5.50		6.00	82	44	35	36		M	
DG-ATA05-D5.55	5.55		6.00	82	44	35	36		M	
DG-ATA05-D5.8	5.80		6.00	82	44	35	36		M	
DG-ATA05-D6	6.00		6.00	82	44	35	36		M	
DG-ATA05-D6.1	6.10		8.00	91	53	43	36		M	
DG-ATA05-D6.2	6.20		8.00	91	53	43	36		M	
DG-ATA05-D6.3	6.30		8.00	91	53	43	36		M	
DG-ATA05-D6.5	6.50		8.00	91	53	43	36		M	
DG-ATA05-D6.6	6.60		8.00	91	53	43	36		M	
DG-ATA05-D6.75	6.75	M8	8.00	91	53	43	36		M	
DG-ATA05-D6.9	6.90		8.00	91	53	43	36		M	
DG-ATA05-D7	7.00	M8 × 1	8.00	91	53	43	36		M	
DG-ATA05-D7.1	7.10		8.00	91	53	43	36		M	
DG-ATA05-D7.4	7.40		8.00	91	53	43	36		M	
DG-ATA05-D7.5	7.50		8.00	91	53	43	36		M	

订货示例: DG-ATA05-D3-M  
Ordering guide: DG-ATA05-D3-M

推荐切削用量见D43页。The page D43 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATA05

直柄麻花钻  
Straight shank twist drill

钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels. Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	
DG-ATA05-D7.8	7.80		8.00	91	53	43	36		M	
DG-ATA05-D8	8.00		8.00	91	53	43	36		M	
DG-ATA05-D8.1	8.10		10.00	103	61	49	40		M	
DG-ATA05-D8.4	8.40		10.00	103	61	49	40		M	
DG-ATA05-D8.5	8.50	M10	10.00	103	61	49	40		M	
DG-ATA05-D8.6	8.60		10.00	103	61	49	40		M	
DG-ATA05-D8.7	8.70		10.00	103	61	49	40		M	
DG-ATA05-D8.8	8.80		10.00	103	61	49	40		M	
DG-ATA05-D9	9.00	M10 × 1	10.00	103	61	49	40		M	
DG-ATA05-D9.3	9.30		10.00	103	61	49	40		M	
DG-ATA05-D9.5	9.50		10.00	103	61	49	40		M	
DG-ATA05-D9.6	9.60		10.00	103	61	49	40		M	
DG-ATA05-D9.8	9.80		10.00	103	61	49	40		M	
DG-ATA05-D10	10.00		10.00	103	61	49	40		M	
DG-ATA05-D10.25	10.25	M12	12.00	118	71	56	45		M	
DG-ATA05-D10.4	10.40		12.00	118	71	56	45		M	
DG-ATA05-D10.5	10.50	M12 × 1.5	12.00	118	71	56	45		M	
DG-ATA05-D10.6	10.60		12.00	118	71	56	45		M	
DG-ATA05-D10.8	10.80		12.00	118	71	56	45		M	
DG-ATA05-D11	11.00		12.00	118	71	56	45		M	
DG-ATA05-D11.2	11.20		12.00	118	71	56	45		M	
DG-ATA05-D11.5	11.50		12.00	118	71	56	45		M	
DG-ATA05-D11.8	11.80		12.00	118	71	56	45		M	
DG-ATA05-D12	12.00	M14	12.00	118	71	56	45		M	
DG-ATA05-D12.2	12.20		14.00	124	77	60	45		M	
DG-ATA05-D12.25	12.25		14.00	124	77	60	45		M	
DG-ATA05-D12.5	12.50	M14 × 1.5	14.00	124	77	60	45		M	
DG-ATA05-D12.7	12.70		14.00	124	77	60	45		M	
DG-ATA05-D12.75	12.75		14.00	124	77	60	45		M	
DG-ATA05-D12.8	12.80		14.00	124	77	60	45		M	

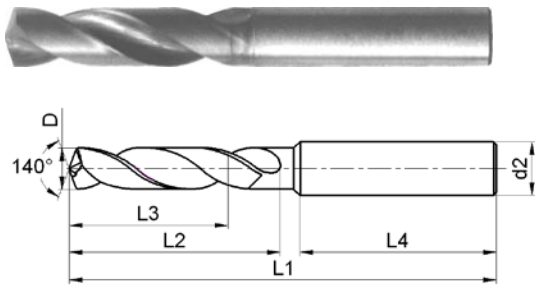
订货示例: DG-ATA05-D10-M

Ordering guide: DG-ATA05-D10-M

推荐切削用量见D43页。The page D43 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DG-ATA05	
直柄麻花钻 Straight shank twist drill	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	
DG-ATA05-D13	13.00		14.00	124	77	60	45		M	
DG-ATA05-D13.5	13.50		14.00	124	77	60	45		M	
DG-ATA05-D13.8	13.80		14.00	124	77	60	45		M	
DG-ATA05-D14	14.00	M16	14.00	124	77	60	45		M	
DG-ATA05-D14.25	14.25		16.00	133	83	63	48		M	
DG-ATA05-D14.5	14.50	M16 × 1.5	16.00	133	83	63	48		M	
DG-ATA05-D14.75	14.75		16.00	133	83	63	48		M	
DG-ATA05-D14.8	14.80		16.00	133	83	63	48		M	
DG-ATA05-D15	15.00		16.00	133	83	63	48		M	
DG-ATA05-D15.1	15.10		16.00	133	83	63	48		M	
DG-ATA05-D15.5	15.50		16.00	133	83	63	48		M	
DG-ATA05-D15.8	15.80		16.00	133	83	63	48		M	
DG-ATA05-D16	16.00		16.00	133	83	63	48		M	
DG-ATA05-D16.5	16.50		18.00	143	93	71	48		M	
DG-ATA05-D16.75	16.75		18.00	143	93	71	48		M	
DG-ATA05-D16.8	16.80		18.00	143	93	71	48		M	
DG-ATA05-D17	17.00		18.00	143	93	71	48		M	
DG-ATA05-D17.5	17.50		18.00	143	93	71	48		M	
DG-ATA05-D17.8	17.80		18.00	143	93	71	48		M	
DG-ATA05-D18	18.00		18.00	143	93	71	48		M	
DG-ATA05-D18.5	18.50		20.00	153	101	77	50		M	
DG-ATA05-D19	19.00		20.00	153	101	77	50		M	
DG-ATA05-D19.5	19.50		20.00	153	101	77	50		M	
DG-ATA05-D19.8	19.80		20.00	153	101	77	50		M	
DG-ATA05-D20	20.00		20.00	153	101	77	50		M	

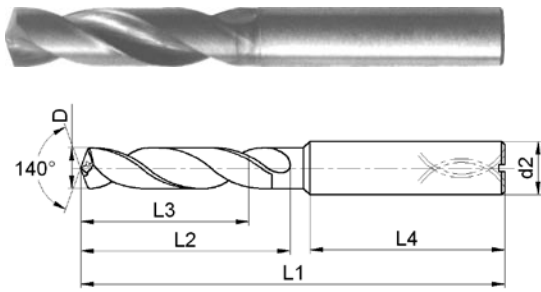
订货示例: DG-ATA05-D20-M

Ordering guide: DG-ATA05-D20-M

推荐切削用量见D43页。The page D43 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATA05C	
内冷直柄麻花钻	
Straight shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA05C-D5	5.00	M6	6.00	82	44	35	36		M	
DG-ATA05C-D5.1	5.10		6.00	82	44	35	36		M	
DG-ATA05C-D5.2	5.20		6.00	82	44	35	36		M	
DG-ATA05C-D5.5	5.50		6.00	82	44	35	36		M	
DG-ATA05C-D5.55	5.55		6.00	82	44	35	36		M	
DG-ATA05C-D5.8	5.80		6.00	82	44	35	36		M	
DG-ATA05C-D6	6.00		6.00	82	44	35	36		M	
DG-ATA05C-D6.1	6.10		8.00	91	53	43	36		M	
DG-ATA05C-D6.2	6.20		8.00	91	53	43	36		M	
DG-ATA05C-D6.3	6.30		8.00	91	53	43	36		M	
DG-ATA05C-D6.5	6.50		8.00	91	53	43	36		M	
DG-ATA05C-D6.6	6.60		8.00	91	53	43	36		M	
DG-ATA05C-D6.75	6.75	M8	8.00	91	53	43	36		M	
DG-ATA05C-D6.9	6.90		8.00	91	53	43	36		M	
DG-ATA05C-D7	7.00	M8 × 1	8.00	91	53	43	36		M	
DG-ATA05C-D7.1	7.10		8.00	91	53	43	36		M	
DG-ATA05C-D7.4	7.40		8.00	91	53	43	36		M	
DG-ATA05C-D7.5	7.50		8.00	91	53	43	36		M	
DG-ATA05C-D7.8	7.80		8.00	91	53	43	36		M	
DG-ATA05C-D8	8.00		8.00	91	53	43	36		M	
DG-ATA05C-D8.1	8.10		10.00	103	61	49	40		M	
DG-ATA05C-D8.4	8.40		10.00	103	61	49	40		M	
DG-ATA05C-D8.5	8.50	M10	10.00	103	61	49	40		M	
DG-ATA05C-D8.6	8.60		10.00	103	61	49	40		M	
DG-ATA05C-D8.7	8.70		10.00	103	61	49	40		M	
DG-ATA05C-D8.8	8.80		10.00	103	61	49	40		M	
DG-ATA05C-D9	9.00	M10 × 1	10.00	103	61	49	40		M	
DG-ATA05C-D9.3	9.30		10.00	103	61	49	40		M	
DG-ATA05C-D9.5	9.50		10.00	103	61	49	40		M	
DG-ATA05C-D9.6	9.60		10.00	103	61	49	40		M	

订货示例: DG-ATA05C-D5-M

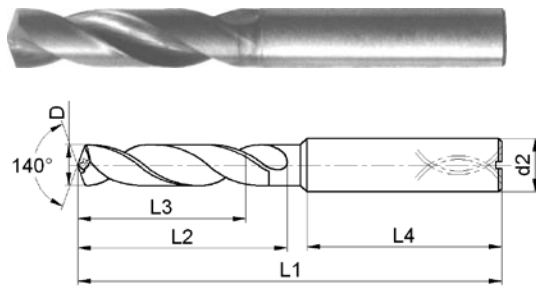
Ordering guide: DG-ATA05C-D5-M

推荐切削用量见D44页。The page D44 for the recommendable cutting date.

●: 表示有库存



# 麻花钻 Twist drill



<b>DG-ATA05C</b>	
内冷直柄麻花钻	
<i>Straight shank twist drill with inter coolant hole</i>	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适用场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



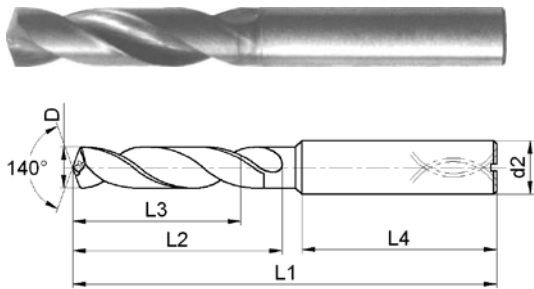
型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATA05C-D9.8	9.80		10.00	103	61	49	40		M	
DG-ATA05C-D10	10.00		10.00	103	61	49	40		M	
DG-ATA05C-D10.25	10.25	M12	12.00	118	71	56	45		M	
DG-ATA05C-D10.4	10.40		12.00	118	71	56	45		M	
DG-ATA05C-D10.5	10.50	M12 × 1.5	12.00	118	71	56	45		M	
DG-ATA05C-D10.6	10.60		12.00	118	71	56	45		M	
DG-ATA05C-D10.8	10.80		12.00	118	71	56	45		M	
DG-ATA05C-D11	11.00		12.00	118	71	56	45		M	
DG-ATA05C-D11.2	11.20		12.00	118	71	56	45		M	
DG-ATA05C-D11.5	11.50		12.00	118	71	56	45		M	
DG-ATA05C-D11.8	11.80		12.00	118	71	56	45		M	
DG-ATA05C-D12	12.00	M14	12.00	118	71	56	45		M	
DG-ATA05C-D12.2	12.20		14.00	124	77	60	45		M	
DG-ATA05C-D12.25	12.25		14.00	124	77	60	45		M	
DG-ATA05C-D12.5	12.50	M14 × 1.5	14.00	124	77	60	45		M	
DG-ATA05C-D12.7	12.70		14.00	124	77	60	45		M	
DG-ATA05C-D12.75	12.75		14.00	124	77	60	45		M	
DG-ATA05C-D12.8	12.80		14.00	124	77	60	45		M	
DG-ATA05C-D13	13.00		14.00	124	77	60	45		M	
DG-ATA05C-D13.5	13.50		14.00	124	77	60	45		M	
DG-ATA05C-D13.8	13.80		14.00	124	77	60	45		M	
DG-ATA05C-D14	14.00	M16	14.00	124	77	60	45		M	
DG-ATA05C-D14.25	14.25		16.00	133	83	63	48		M	
DG-ATA05C-D14.5	14.50	M16 × 1.5	16.00	133	83	63	48		M	
DG-ATA05C-D14.75	14.75		16.00	133	83	63	48		M	
DG-ATA05C-D14.8	14.80		16.00	133	83	63	48		M	
DG-ATA05C-D15	15.00		16.00	133	83	63	48		M	
DG-ATA05C-D15.1	15.10		16.00	133	83	63	48		M	
DG-ATA05C-D15.5	15.50		16.00	133	83	63	48		M	
DG-ATA05C-D15.8	15.80		16.00	133	83	63	48		M	

订货示例: DG-ATA05C-D10-M

Ordering guide: DG-ATA05C-D10-M

推荐切削用量见D44页。The page D44 for the recommendable cutting date.

●: 表示有库存



<b>DG-ATA05C</b>	
<b>内冷直柄麻花钻</b>	
<b>Straight shank twist drill with inter coolant hole</b>	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels. Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	
DG-ATA05C-D16	16.00		16.00	133	83	63	48		M	
DG-ATA05C-D16.5	16.50		18.00	143	93	71	48		M	
DG-ATA05C-D16.75	16.75		18.00	143	93	71	48		M	
DG-ATA05C-D16.8	16.80		18.00	143	93	71	48		M	
DG-ATA05C-D17	17.00		18.00	143	93	71	48		M	
DG-ATA05C-D17.5	17.50		18.00	143	93	71	48		M	
DG-ATA05C-D17.8	17.80		18.00	143	93	71	48		M	
DG-ATA05C-D18	18.00		18.00	143	93	71	48		M	
DG-ATA05C-D18.5	18.50		20.00	153	101	77	50		M	
DG-ATA05C-D19	19.00		20.00	153	101	77	50		M	
DG-ATA05C-D19.5	19.50		20.00	153	101	77	50		M	
DG-ATA05C-D19.8	19.80		20.00	153	101	77	50		M	
DG-ATA05C-D20	20.00		20.00	153	101	77	50		M	

订货示例: DG-ATA05C-D20-M

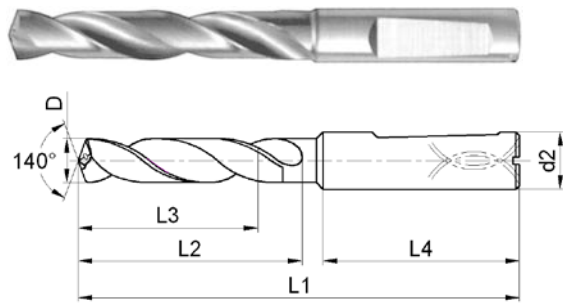
Ordering guide: DG-ATA05C-D20-M

推荐切削用量见D44页。The page D44 for the recommendable cutting date.

●: 表示有库存



# 麻花钻 Twist drill



DG-ATE05C	
内冷斜削柄麻花钻 Inclined plane shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	库存 Stock
DG-ATE05C-D5	5.00	M6	6.00	82	44	35	36		M	
DG-ATE05C-D5.1	5.10		6.00	82	44	35	36		M	
DG-ATE05C-D5.2	5.20		6.00	82	44	35	36		M	
DG-ATE05C-D5.5	5.50		6.00	82	44	35	36		M	
DG-ATE05C-D5.55	5.55		6.00	82	44	35	36		M	
DG-ATE05C-D5.8	5.80		6.00	82	44	35	36		M	
DG-ATE05C-D6	6.00		6.00	82	44	35	36		M	
DG-ATE05C-D6.1	6.10		8.00	91	53	43	36		M	
DG-ATE05C-D6.2	6.20		8.00	91	53	43	36		M	
DG-ATE05C-D6.3	6.30		8.00	91	53	43	36		M	
DG-ATE05C-D6.5	6.50		8.00	91	53	43	36		M	
DG-ATE05C-D6.6	6.60		8.00	91	53	43	36		M	
DG-ATE05C-D6.75	6.75	M8	8.00	91	53	43	36		M	
DG-ATE05C-D6.9	6.90		8.00	91	53	43	36		M	
DG-ATE05C-D7	7.00	M8 × 1	8.00	91	53	43	36		M	
DG-ATE05C-D7.1	7.10		8.00	91	53	43	36		M	
DG-ATE05C-D7.4	7.40		8.00	91	53	43	36		M	
DG-ATE05C-D7.5	7.50		8.00	91	53	43	36		M	
DG-ATE05C-D7.8	7.80		8.00	91	53	43	36		M	
DG-ATE05C-D8	8.00		8.00	91	53	43	36		M	
DG-ATE05C-D8.1	8.10		10.00	103	61	49	40		M	
DG-ATE05C-D8.4	8.40		10.00	103	61	49	40		M	
DG-ATE05C-D8.5	8.50	M10	10.00	103	61	49	40		M	
DG-ATE05C-D8.6	8.60		10.00	103	61	49	40		M	
DG-ATE05C-D8.7	8.70		10.00	103	61	49	40		M	
DG-ATE05C-D8.8	8.80		10.00	103	61	49	40		M	
DG-ATE05C-D9	9.00	M10 × 1	10.00	103	61	49	40		M	
DG-ATE05C-D9.3	9.30		10.00	103	61	49	40		M	
DG-ATE05C-D9.5	9.50		10.00	103	61	49	40		M	
DG-ATE05C-D9.6	9.60		10.00	103	61	49	40		M	

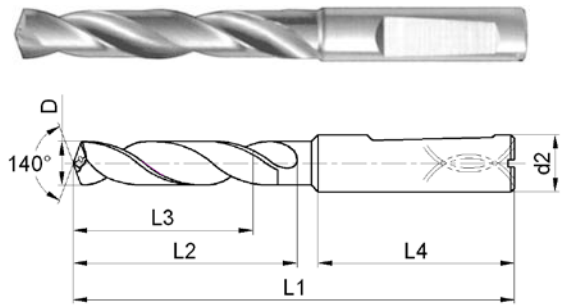
订货示例: DG-ATE05C-D5-M

Ordering guide: DG-ATE05C-D5-M

推荐切削用量见D45页。The page D45 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATE05C	
内冷斜削柄麻花钻 Inclined plane shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels, Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	
DG-ATE05C-D9.8	9.80		10.00	103	61	49	40		M	
DG-ATE05C-D10	10.00		10.00	103	61	49	40		M	
DG-ATE05C-D10.25	10.25	M12	12.00	118	71	56	45		M	
DG-ATE05C-D10.4	10.40		12.00	118	71	56	45		M	
DG-ATE05C-D10.5	10.50	M12 × 1.5	12.00	118	71	56	45		M	
DG-ATE05C-D10.6	10.60		12.00	118	71	56	45		M	
DG-ATE05C-D10.8	10.80		12.00	118	71	56	45		M	
DG-ATE05C-D11	11.00		12.00	118	71	56	45		M	
DG-ATE05C-D11.2	11.20		12.00	118	71	56	45		M	
DG-ATE05C-D11.5	11.50		12.00	118	71	56	45		M	
DG-ATE05C-D11.8	11.80		12.00	118	71	56	45		M	
DG-ATE05C-D12	12.00	M14	12.00	118	71	56	45		M	
DG-ATE05C-D12.2	12.20		14.00	124	77	60	45		M	
DG-ATE05C-D12.25	12.25		14.00	124	77	60	45		M	
DG-ATE05C-D12.5	12.50	M14 × 1.5	14.00	124	77	60	45		M	
DG-ATE05C-D12.7	12.70		14.00	124	77	60	45		M	
DG-ATE05C-D12.75	12.75		14.00	124	77	60	45		M	
DG-ATE05C-D12.8	12.80		14.00	124	77	60	45		M	
DG-ATE05C-D13	13.00		14.00	124	77	60	45		M	
DG-ATE05C-D13.5	13.50		14.00	124	77	60	45		M	
DG-ATE05C-D13.8	13.80		14.00	124	77	60	45		M	
DG-ATE05C-D14	14.00	M16	14.00	124	77	60	45		M	
DG-ATE05C-D14.25	14.25		16.00	133	83	63	48		M	
DG-ATE05C-D14.5	14.50	M16 × 1.5	16.00	133	83	63	48		M	
DG-ATE05C-D14.75	14.75		16.00	133	83	63	48		M	
DG-ATE05C-D14.8	14.80		16.00	133	83	63	48		M	
DG-ATE05C-D15	15.00		16.00	133	83	63	48		M	
DG-ATE05C-D15.1	15.10		16.00	133	83	63	48		M	
DG-ATE05C-D15.5	15.50		16.00	133	83	63	48		M	
DG-ATE05C-D15.8	15.80		16.00	133	83	63	48		M	

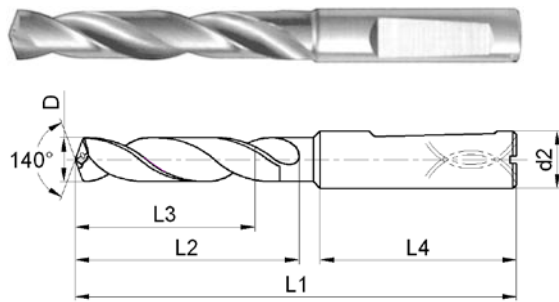
订货示例: DG-ATE05C-D10-M

Ordering guide: DG-ATE05C-D10-M

推荐切削用量见D45页。The page D45 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill



DG-ATE05C	
内冷斜削柄麻花钻	
Inclined plane shank twist drill with inter coolant hole	
钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于钢、不锈钢、铸铁、高温合金、有色金属。 Suitable for drilling steels, Stainless steels. Castiron, superalloys. Non-ferrous materials.



型号 Type	规格尺寸 Dimension							涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	L4	未涂层 Non-Coating	牌号 Grade	
DG-ATE05C-D16	16.00		16.00	133	83	63	48		M	
DG-ATE05C-D16.5	16.50		18.00	143	93	71	48		M	
DG-ATE05C-D16.75	16.75		18.00	143	93	71	48		M	
DG-ATE05C-D16.8	16.80		18.00	143	93	71	48		M	
DG-ATE05C-D17	17.00		18.00	143	93	71	48		M	
DG-ATE05C-D17.5	17.50		18.00	143	93	71	48		M	
DG-ATE05C-D17.8	17.80		18.00	143	93	71	48		M	
DG-ATE05C-D18	18.00		18.00	143	93	71	48		M	
DG-ATE05C-D18.5	18.50		20.00	153	101	77	50		M	
DG-ATE05C-D19	19.00		20.00	153	101	77	50		M	
DG-ATE05C-D19.5	19.50		20.00	153	101	77	50		M	
DG-ATE05C-D19.8	19.80		20.00	153	101	77	50		M	
DG-ATE05C-D20	20.00		20.00	153	101	77	50		M	
									M	

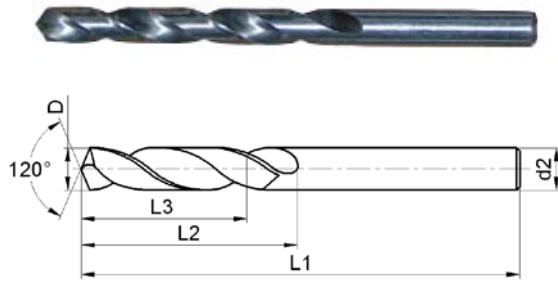
订货示例: DG-ATE05C-D20-M

Ordering guide: DG-ATE05C-D20-M

推荐切削用量见D45页。The page D45 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill

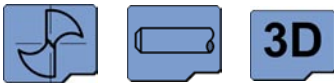


DK-NTD03

普通麻花钻

General twist drill

钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外冷 Outer coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁, 铝合金钻孔 Suitable for drilling cast iron and Non-ferrous materials.



型号 Type	规格尺寸 Dimension					涂层Coating		库存 Stock
	D (h8)	d2(h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	
DK-NTD03-D2	2.00	2.00	38	12	9	○		●
DK-NTD03-D2.5	2.50	2.50	43	14	11	○		●
DK-NTD03-D2.8	2.80	2.80	46	16	12	○		●
DK-NTD03-D3	3.00	3.00	46	16	12	○		●
DK-NTD03-D3.1	3.10	3.10	49	18	14	○		●
DK-NTD03-D3.2	3.20	3.20	49	18	14	○		●
DK-NTD03-D3.3	3.30	3.30	49	18	14	○		●
DK-NTD03-D3.4	3.40	3.40	52	20	15	○		●
DK-NTD03-D3.5	3.50	3.50	52	20	15	○		●
DK-NTD03-D3.6	3.60	3.60	52	20	15	○		●
DK-NTD03-D3.7	3.70	3.70	52	20	15	○		●
DK-NTD03-D3.8	3.80	3.80	55	22	17	○		●
DK-NTD03-D3.9	3.90	3.90	55	22	17	○		●
DK-NTD03-D4	4.00	4.00	55	22	17	○		●
DK-NTD03-D4.1	4.10	4.10	55	22	17	○		●
DK-NTD03-D4.2	4.20	4.20	55	22	17	○		●
DK-NTD03-D4.3	4.30	4.30	58	24	18	○		●
DK-NTD03-D4.4	4.40	4.40	58	24	18	○		●
DK-NTD03-D4.5	4.50	4.50	58	24	18	○		●
DK-NTD03-D4.6	4.60	4.60	58	24	18	○		●
DK-NTD03-D4.7	4.70	4.70	58	24	18	○		●
DK-NTD03-D4.8	4.80	4.80	62	26	20	○		●
DK-NTD03-D4.9	4.90	4.90	62	26	20	○		●
DK-NTD03-D5	5.00	5.00	62	26	20	○		●
DK-NTD03-D5.1	5.10	5.10	62	26	20	○		●
DK-NTD03-D5.2	5.20	5.20	62	26	20	○		●
DK-NTD03-D5.3	5.30	5.30	62	26	20	○		●
DK-NTD03-D5.4	5.40	5.40	66	28	21	○		●
DK-NTD03-D5.5	5.50	5.50	66	28	21	○		●
DK-NTD03-D5.6	5.60	5.60	66	28	21	○		●

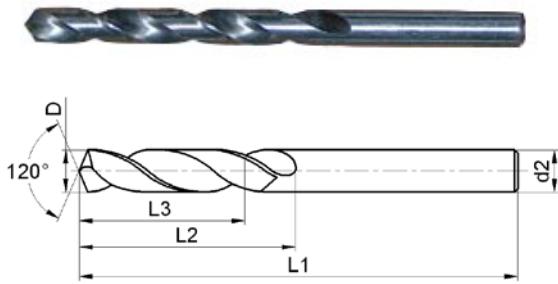
订货示例: DK-NTD03-D5

Ordering guide: DK-NTD03-D5

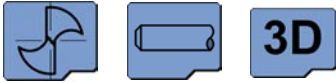
推荐切削用量见D46页。The page D46 for the recommendable cutting date.

●: 表示有库存

# 麻花钻 Twist drill



DK-NTD03	
普通麻花钻	
General twist drill	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外冷 Outer coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁, 铝合金钻孔 Suitable for drilling cast iron and Non-ferrous materials.



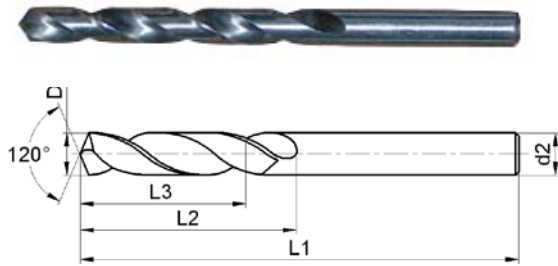
型号 Type	规格尺寸 Dimension					涂层Coating		库存 Stock
	D (h8)	d2 (h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	
DK-NTD03-D5.7	5.70	5.70	66	28	21	○		●
DK-NTD03-D5.8	5.80	5.80	66	28	21	○		●
DK-NTD03-D5.9	5.90	5.90	66	28	21	○		●
DK-NTD03-D6	6.00	6.00	66	28	21	○		●
DK-NTD03-D6.1	6.10	6.10	70	31	23	○		●
DK-NTD03-D6.2	6.20	6.20	70	31	23	○		●
DK-NTD03-D6.3	6.30	6.30	70	31	23	○		●
DK-NTD03-D6.4	6.40	6.40	70	31	23	○		●
DK-NTD03-D6.5	6.50	6.50	70	31	23	○		●
DK-NTD03-D6.6	6.60	6.60	70	31	23	○		●
DK-NTD03-D6.7	6.70	6.70	70	31	23	○		●
DK-NTD03-D6.8	6.80	6.80	74	34	25	○		●
DK-NTD03-D6.9	6.90	6.90	74	34	25	○		●
DK-NTD03-D7	7.00	7.00	74	34	25	○		●
DK-NTD03-D7.1	7.10	7.10	74	34	25	○		●
DK-NTD03-D7.2	7.20	7.20	74	34	25	○		●
DK-NTD03-D7.3	7.30	7.30	74	34	25	○		●
DK-NTD03-D7.4	7.40	7.40	74	34	25	○		●
DK-NTD03-D7.5	7.50	7.50	74	34	25	○		●
DK-NTD03-D7.6	7.60	7.60	79	37	27	○		●
DK-NTD03-D7.7	7.70	7.70	79	37	27	○		●
DK-NTD03-D7.8	7.80	7.80	79	37	27	○		●
DK-NTD03-D7.9	7.90	7.90	79	37	27	○		●
DK-NTD03-D8	8.00	8.00	79	37	27	○		●
DK-NTD03-D8.1	8.10	8.10	79	37	27	○		●
DK-NTD03-D8.2	8.20	8.20	79	37	27	○		●
DK-NTD03-D8.3	8.30	8.30	79	37	27	○		●
DK-NTD03-D8.4	8.40	8.40	79	37	27	○		●
DK-NTD03-D8.5	8.50	8.50	79	37	27	○		●
DK-NTD03-D8.6	8.60	8.60	84	40	29	○		●

订货示例: DK-NTD03-D8  
Ordering guide: DK-NTD03-D8

推荐切削用量见D46页。The page D46 for the recommendable cutting date.

●: 表示有库存

## 麻花钻 Twist drill

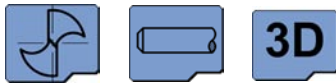


DK-NTD03

普通麻花钻

General twist drill

钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外冷 Outer coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁, 铝合金钻孔 Suitable for drilling cast iron and Non-ferrous materials.



型号 Type	规格尺寸 Dimension					涂层Coating		
	D(h8)	d2(h7)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	库存 Stock
DK-NTD03-D8.7	8.70	8.70	84	40	29	○		●
DK-NTD03-D8.8	8.80	8.80	84	40	29	○		●
DK-NTD03-D9	9.00	9.00	84	40	29	○		●
DK-NTD03-D9.1	9.10	9.10	84	40	29	○		●
DK-NTD03-D9.2	9.20	9.20	84	40	29	○		●
DK-NTD03-D9.3	9.30	9.30	84	40	29	○		●
DK-NTD03-D9.4	9.40	9.40	84	40	29	○		●
DK-NTD03-D9.5	9.50	9.50	84	40	29	○		●
DK-NTD03-D9.6	9.60	9.60	89	43	31	○		●
DK-NTD03-D9.7	9.70	9.70	89	43	31	○		●
DK-NTD03-D9.8	9.80	9.80	89	43	31	○		●
DK-NTD03-D9.9	9.90	9.90	89	43	31	○		●
DK-NTD03-D10	10.00	10.00	89	43	31	○		●
DK-NTD03-D10.1	10.10	10.10	89	43	31	○		●
DK-NTD03-D10.2	10.20	10.20	89	43	31	○		●
DK-NTD03-D10.4	10.40	10.40	89	43	31	○		●
DK-NTD03-D10.5	10.50	10.50	89	43	31	○		●
DK-NTD03-D10.7	10.70	10.70	95	47	33	○		●
DK-NTD03-D10.8	10.80	10.80	95	47	33	○		●
DK-NTD03-D11	11.00	11.00	95	47	33	○		●
DK-NTD03-D11.5	11.50	11.50	95	47	33	○		●
DK-NTD03-D12	12.00	12.00	102	51	35	○		●

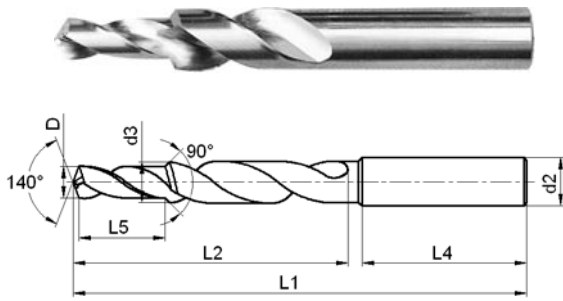
订货示例: DK-NTD03-D12

Ordering guide: DK-NTD03-D12

推荐切削用量见D46页。The page D46 for the recommendable cutting date.

●: 表示有库存

## 阶梯钻 Step drill



DK-BSA03	
螺纹底孔用90° 阶梯钻	
Step drill for screw thread hole with 90° chamfer	
钻孔深度 The depth of drilling	(2-3) × D (2-3)times diameter
冷却方式 Coolant type	外 Outside
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁, 铝合金钻孔 Suitable for drilling cast iron and Non-ferrous materials.



型号 Type	规格尺寸 Dimension								涂层Coating		
	螺纹尺寸 Screw thread dim.	D(m8)	d2(h6)	d3	L1	L2	L4	L5	未涂层 Non-Coating	牌号 Grade	库存 Stock
DK-BSA03-M4	M4	3.30	6.00	4.50	66	28	36.0	11.4	○		
DK-BSA03-M5	M5	4.20	6.00	6.00	66	28	36.0	13.6	○		
DK-BSA03-M6	M6	5.00	8.00	7.00	79	41	36.0	16.5	○		
DK-BSA03-M8	M8	6.75	10.00	9.50	89	47	40.0	21.0	○		
DK-BSA03-M10	M10	8.50	12.00	12.00	102	55	45.0	25.5	○		
DK-BSA03-M12	M12	10.25	14.00	14.00	107	60	45.0	30.0	○		
DK-BSA03-M14	M14	12.00	16.00	16.00	115	65	48.0	34.5	○		
DK-BSA03-M16	M16	14.00	18.00	18.00	123	73	48.0	38.5	○		
DK-BSA03-M8 × 1.0	M8 × 1	7.00	10.00	9.80	89	47	40.0	21.0	○		
DK-BSA03-M10 × 1.0	M10 × 1	9.00	12.00	12.00	102	55	45.0	25.5	○		
DK-BSA03-M12 × 1.5	M12 × 1.5	10.50	14.00	14.00	107	60	45.0	30.0	○		
DK-BSA03-M14 × 1.5	M14 × 1.5	12.50	16.00	16.00	115	65	48.0	34.5	○		
DK-BSA03-M16 × 1.5	M16 × 1.5	14.50	18.00	18.00	123	73	48.0	38.5	○		

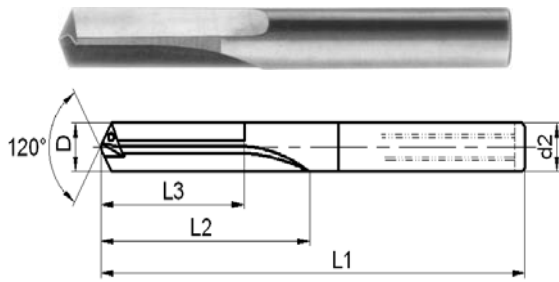
订货示例: DK-BSA03-M6

Ordering guide: DK-BSA03-M6

推荐切削用量见D46页。The page D46 for the recommendable cutting date.

●: 表示有库存

## 直槽钻 Straight fluted drill



### DK-EPA05C

#### 内冷直槽钻

#### Straight fluted drill with inter coolant

钻孔深度 The depth of drilling	(4-5) × D (4-5)times diameter
冷却方式 Coolant type	内冷 Inter coolant
柄部型式 Type of shank	直柄 d2 Straight shank d2
适应场合 Application	适用于铸铁, 铝合金钻孔 Suitable for drilling cast iron and Non-ferrous materials.



型号 Type	规格尺寸 Dimension						涂层Coating		库存 Stock
	D(m7)	螺纹尺寸 Screw thread dim.	d2(h6)	L1	L2	L3	未涂层 Non-Coating	牌号 Grade	
DK-EPA05C-D4	4.00		6.00	74	36	29	○		
DK-EPA05C-D4.2	4.20	M5	6.00	74	36	29	○		
DK-EPA05C-D5	5.00	M6	6.00	82	44	35	○		
DK-EPA05C-D6	6.00		6.00	82	44	35	○		
DK-EPA05C-D6.8	6.80	M8	8.00	91	53	43	○		
DK-EPA05C-D7	7.00	M8 × 1	8.00	91	53	43	○		
DK-EPA05C-D8	8.00		8.00	91	53	43	○		
DK-EPA05C-D8.5	8.50	M10	10.00	103	61	49	○		
DK-EPA05C-D9	9.00	M10 × 1	10.00	103	61	49	○		
DK-EPA05C-D10	10.00		10.00	103	61	49	○		
DK-EPA05C-D10.25	10.25	M12	12.00	118	71	56	○		
DK-EPA05C-D11	11.00		12.00	118	71	56	○		
DK-EPA05C-D12	12.00	M14	12.00	118	71	56	○		
DK-EPA05C-D13	13.00		14.00	124	77	60	○		
DK-EPA05C-D14	14.00	M16	14.00	124	77	60	○		
DK-EPA05C-D15	15.00		16.00	133	83	63	○		
DK-EPA05C-D15.5	15.50		16.00	133	83	63	○		
DK-EPA05C-D16	16.00		16.00	133	83	63	○		
DK-EPA05C-D17	17.00		18.00	143	93	71	○		
DK-EPA05C-D17.5	17.50		18.00	143	93	71	○		
DK-EPA05C-D18	18.00		18.00	143	93	71	○		
DK-EPA05C-D20	20.00		20.00	153	101	77	○		

订货示例: DK-EPA05C-D6 Ordering guide: DK-EPA05C-D6  
推荐切削用量见D46页。The page D46 for the recommendable cutting date.

●: 表示有库存





## 整体硬质合金钻头 Solid carbide drills

DK-NCA90 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc (m/min)	f (mm/rev)		
					D=2~<5	D=5~<12.5	D=12.5~25
K	灰铸铁。 Grey iron.	<200HB	E	90	0.020 × D	0.016 × D	0.013 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	80	0.020 × D	0.016 × D	0.013 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	70	0.020 × D	0.016 × D	0.013 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	60	0.020 × D	0.016 × D	0.013 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	150	0.032 × D	0.025 × D	0.020 × D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	120	0.032 × D	0.025 × D	0.020 × D
N	有色金属,铜合金 Non-ferrous materials. Brass,	<180HB	E	120	0.025 × D	0.020 × D	0.016 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

DK-NCA120 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc (m/min)	f (mm/rev)		
					D=2~<5	D=5~<12.5	D=12.5~25
K	灰铸铁。 Grey iron.	<200HB	E	90	0.020 × D	0.016 × D	0.013 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	80	0.020 × D	0.016 × D	0.013 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	70	0.020 × D	0.016 × D	0.013 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	60	0.020 × D	0.016 × D	0.013 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	150	0.032 × D	0.025 × D	0.020 × D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	120	0.032 × D	0.025 × D	0.020 × D
N	有色金属,铜合金 Non-ferrous materials. Brass,	<180HB	E	120	0.025 × D	0.020 × D	0.016 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

DK-CLA03 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc m/min	f (mm/rev)		
					D=2~<5	D=5~<12.5	D=12.5~25
K	灰铸铁。 Grey iron.	<200HB	E	90	0.032 × D	0.025 × D	0.020 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	75	0.032 × D	0.025 × D	0.020 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	75	0.032 × D	0.025 × D	0.020 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	60	0.032 × D	0.025 × D	0.020 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

## 整体硬质合金钻头 Solid carbide drills

DM-CLA03 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc	f (mm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
M	易切削奥氏体不锈钢 Free-cutting stainless steels. Austenitic stainless steels	<180HB	E	35	0.016×D	0.013×D	0.010×D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	35	0.016×D	0.013×D	0.010×D
M	奥氏体与双相不锈钢 Austenitic and duplex stainless steels.	200-240HB	E	35	0.013×D	0.010×D	0.008×D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	35	0.013×D	0.010×D	0.008×D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	150	0.040×D	0.032×D	0.025×D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	120	0.032×D	0.025×D	0.020×D
N	有色金属,铜合金 Non-ferrous materials. Brass	<180HB	E	180	0.032×D	0.025×D	0.020×D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	<280HB	E	30	0.016×D	0.013×D	0.010×D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	>280HB	E	20	0.013×D	0.010×D	0.008×D
S	钛合金 Titanium alloys	250-300HB	E	25	0.013×D	0.010×D	0.008×D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

DG-PTA05 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	Vc	f (mm/rev)			
			m/min	D=0.5~<1	D=1~<1.5	D=1.5~<2	D=2~<3
P	碳钢 Carbon steels.	125-220HB	20-80	0.007-0.02	0.02-0.04	0.03-0.05	0.04-0.07
P	合金钢 Steels.	170-220HB	20-55	0.007-0.02	0.02-0.04	0.03-0.05	0.04-0.07
P	轴承钢 Axletree steels.	220-280HB	20-36	0.007-0.02	0.03-0.05	0.04-0.06	0.06-0.09
M	易切削奥氏体不锈钢 Free-cutting stainless steels.		20-36	0.007-0.02	0.03-0.05	0.04-0.06	0.06-0.09
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.		20-36	0.007-0.02	0.03-0.05	0.04-0.06	0.06-0.09
K	灰铸铁。 Grey iron.		20-80	0.007-0.02	0.02-0.04	0.03-0.05	0.04-0.07
K	球墨铸铁。 Nodular cast iron.		20-60	0.007-0.02	0.02-0.04	0.03-0.05	0.04-0.07
N	变形铝合金 Aluminium.		32-80	0.015-0.03	0.03-0.08	0.04-0.10	0.06-0.15
N	硅铝合金 Aluminium.		32-63	0.007-0.01	0.01-0.03	0.016-0.04	0.024-0.06
N	有色金属,铜合金 Non-ferrous materials. Brass		20-45	0.007-0.01	0.012-0.03	0.016-0.04	0.024-0.06

- 1 钻头装夹后径向跳动应小于0.003mm;
- 2 使用热膨胀装夹系统更有效;
- 3 请使用水溶性切削油;
- 4 孔深大于3D(D: 钻头直径) 的场合, 请以步进法进给;

## 整体硬质合金钻头 Solid carbide drills

DG-ATA03 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc m/min	f (mm/rev)		
					D=2~<5	D=5~<12.5	D=12.5~25
P	低碳钢 Low-carbon steels.	< 150HB	E	110	0.032 × D	0.025 × D	0.020 × D
P	易切钢 Free-cutting steels.	125-220HB	E	120	0.040 × D	0.032 × D	0.025 × D
P	结构钢, 中碳钢 Structural steels, carbon content	140-170HB	E	105	0.040 × D	0.032 × D	0.025 × D
P	调质钢, 普通低合金钢 Harder steels for toughening. Low-alloy steels.	170-220HB	E	100	0.032 × D	0.025 × D	0.020 × D
P	普通工具钢, 调质钢 General tool steels. Harder steels	220-280HB	E	85	0.025 × D	0.020 × D	0.016 × D
P	难加工工具钢, 高合金钢 Difficult-cutting tool steels. High-alloy steels	280-350HB	E	55	0.025 × D	0.020 × D	0.016 × D
M	易切削奥氏体不锈钢 Free-cutting stainless steels.	< 180HB	E	55	0.020 × D	0.016 × D	0.013 × D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	50	0.020 × D	0.016 × D	0.013 × D
M	奥氏体与双相不锈钢 Stainless steels. Austenitic and duplex stainless steels.	200-240HB	E	45	0.016 × D	0.013 × D	0.010 × D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	40	0.016 × D	0.013 × D	0.010 × D
K	灰铸铁。 Grey iron.	< 200HB	E	155	0.050 × D	0.040 × D	0.032 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	< 300HB	E	135	0.050 × D	0.040 × D	0.032 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 240HB	E	125	0.040 × D	0.032 × D	0.025 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 300HB	E	115	0.040 × D	0.032 × D	0.025 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	< 130HB	E	220	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12的铝合金 Aluminium alloys with > 12% Si.	< 180HB	E	180	0.050 × D	0.040 × D	0.032 × D
N	有色金属, 铜合金 Non-ferrous materials. Brass	< 180HB	E	180	0.040 × D	0.032 × D	0.025 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	< 280HB	E	25	0.020 × D	0.016 × D	0.013 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	> 280HB	E	20	0.020 × D	0.016 × D	0.013 × D
S	钛合金 Titanium alloys	250-300HB	E	35	0.016 × D	0.013 × D	0.010 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

## 整体硬质合金钻头 Solid carbide drills

DG-ATA03C 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	V <sub>c</sub>	f (mm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
P	低碳钢 Low-carbon steels.	< 150HB	E	120	0.032 × D	0.025 × D	0.020 × D
P	易切钢 Free-cutting steels.	125-220HB	E	135	0.050 × D	0.040 × D	0.032 × D
P	结构钢, 中碳钢 Structural steels, carbon content	140-170HB	E	120	0.040 × D	0.032 × D	0.025 × D
P	调质钢, 普通低合金钢 Harder steels for toughening. Low-alloy steels.	170-220HB	E	105	0.040 × D	0.032 × D	0.025 × D
P	普通工具钢, 调质钢 General tool steels. Harder steels	220-280HB	E	90	0.025 × D	0.020 × D	0.016 × D
P	难加工工具钢, 高合金钢 Difficult-cutting tool steels. High-alloy steels	280-350HB	E	65	0.025 × D	0.020 × D	0.016 × D
M	易切削奥氏体不锈钢 Free-cutting stainless steels.	< 180HB	E	60	0.025 × D	0.020 × D	0.016 × D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	55	0.025 × D	0.020 × D	0.016 × D
M	奥氏体与双相不锈钢 Stainless steels. Austenitic and duplex stainless steels.	200-240HB	E	50	0.025 × D	0.020 × D	0.016 × D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	45	0.025 × D	0.020 × D	0.016 × D
K	灰铸铁。 Grey iron.	< 200HB	E	180	0.060 × D	0.050 × D	0.040 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	< 300HB	E	145	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 240HB	E	130	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 300HB	E	120	0.050 × D	0.040 × D	0.032 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	< 130HB	E	260	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12的铝合金 Aluminium alloys with > 12% Si.	< 180HB	E	220	0.050 × D	0.040 × D	0.032 × D
N	有色金属, 铜合金 Non-ferrous materials. Brass	< 180HB	E	220	0.040 × D	0.032 × D	0.025 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	< 280HB	E	35	0.020 × D	0.016 × D	0.013 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	> 280HB	E	30	0.020 × D	0.016 × D	0.013 × D
S	钛合金 Titanium alloys	250-300HB	E	40	0.016 × D	0.013 × D	0.010 × D

E=乳化液    M=喷雾冷却    A=空气冷却    D=钻头刃径  
E= Emulsion    M= Mist spray    A= Air    D= dia. of the drill



## 整体硬质合金钻头 Solid carbide drills

DG-ATE03C推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	V <sub>c</sub>	f (mm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
P	低碳钢 Low-carbon steels.	< 150HB	E	120	0.032 × D	0.025 × D	0.020 × D
P	易切钢 Free-cutting steels.	125-220HB	E	135	0.050 × D	0.040 × D	0.032 × D
P	结构钢, 中碳钢 Structural steels, carbon content	140-170HB	E	120	0.040 × D	0.032 × D	0.025 × D
P	调质钢, 普通低合金钢 Harder steels for toughening. Low-alloy steels.	170-220HB	E	105	0.040 × D	0.032 × D	0.025 × D
P	普通工具钢, 调质钢 General tool steels. Harder steels	220-280HB	E	90	0.025 × D	0.020 × D	0.016 × D
P	难加工工具钢, 高合金钢 Difficult-cutting tool steels. High-alloy steels	280-350HB	E	65	0.025 × D	0.020 × D	0.016 × D
M	易切削奥氏体不锈钢 Free-cutting stainless steels.	< 180HB	E	60	0.025 × D	0.020 × D	0.016 × D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	55	0.025 × D	0.020 × D	0.016 × D
M	奥氏体与双相不锈钢 Stainless steels. Austenitic and duplex stainless steels.	200-240HB	E	50	0.025 × D	0.020 × D	0.016 × D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	45	0.025 × D	0.020 × D	0.016 × D
K	灰铸铁。 Grey iron.	< 200HB	E	180	0.060 × D	0.050 × D	0.040 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	< 300HB	E	145	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 240HB	E	130	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 300HB	E	120	0.050 × D	0.040 × D	0.032 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	< 130HB	E	260	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12的铝合金 Aluminium alloys with > 12% Si.	< 180HB	E	220	0.050 × D	0.040 × D	0.032 × D
N	有色金属, 铜合金 Non-ferrous materials. Brass	< 180HB	E	220	0.040 × D	0.032 × D	0.025 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	< 280HB	E	35	0.020 × D	0.016 × D	0.013 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	> 280HB	E	30	0.020 × D	0.016 × D	0.013 × D
S	钛合金 Titanium alloys	250-300HB	E	40	0.016 × D	0.013 × D	0.010 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

## 整体硬质合金钻头 Solid carbide drills

DG-ATA05 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc m/min	f (mm/rev)		
					D=2~<5	D=5~<12.5	D=12.5~25
P	低碳钢 Low-carbon steels.	< 150HB	E	110	0.032 × D	0.025 × D	0.020 × D
P	易切钢 Free-cutting steels.	125-220HB	E	110	0.040 × D	0.032 × D	0.025 × D
P	结构钢, 中碳钢 Structural steels, carbon content	140-170HB	E	105	0.040 × D	0.032 × D	0.025 × D
P	调质钢, 普通低合金钢 Harder steels for toughening. Low-alloy steels.	170-220HB	E	100	0.032 × D	0.025 × D	0.020 × D
P	普通工具钢, 调质钢 General tool steels. Harder steels	220-280HB	E	85	0.025 × D	0.020 × D	0.016 × D
P	难加工工具钢, 高合金钢 Difficult-cutting tool steels. High-alloy steels	280-350HB	E	55	0.025 × D	0.020 × D	0.016 × D
M	易切削奥氏体不锈钢 Free-cutting stainless steels.	< 180HB	E	55	0.020 × D	0.016 × D	0.013 × D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	50	0.020 × D	0.016 × D	0.013 × D
M	奥氏体与双相不锈钢 Stainless steels. Austenitic and duplex stainless steels.	200-240HB	E	45	0.016 × D	0.013 × D	0.010 × D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	40	0.016 × D	0.013 × D	0.010 × D
K	灰铸铁。 Grey iron.	< 200HB	E	155	0.050 × D	0.040 × D	0.032 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	< 300HB	E	135	0.050 × D	0.040 × D	0.032 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 240HB	E	125	0.040 × D	0.032 × D	0.025 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 300HB	E	115	0.040 × D	0.032 × D	0.025 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	< 130HB	E	220	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12的铝合金 Aluminium alloys with > 12% Si.	< 180HB	E	180	0.050 × D	0.040 × D	0.032 × D
N	有色金属, 铜合金 Non-ferrous materials. Brass	< 180HB	E	180	0.040 × D	0.032 × D	0.025 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	< 280HB	E	25	0.020 × D	0.016 × D	0.013 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	> 280HB	E	20	0.020 × D	0.016 × D	0.013 × D
S	钛合金 Titanium alloys	250-300HB	E	35	0.016 × D	0.013 × D	0.010 × D

E=乳化液    M=喷雾冷却    A=空气冷却    D=钻头刃径  
E= Emulsion    M= Mist spray    A= Air    D= dia. of the drill



## 整体硬质合金钻头 Solid carbide drills

DG-ATA05C 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc m/min	f (mm/rev)		
					D=2~<5	D=5~<12.5	D=12.5~25
P	低碳钢 Low-carbon steels.	<150HB	E	120	0.032 × D	0.025 × D	0.020 × D
P	易切钢 Free-cutting steels.	125-220HB	E	135	0.050 × D	0.040 × D	0.032 × D
P	结构钢, 中碳钢 Structural steels, carbon content	140-170HB	E	120	0.040 × D	0.032 × D	0.025 × D
P	调质钢, 普通低合金钢 Harder steels for toughening. Low-alloy steels.	170-220HB	E	105	0.040 × D	0.032 × D	0.025 × D
P	普通工具钢, 调质钢 General tool steels. Harder steels	220-280HB	E	90	0.025 × D	0.020 × D	0.016 × D
P	难加工工具钢, 高合金钢 Difficult-cutting tool steels. High-alloy steels	280-350HB	E	65	0.025 × D	0.020 × D	0.016 × D
M	易切削奥氏体不锈钢 Free-cutting stainless steels.	<180HB	E	60	0.025 × D	0.020 × D	0.016 × D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	55	0.025 × D	0.020 × D	0.016 × D
M	奥氏体与双相不锈钢 Stainless steels. Austenitic and duplex stainless steels.	200-240HB	E	50	0.025 × D	0.020 × D	0.016 × D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	45	0.025 × D	0.020 × D	0.016 × D
K	灰铸铁。 Grey iron.	<200HB	E	180	0.060 × D	0.050 × D	0.040 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	145	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	130	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	120	0.050 × D	0.040 × D	0.032 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	260	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	220	0.050 × D	0.040 × D	0.032 × D
N	有色金属, 铜合金 Non-ferrous materials. Brass	<180HB	E	220	0.040 × D	0.032 × D	0.025 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	<280HB	E	35	0.020 × D	0.016 × D	0.013 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	>280HB	E	30	0.020 × D	0.016 × D	0.013 × D
S	钛合金 Titanium alloys	250-300HB	E	40	0.016 × D	0.013 × D	0.010 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

## 整体硬质合金钻头 Solid carbide drills

DG-ATE05C推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc	f (mm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
P	低碳钢 Low-carbon steels.	< 150HB	E	120	0.032 × D	0.025 × D	0.020 × D
P	易切钢 Free-cutting steels.	125-220HB	E	135	0.050 × D	0.040 × D	0.032 × D
P	结构钢, 中碳钢 Structural steels, carbon content	140-170HB	E	120	0.040 × D	0.032 × D	0.025 × D
P	调质钢, 普通低合金钢 Harder steels for toughening. Low-alloy steels.	170-220HB	E	105	0.040 × D	0.032 × D	0.025 × D
P	普通工具钢, 调质钢 General tool steels. Harder steels	220-280HB	E	90	0.025 × D	0.020 × D	0.016 × D
P	难加工工具钢, 高合金钢 Difficult-cutting tool steels. High-alloy steels	280-350HB	E	65	0.025 × D	0.020 × D	0.016 × D
M	易切削奥氏体不锈钢 Free-cutting stainless steels.	< 180HB	E	60	0.025 × D	0.020 × D	0.016 × D
M	中等加工难度的不锈钢 Moderately difficult-cutting stainless steels.	180-200HB	E	55	0.025 × D	0.020 × D	0.016 × D
M	奥氏体与双相不锈钢 Stainless steels. Austenitic and duplex stainless steels.	200-240HB	E	50	0.025 × D	0.020 × D	0.016 × D
M	难加工的奥氏体不锈钢 Moderately difficult-cutting stainless steels.	≤250HB	E	45	0.025 × D	0.020 × D	0.016 × D
K	灰铸铁。 Grey iron.	< 200HB	E	180	0.060 × D	0.050 × D	0.040 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	< 300HB	E	145	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 240HB	E	130	0.060 × D	0.050 × D	0.040 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	< 300HB	E	120	0.050 × D	0.040 × D	0.032 × D
N	含Si量 < 12%的铝合金 Aluminium alloys with <12% Si.	< 130HB	E	260	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12%的铝合金 Aluminium alloys with > 12% Si.	< 180HB	E	220	0.050 × D	0.040 × D	0.032 × D
N	有色金属, 铜合金 Non-ferrous materials. Brass	< 180HB	E	220	0.040 × D	0.032 × D	0.025 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	< 280HB	E	35	0.020 × D	0.016 × D	0.013 × D
S	镍基、钴基、铁基高温合金 Nickel-, Cobalt- and Iron-based superalloys	> 280HB	E	30	0.020 × D	0.016 × D	0.013 × D
S	钛合金 Titanium alloys	250-300HB	E	40	0.016 × D	0.013 × D	0.010 × D

E=乳化液    M=喷雾冷却    A=空气冷却    D=钻头刃径  
E= Emulsion    M= Mist spray    A= Air    D= dia. of the drill





## 整体硬质合金钻头 Solid carbide drills

DK-NTD03推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc	fm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
K	灰铸铁。 Grey iron.	<200HB	E	90	0.020 × D	0.016 × D	0.013 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	80	0.020 × D	0.016 × D	0.013 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	80	0.020 × D	0.016 × D	0.013 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	70	0.020 × D	0.016 × D	0.013 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	150	0.032 × D	0.025 × D	0.020 × D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	120	0.032 × D	0.025 × D	0.020 × D
N	有色金属,铜合金 Non-ferrous materials. Brass	<180HB	E	120	0.025 × D	0.020 × D	0.016 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

DK-BSA03推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc	f (mm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
K	灰铸铁。 Grey iron.	<200HB	E	145	0.050 × D	0.040 × D	0.032 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	130	0.050 × D	0.040 × D	0.032 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	120	0.040 × D	0.032 × D	0.025 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	110	0.040 × D	0.032 × D	0.025 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	200	0.060 × D	0.050 × D	0.040 × D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	170	0.050 × D	0.040 × D	0.032 × D
N	有色金属,铜合金 Non-ferrous materials. Brass	<180HB	E	170	0.040 × D	0.032 × D	0.025 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill

DK-EPA05C 推荐切削用量 Recommendable cutting data

ISO	工件材料 Workpiece material	硬度 Hardness	冷却 Coolant	Vc	f (mm/rev)		
				m/min	D=2~<5	D=5~<12.5	D=12.5~25
K	灰铸铁。Grey iron.	<200HB	E	120	0.032 × D	0.025 × D	0.020 × D
K	中等硬度铸铁。灰铸铁。 Medium hard cast iron. Grey iron.	<300HB	E	100	0.032 × D	0.025 × D	0.020 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<240HB	E	90	0.032 × D	0.025 × D	0.020 × D
K	可锻铸铁。球墨铸铁。 Smithing cast iron. Nodular cast iron.	<300HB	E	80	0.032 × D	0.025 × D	0.020 × D
N	含Si量 < 12的铝合金 Aluminium alloys with <12% Si.	<130HB	E	380	0.050 × D	0.040 × D	0.032 × D
N	含Si量 > 12的铝合金 Aluminium alloys with >12% Si.	<180HB	E	330	0.050 × D	0.040 × D	0.032 × D
N	有色金属,铜合金 Non-ferrous materials. Brass	<180HB	E	170	0.032 × D	0.025 × D	0.020 × D

E=乳化液 M=喷雾冷却 A=空气冷却 D=钻头刃径  
E= Emulsion M= Mist spray A= Air D= dia. of the drill