

X5070 BLUE

NANO GRAIN
CARBIDE END MILLS

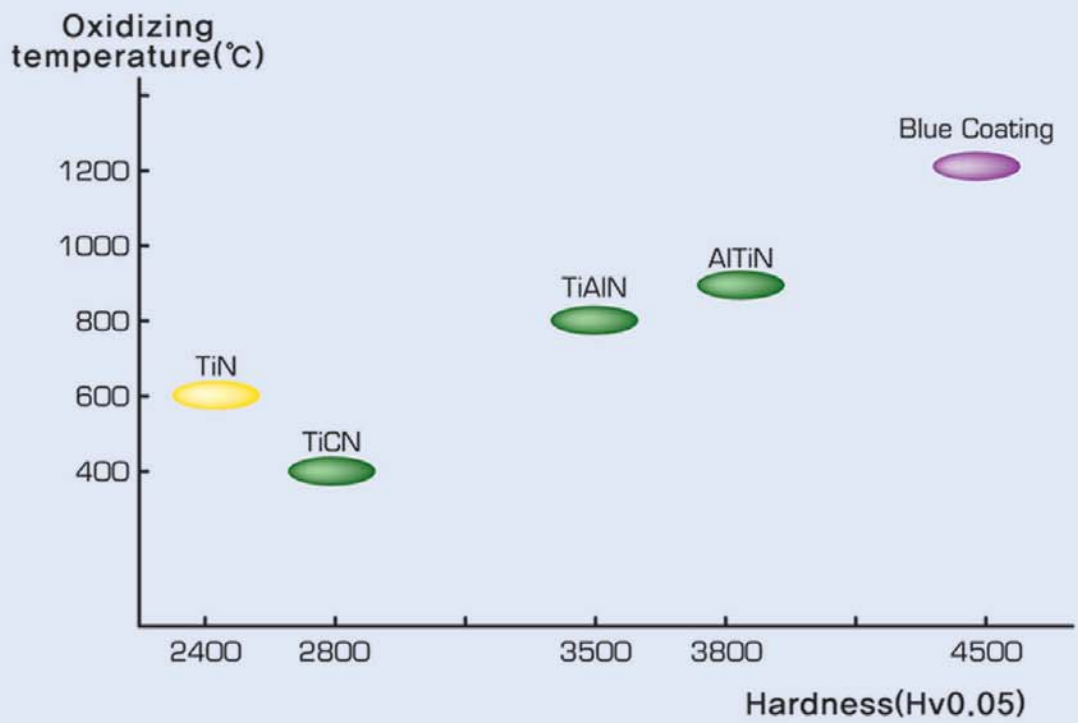
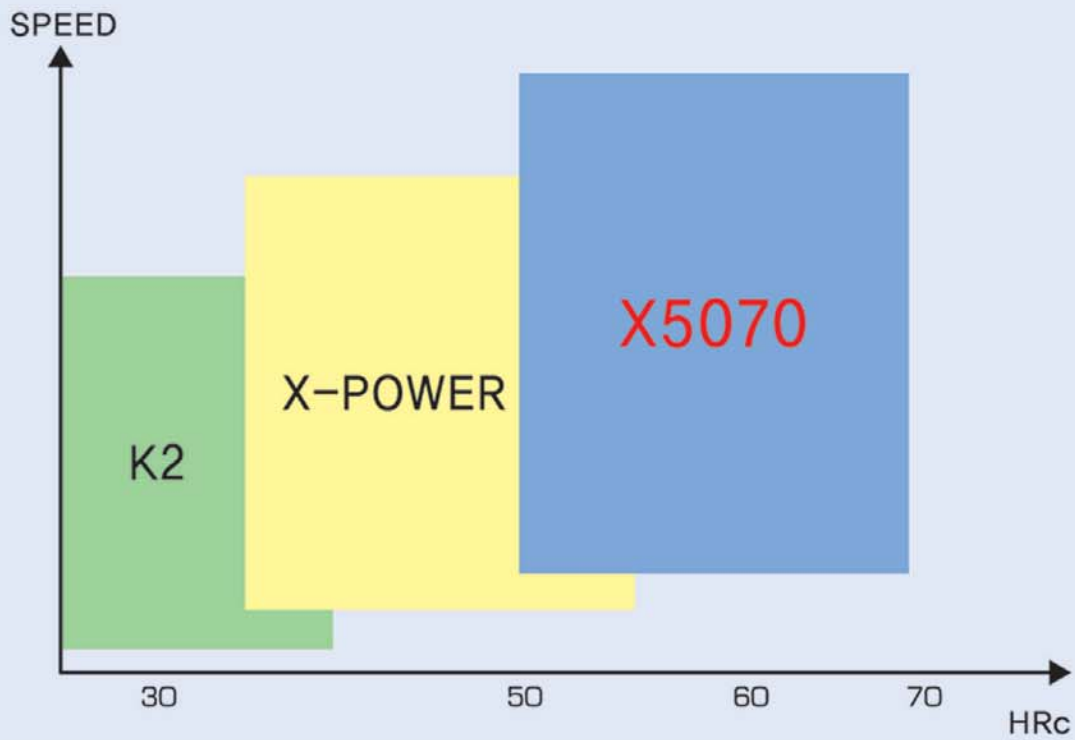
High Speed Cutting in Dry Conditions

Hardened Mold, Die, Alloy Steel

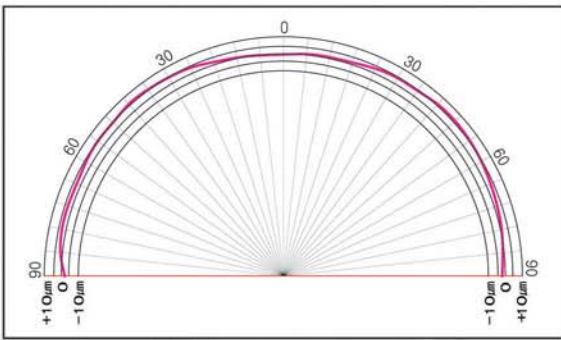
and Most Alloys up to HRc70

适用于硬模，模具，合金钢，和硬度高达HRC70合金材料的高速干铣

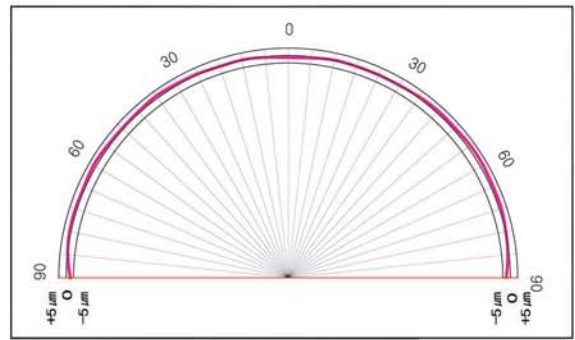




TIGHTER RADIUS TOLERANCE (G8A28030, R1.5)



BEFORE $\pm 0.010\text{mm}$



IMPROVED $\pm 0.005\text{mm}$

(Below 6mm)

Tighter Radius Tolerance $\pm 0.005\text{mm}$ higher accuracy and longer tool life.

POLISHED CUTTING SURFACE

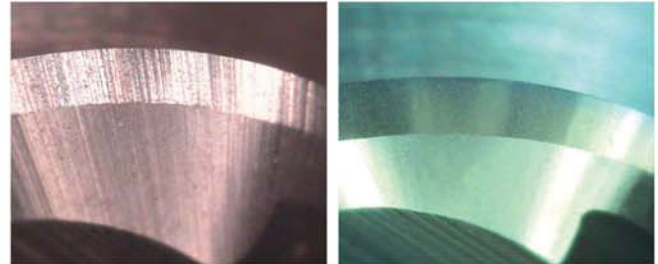
BALL CENTER



BEFORE

IMPROVED

45° POSITION from BALL CENTER

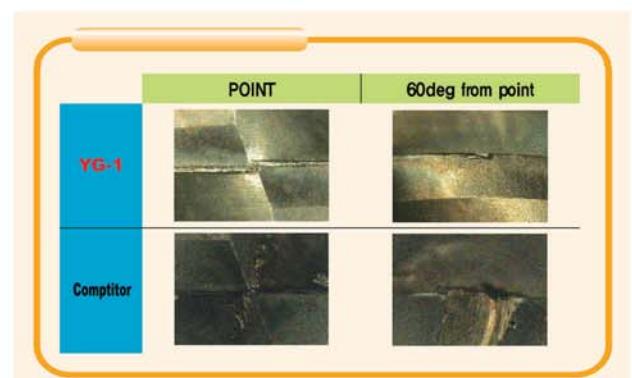
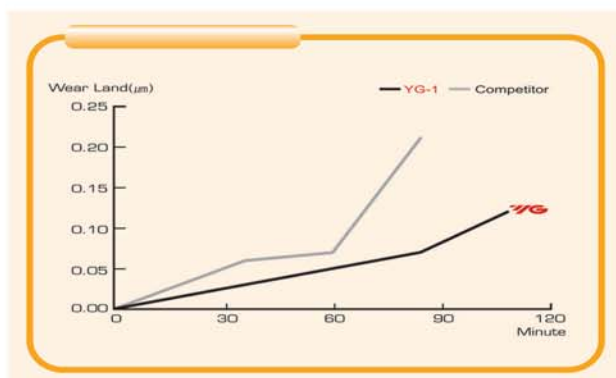


BEFORE

IMPROVED

Polished cutting surfaces give superior part finishes

TEST RESULT



RPM	15000 rpm	
FEED	3000 mm/mm	
DEPTH	Axial : 0.4 mm	Radial : 1.0 mm
Material	STAVAX(HR.c52)	
Coolant	Oil Mist	















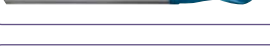


BLUE COATING

Special coating give consistent result in high speed cutting of high hardness materials



X5070 CARBIDE END MILLS

SELECTION GUIDE

G8A50		2 FLUTE, MINIATURE, CORNER RADIUS 2刃, 微型, 圆鼻铣刀	E 7
G8A36		2 FLUTE, STUB CUT LENGTH, CORNER RADIUS with EXTENDED NECK 2刃, 超短, 带颈部的圆鼻铣刀	E 8
G8A01		2 FLUTE, EXTENDED NECK 2刃, 颈部延伸	E 10
G8A60		2 FLUTE, CORNER RADIUS 2刃, 圆鼻铣刀	E 12
G8A52		2 FLUTE, CORNER RADIUS for RIB PROCESSING 2刃, 深腔加工用圆鼻铣刀	E 16
G8A45		2 FLUTE, for RIB PROCESSING 2刃, 深腔加工用铣刀	E 18
G8A37		4 FLUTE, STUB CUT LENGTH, CORNER RADIUS with EXTENDED NECK 4刃, 超短, 带颈部的圆鼻铣刀	E 21
G8A02		4 FLUTE, EXTENDED NECK 4刃, 颈部延伸	E 23
G8A47		4 FLUTE, CORNER RADIUS with EXTENDED NECK 4刃, 带颈部的圆鼻铣刀	E 25
G8B08		4 FLUTE, CORNER RADIUS with EXTENDED NECK 4刃, 带颈部的圆鼻铣刀	E 26
G8A53		2 FLUTE, MINIATURE, BALL NOSE 2刃, 微型, 球头	E 27
G8A46		2 FLUTE, BALL NOSE for RIB PROCESSING 2刃, 球头, 深腔加工用铣刀	E 28
G8A54		2 FLUTE, BALL NOSE for RIB PROCESSING 2刃, 球头, 深腔加工用铣刀	E 32
G8A28		2 FLUTE, SHORT LENGTH, BALL NOSE 2刃, 短型, 球头	E 34
G8A38		2 FLUTE, STUB CUT LENGTH, BALL NOSE with EXTENDED NECK 2刃, 超短, 球头, 颈部延伸	E 35
G8A59		3 FLUTE, LONG LENGTH, BALL NOSE 3刃, 加长(铣刀), 球头	E 37
G8A39		6 FLUTE, 45° HELIX, CORNER RADIUS 6刃, 45度螺旋角, 圆鼻铣刀	E 38

X5070**2 FLUTE, MINIATURE, CORNER RADIUS****2刃, 微型, 圆鼻铣刀**

- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

● **PLAIN SHANK**● **G8A50 Series**

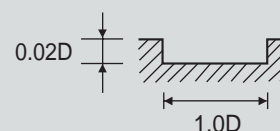
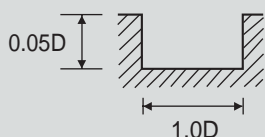
Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER	SHANK DIAMETER	LENGTH OF CUT	OVERALL LENGTH
G8A50003		0.3	6	0.45	50
G8A50004		0.4	6	0.6	50
G8A50005	0.05	0.5	6	0.7	50
G8A50006	0.05	0.6	6	0.9	50
G8A50008	0.05	0.8	6	1.2	50
G8A50010	0.10	1.0	6	1.5	50
G8A50012	0.10	1.2	6	1.8	50
G8A50015	0.15	1.5	6	2.2	50
G8A50020	0.15	2.0	6	2.2	50

MILL DIA. TOLERANCE(mm)	SHANK DIA. TOLERANCE
0 - 0.012	h6

X5070**2 FLUTE, MINIATURE, CORNER RADIUS - SLOTTING****2刃, 微型, 圆鼻铣刀 开槽**● **G8A50**

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65	
HARDNESS										
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
0.3	50000	190	45000	140	40000	115	33000	70	25000	40
0.4	50000	235	45000	180	40000	140	33000	90	25000	55
0.5	50000	370	45000	280	40000	220	33000	140	25000	85
0.6	50000	470	45000	360	40000	285	30000	160	25000	105
0.8	50000	600	40000	440	30000	295	25000	185	19000	110
1.0	48000	750	38000	570	25500	360	20500	215	16000	135
1.2	42000	790	34000	640	22500	380	20000	250	14500	145
1.5	37000	800	30500	670	21000	410	17000	250	13000	155
2.0	33300	850	26000	680	17500	420	14500	260	11000	160



RPM = REVOLUTION PER MIN.
FEED = mm / min.

X5070

2 FLUTE, STUB CUT LENGTH WITH EXTENDED NECK

2刃, 超短, 带颈部的圆鼻铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

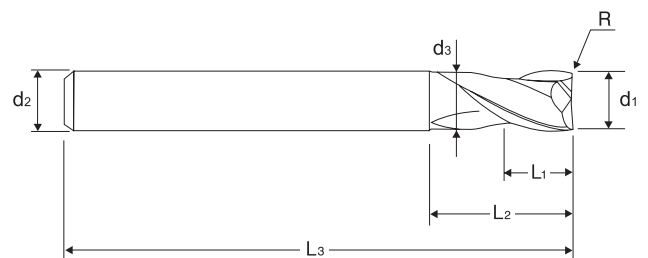
● PLAIN SHANK

● G8A36 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A36003		0.3	3	0.45		40	
G8A36004		0.4	3	0.6		40	
G8A36005	0.05	0.5	3	0.7		40	
G8A36907	0.05	0.5	4	1		40	
G8A36006	0.05	0.6	3	0.9		40	
G8A36908	0.05	0.6	4	1.2		40	
G8A36909	0.05	0.7	4	1.4		40	
G8A36008	0.05	0.8	3	1.2		40	
G8A36910	0.05	0.8	4	1.6		40	
G8A36911	0.05	0.9	4	2		40	
G8A36010	0.1	1	3	1.5		40	
G8A36901	0.1	1	4	1.5		40	
G8A36903	0.1	1	6	1.5		40	
G8A36015	0.1	1.5	3	2.2		40	
G8A36904	0.1	1.5	6	2.2		40	
G8A36020	0.1	2	3	3	6	40	1.95
G8A36902	0.1	2	4	3	6	40	1.95
G8A36905	0.1	2	6	3	6	40	1.95
G8A36025	0.1	2.5	3	4	6	40	2.40
G8A36906	0.1	2.5	6	4	6	40	2.40
G8A36030	0.1	3	6	4	7	45	2.85
G8A36035	0.1	3.5	6	5	9	45	3.35
G8A36040	0.1	4	6	5	9	45	3.85
G8A36045	0.1	4.5	6	6	10	45	4.35
G8A36050	0.2	5	6	6	11	50	4.85
G8A36060	0.2	6	6	7	14	50	5.85
G8A36080	0.2	8	8	9	18	60	7.70
G8A36100	0.2	10	10	12	25	75	9.70
G8A36120	0.3	12	12	15	30	75	11.70
G8A36160	0.3	16	16	18	38	90	15.70
G8A36200	0.3	20	20	24	45	100	19.70

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ -0.012	h6
over 6 ~	0 ~ -0.015	



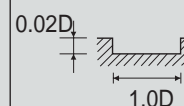
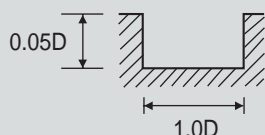
X5070

2 FLUTE, STUB CUT LENGTH WITH EXTENDED NECK - SLOTTING

2刃, 超短, 带颈部的圆鼻铣刀 开槽

●G8A36

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
HARDNESS	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	750	38000	570	25500	360	20500	215	16000	135	12500	85
2	33300	850	26000	680	17500	420	14500	260	11000	160	9500	115
3	21800	850	17300	680	11500	420	9500	260	7500	160	6400	115
4	16700	880	13200	700	8800	440	7200	270	5600	170	4750	118
5	15700	1000	12500	805	8300	500	6400	285	5100	180	4450	132
6	13100	950	10350	770	6900	480	5300	280	4200	180	3700	130
8	9880	930	7800	720	5200	445	4000	255	3200	165	2800	120
10	7800	850	6150	680	4100	415	3200	240	2550	155	2200	112
12	6650	850	5250	680	3500	415	2650	240	2100	155	1860	112
16	4900	730	3900	580	2600	365	2000	210	1600	135	1400	95
20	3900	660	3100	525	2050	335	1600	195	1300	125	1100	85



RPM = REVOLUTION PER MIN.
FEED = mm/min.

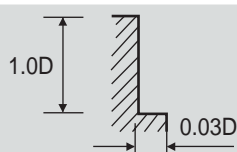
X5070

2 FLUTE, STUB CUT LENGTH WITH EXTENDED NECK - SIDE CUTTING

2刃, 超短, 带颈部的圆鼻铣刀 侧铣

●G8A36

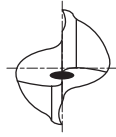
MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
HARDNESS	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	1050	38000	820	25500	510	20500	310	16000	190	12500	125
2	33300	1200	26000	970	17500	600	14500	370	11000	230	9500	165
3	21800	1200	17300	970	11500	600	9500	370	7500	230	6400	165
4	16700	1250	13200	1000	8800	625	7200	385	5600	240	4750	170
5	15700	1450	12500	1150	8300	710	6400	410	5100	260	4450	190
6	13100	1350	10350	1100	6900	690	5300	400	4200	255	3700	185
8	9880	1320	7800	1030	5200	635	4000	365	3200	235	2800	170
10	7800	1200	6150	970	4100	590	3200	340	2550	220	2200	160
12	6650	1200	5250	970	3500	590	2650	340	2100	220	1860	160
16	4900	1050	3900	840	2600	520	2000	300	1600	190	1400	140
20	3900	950	3100	750	2050	475	1600	275	1300	175	1100	125



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

2 FLUTE, EXTENDED NECK 2刃，颈部延伸



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削，高速切削，最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Higher wear-resistance.
高耐磨性。

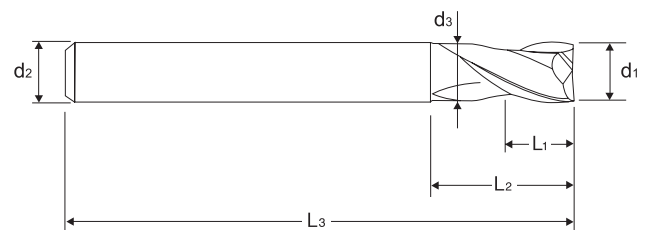
● STUB CUT LENGTH

● G8A01 Series

Unit : mm

EDP No.	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G8A01001	0.1	4	0.2		40	
G8A01002	0.2	4	0.4		40	
G8A01003	0.3	4	0.6		40	
G8A01004	0.4	4	0.8		40	
G8A01005	0.5	4	1		40	
G8A01006	0.6	4	1.2		40	
G8A01007	0.7	4	1.4		40	
G8A01008	0.8	4	1.6		40	
G8A01009	0.9	4	2		40	
G8A01010	1.0	6	1.5	3	50	0.95
G8A01015	1.5	6	1.7	4	50	1.45
G8A01020	2.0	6	2	5	50	1.95
G8A01025	2.5	6	2.5	6	55	2.40
G8A01030	3.0	6	3	8	55	2.85
G8A01035	3.5	6	3.5	9	55	3.35
G8A01040	4.0	6	4	10	55	3.75
G8A01050	5.0	6	5	13	55	4.75
G8A01060	6.0	6	6	15	55	5.75
G8A01080	8.0	8	8	20	65	7.70
G8A01100	10.0	10	10	25	75	9.70
G8A01120	12.0	12	12	28	85	11.70
G8A01160	16.0	16	16	32	90	15.70
G8A01200	20.0	20	20	40	105	19.70

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ -0.012	h6
over 6 ~	0 ~ -0.015	



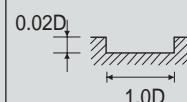
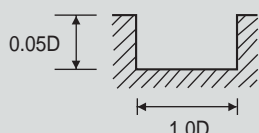
X5070

2 FLUTE, EXTENDED NECK - SLOTTING

2刃, 颈部延伸 开槽

●G8A01

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
HARDNESS												
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	750	38000	570	25500	360	20500	215	16000	135	12500	85
2	33300	850	26000	680	17500	420	14500	260	11000	160	9500	115
3	21800	850	17300	680	11500	420	9500	260	7500	160	6400	115
4	16700	880	13200	700	8800	440	7200	270	5600	170	4750	118
5	15700	1000	12500	805	8300	500	6400	285	5100	180	4450	132
6	13100	950	10350	770	6900	480	5300	280	4200	180	3700	130
8	9880	930	7800	720	5200	445	4000	255	3200	165	2800	120
10	7800	850	6150	680	4100	415	3200	240	2550	155	2200	112
12	6650	850	5250	680	3500	415	2650	240	2100	155	1860	112
16	4900	730	3900	580	2600	365	2000	210	1600	135	1400	95
20	3900	660	3100	525	2050	335	1600	195	1300	125	1100	85



RPM = REVOLUTION PER MIN.
FEED = mm/min.

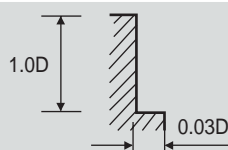
X5070

2 FLUTE, EXTENDED NECK - SIDE CUTTING

2刃, 颈部延伸 侧铣

●G8A01

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
HARDNESS												
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	1050	38000	820	25500	510	20500	310	16000	190	12500	125
2	33300	1200	26000	970	17500	600	14500	370	11000	230	9500	165
3	21800	1200	17300	970	11500	600	9500	370	7500	230	6400	165
4	16700	1250	13200	1000	8800	625	7200	385	5600	240	4750	170
5	15700	1450	12500	1150	8300	710	6400	410	5100	260	4450	190
6	13100	1350	10350	1100	6900	690	5300	400	4200	255	3700	185
8	9880	1320	7800	1030	5200	635	4000	365	3200	235	2800	170
10	7800	1200	6150	970	4100	590	3200	340	2550	220	2200	160
12	6650	1200	5250	970	3500	590	2650	340	2100	220	1860	160
16	4900	1050	3900	840	2600	520	2000	300	1600	190	1400	140
20	3900	950	3100	750	2050	475	1600	275	1300	175	1100	125



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

2 FLUTE, CORNER RADIUS 2刃, 圆鼻铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
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适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

● STUB CUT LENGTH

● G8A60 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A60936	0.05	0.5	4	0.7	1.5	45	0.45
G8A60932	0.05	0.5	4	0.7	2.5	45	0.45
G8A60935	0.05	0.5	4	0.7	4	45	0.45
G8A60931	0.05	0.5	4	0.7	2	45	0.45
G8A60933	0.05	0.6	4	0.9	3	45	0.55
G8A60934	0.05	0.6	4	0.9	4	45	0.55
G8A600060102	0.1	0.6	4	0.9	2	45	0.55
G8A600070104	0.1	0.7	4	1	4	45	0.65
G8A600080102	0.1	0.7	4	1	2	45	0.65
G8A60008	0.1	0.8	4	1.2	4	45	0.75
G8A60924	0.1	0.8	4	1.2	6	45	0.75
G8A60925	0.1	1.0	6	1.5	4	50	0.95
G8A60926	0.1	1.0	6	1.5	6	50	0.95
G8A60010	0.2	1.0	6	1.5	4	50	0.95
G8A60910	0.2	1.0	6	1.5	6	50	0.95
G8A60911	0.2	1.0	6	1.5	8	50	0.95
G8A60912	0.3	1.0	6	1.5	4	50	0.95
G8A60930	0.3	1.0	6	1.5	6	50	0.95
G8A600100308	0.3	1.0	6	1.5	8	50	0.95
G8A60015	0.2	1.5	6	2.5	4	50	1.45
G8A600150206	0.2	1.5	6	2.5	6	50	1.45
G8A600150208	0.2	1.5	6	2.5	8	50	1.45
G8A60913	0.2	1.5	6	2.5	10	50	1.45
G8A60914	0.2	1.5	6	2.5	12	50	1.45
G8A60915	0.3	1.5	6	2.5	4	50	1.45
G8A600150306	0.3	1.5	6	2.5	6	50	1.45
G8A600150308	0.3	1.5	6	2.5	8	50	1.45
G8A60927	0.2	2.0	6	3	6	50	1.95
G8A600200208	0.2	2.0	6	3	8	50	1.95
G8A600200210	0.2	2.0	6	3	10	50	1.95
G8A600200212	0.2	2.0	6	3	12	50	1.95
G8A60916	0.3	2.0	6	3	6	50	1.95
G8A600200308	0.3	2.0	6	3	8	55	1.95
G8A600200310	0.3	2.0	6	3	10	55	1.95
G8A600200312	0.3	2.0	6	3	12	55	1.95
G8A600200316	0.3	2.0	6	3	16	55	1.95
G8A60917	0.5	2.0	6	3	6	50	1.95
G8A60020	0.5	2.0	6	3	9	55	1.95
G8A60918	0.5	2.0	6	3	12	55	1.95
G8A600300208	0.2	3.0	6	4	8	55	2.85
G8A600300210	0.2	3.0	6	4	10	55	2.85
G8A600300212	0.2	3.0	6	4	12	55	2.85



2 FLUTE, CORNER RADIUS 2刃, 圆鼻铣刀

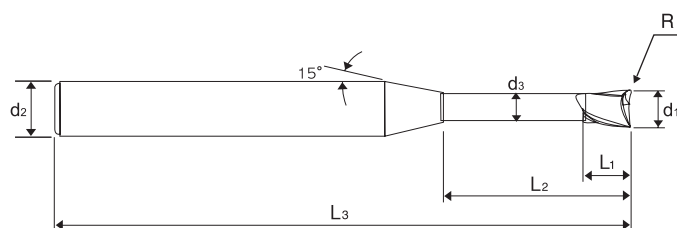
● STUB CUT LENGTH

● G8A60 Series

Unit : mm

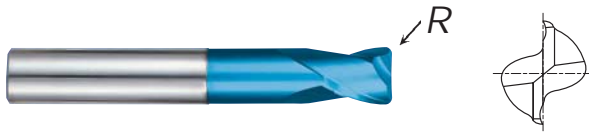
EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A600300216	0.2	3.0	6	4	16	55	2.85
G8A600300308	0.3	3.0	6	4	8	55	2.85
G8A60919	0.3	3.0	6	4	9	55	2.85
G8A600300312	0.3	3.0	6	4	12	55	2.85
G8A600300316	0.3	3.0	6	4	16	55	2.85
G8A60030	0.5	3.0	6	4	9	55	2.85
G8A600300512	0.5	3.0	6	4	12	55	2.85
G8A60901	0.5	3.0	6	4	16	55	2.85
G8A60902	0.5	3.0	6	4	20	55	2.85
G8A600400212	0.2	4.0	6	4	12	55	3.85
G8A600400216	0.2	4.0	6	4	16	55	3.85
G8A600400220	0.2	4.0	6	4	20	55	3.85
G8A600400310	0.3	4.0	6	5	10	55	3.85
G8A60920	0.3	4.0	6	5	12	55	3.85
G8A600400316	0.3	4.0	6	5	16	55	3.85
G8A600400320	0.3	4.0	6	5	20	55	3.85
G8A60040	0.5	4.0	6	5	12	55	3.85
G8A60903	0.5	4.0	6	5	16	55	3.85
G8A60904	0.5	4.0	6	5	20	55	3.85
G8A600401012	1.0	4.0	6	5	12	55	3.85
G8A600401016	1.0	4.0	6	5	16	55	3.85

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
~φ5	0 ~ -0.012	h6
φ6~	0 ~ -0.015	



X5070

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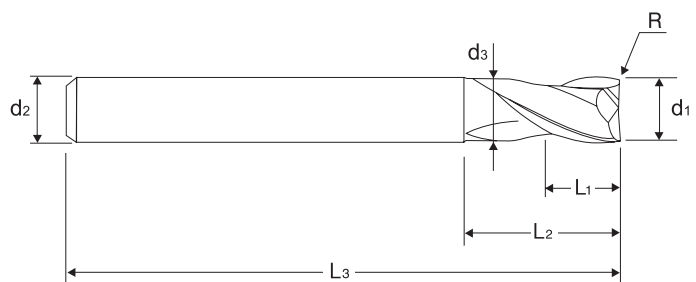
● STUB CUT LENGTH

● G8A60 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A60921	0.3	6.0	6	7	20	60	5.7
G8A60060	0.5	6.0	6	7	20	60	5.7
G8A60905	1.0	6.0	6	7	20	60	5.7
G8A60906	1.5	6.0	6	7	20	60	5.7
G8A600602020	2.0	6.0	6	7	20	60	5.85
G8A60922	0.3	8.0	8	9	25	60	7.7
G8A60080	1.0	8.0	8	9	25	60	7.7
G8A60907	1.5	8.0	8	9	25	60	7.7
G8A600802025	2.0	8.0	8	9	25	60	7.7
G8A60923	0.3	10.0	10	11	32	70	9.7
G8A601000532	0.5	10.0	10	11	32	70	11.7
G8A60100	1.0	10.0	10	11	32	70	9.7
G8A60908	1.5	10.0	10	11	32	70	9.7
G8A601002032	2.0	10.0	10	11	32	70	11.7
G8A601200538	0.5	12.0	12	12	38	80	11.7
G8A60120	1.0	12.0	12	12	38	80	11.7
G8A60909	1.5	12.0	12	12	38	80	11.7
G8A601202038	2.0	12.0	12	12	38	80	11.7

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ -0.012	h6
over 6 ~	0 ~ -0.015	



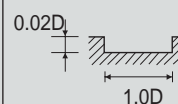
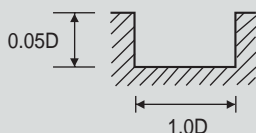
X5070

2 FLUTE, CORNER RADIUS - SLOTTING

2刃, 圆鼻铣刀 开槽

● G8A60

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HARDNESS		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	600	38000	456	25500	288	20500	172	16000	108	12500	70
2	33300	680	26000	544	17500	336	14500	208	11000	128	9500	92
3	21800	680	17300	544	11500	336	9500	208	7500	128	6400	92
4	16700	704	13200	560	8800	352	7200	216	5600	136	4750	94
5	15700	800	12500	644	8300	400	6400	228	5100	144	4450	106
6	13100	760	10350	616	6900	384	5300	224	4200	144	3700	104
8	9880	744	7800	576	5200	356	4000	204	3200	132	2800	96
10	7800	680	6150	544	4100	332	3200	192	2550	124	2200	90
12	6650	680	5250	544	3500	332	2650	192	2100	124	1860	90
16	4900	584	3900	464	2600	292	2000	168	1600	108	1400	78
20	3900	528	3100	420	2050	268	1600	168	1300	100	1100	70



RPM = REVOLUTION PER MIN.
FEED = mm/min.

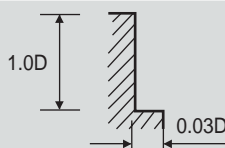
X5070

2 FLUTE, CORNER RADIUS - SIDE CUTTING

2刃, 圆鼻铣刀 侧铣

● G8A60

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HARDNESS		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	840	38000	656	25500	408	20500	248	16000	152	12500	100
2	33300	960	26000	776	17500	480	14500	296	11000	184	9500	132
3	21800	960	17300	776	11500	480	9500	296	7500	184	6400	132
4	16700	1000	13200	800	8800	500	7200	308	5600	192	4750	136
5	15700	1160	12500	920	8300	568	6400	328	5100	208	4450	152
6	13100	1080	10350	880	6900	552	5300	320	4200	204	3700	148
8	9880	1056	7800	824	5200	508	4000	292	3200	188	2800	136
10	7800	960	6150	776	4100	472	3200	272	2550	176	2200	128
12	6650	960	5250	776	3500	472	2650	272	2100	176	1860	128
16	4900	840	3900	672	2600	416	2000	240	1600	152	1400	112
20	3900	760	3100	600	2050	380	1600	220	1300	140	1100	100



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070**2 FLUTE, CORNER RADIUS FOR RIB PROCESSING****2刃, 深腔加工用圆鼻铣刀**

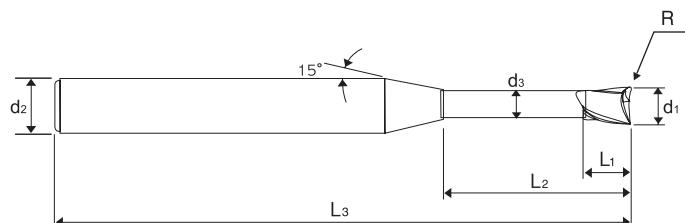
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- ▶ Higher wear-resistance.
高耐磨性。

● **PLAIN SHANK**● **G8A52 Series**

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A52005	0.05	0.5	6	0.7	1.5	50	0.45
G8A52901	0.05	0.5	6	0.7	3.3	50	0.45
G8A52006	0.05	0.6	6	0.9	2.0	50	0.55
G8A52902	0.05	0.6	6	0.9	4.0	50	0.55
G8A52008	0.05	0.8	6	1.2	2.5	50	0.75
G8A52903	0.05	0.8	6	1.2	5.5	50	0.75
G8A52010	0.10	1.0	6	1.5	3.3	50	0.95
G8A52904	0.10	1.0	6	1.5	6.7	50	0.95
G8A52012	0.10	1.2	6	1.8	4.4	50	1.15
G8A52905	0.10	1.2	6	1.8	8.0	50	1.15
G8A52015	0.15	1.5	6	2.2	5.0	50	1.45
G8A52906	0.15	1.5	6	2.2	9.7	50	1.45
G8A52020	0.15	2.0	6	2.2	6.0	50	1.95
G8A52907	0.15	2.0	6	2.2	13.0	50	1.95

MILL DIA. TOLERANCE(mm)	SHANK DIA. TOLERANCE
0 - 0.012	h6

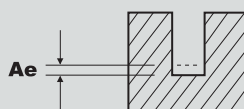


X5070

2 FLUTE, CORNER RADIUS FOR RIB PROCESSING 2刃，深腔加工用圆鼻铣刀

● G8A52

MATERIAL	ALLOY STEELS HEAT RESISTANT STEELS			HARDENED STEELS			HARDENED STEELS		
HARDNESS	HRc 30 ~ HRc 45			HRc 45 ~ HRc 55			HRc 55 ~ HRc 60		
DIAMETER(mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)
0.5	25650~33000	370~470	0.0056~0.0350	23750~26000	285~315	0.0040~0.0250	14200~18000	115~130	0.0024~0.0150
0.6	20900~35200	330~560	0.0063~0.0294	19900~22000	260~290	0.0450~0.0210	11900~15500	100~120	0.0027~0.0126
0.8	16150~26400	360~590	0.0084~0.0392	15200~16700	280~310	0.0060~0.0280	9000~11700	110~125	0.0036~0.0168
1.0	12300~18700	350~540	0.0105~0.0280	10500~11500	250~280	0.0075~0.0200	6300~8050	100~115	0.0045~0.0120
1.2	10450~17600	350~590	0.0245~0.0700	9100~10000	250~280	0.0150~0.0420	5400~7000	100~115	0.0090~0.0252
1.5	9100~17600	430~830	0.0161~0.0770	7000~8000	250~280	0.0115~0.0550	4300~5500	100~115	0.0069~0.0330
2.0	6350~10550	340~570	0.0210~0.1400	6100~6700	270~300	0.0150~0.1000	3600~4700	100~120	0.0090~0.0600

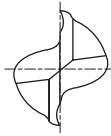


RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

2 FLUTE, FOR RIB PROCESSING

2刃, 深腔加工用铣刀



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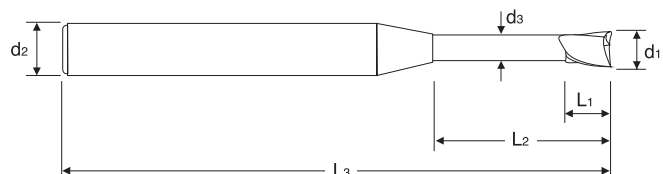
● PLAIN SHANK

● G8A45 Series

Unit : mm

EDP No.	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G8A45863	0.1	4	0.15	0.3	45	0.085
G8A45864	0.1	4	0.15	0.5	45	0.085
G8A45002	0.2	4	0.3	0.5	45	0.17
G8A45815	0.2	4	0.3	1	45	0.17
G8A45816	0.2	4	0.3	1.5	45	0.17
G8A45003	0.3	4	0.45	1	45	0.27
G8A45844	0.3	4	0.45	1.5	45	0.27
G8A45817	0.3	4	0.45	2	45	0.27
G8A45818	0.3	4	0.45	3	45	0.27
G8A45842	0.3	4	0.45	4	45	0.27
G8A45843	0.4	4	0.6	1	45	0.37
G8A45004	0.4	4	0.6	2	45	0.37
G8A45984	0.4	4	0.6	3	45	0.37
G8A45985	0.4	4	0.6	4	45	0.37
G8A45986	0.4	4	0.6	5	45	0.37
G8A45005	0.5	4	0.7	2	45	0.45
G8A45988	0.5	4	0.7	4	45	0.45
G8A45989	0.5	4	0.7	6	45	0.45
G8A45990	0.5	4	0.7	8	45	0.45
G8A45006	0.6	4	0.9	2	45	0.55
G8A45991	0.6	4	0.9	4	45	0.55
G8A45992	0.6	4	0.9	6	45	0.55
G8A45993	0.6	4	0.9	8	45	0.55
G8A45819	0.6	4	0.9	10	45	0.55
G8A45008	0.8	4	1.2	4	45	0.75
G8A45908	0.8	4	1.2	6	45	0.75
G8A45909	0.8	4	1.2	8	45	0.75
G8A45994	0.8	4	1.2	10	45	0.75
G8A45995	0.8	4	1.2	12	45	0.75
G8A45996	1.0	4	1.5	4	45	0.95
G8A45010	1.0	4	1.5	6	45	0.95
G8A45912	1.0	4	1.5	8	45	0.95
G8A45913	1.0	4	1.5	10	45	0.95
G8A45914	1.0	4	1.5	12	45	0.95
G8A45997	1.0	4	1.5	16	50	0.95
G8A45998	1.0	4	1.5	20	50	0.95

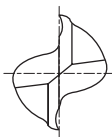
MILL DIA. TOLERANCE(mm)	SHANK DIA. TOLERANCE
0 - 0.012	h6



X5070

2 FLUTE, FOR RIB PROCESSING

2刃, 深腔加工用铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

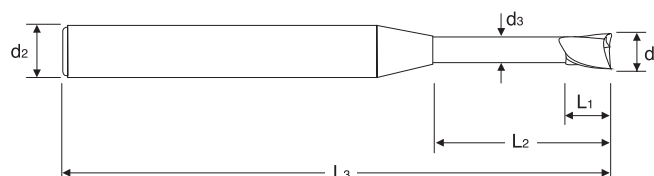
● PLAIN SHANK

● G8A45 Series

Unit : mm

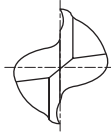
EDP No.	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G8A45012	1.2	4	1.8	6	45	1.15
G8A45915	1.2	4	1.8	8	45	1.15
G8A45916	1.2	4	1.8	10	45	1.15
G8A45917	1.2	4	1.8	12	45	1.15
G8A45999	1.2	4	1.8	16	50	1.15
G8A45015	1.5	4	2.3	6	45	1.45
G8A45923	1.5	4	2.3	8	45	1.45
G8A45924	1.5	4	2.3	10	45	1.45
G8A45925	1.5	4	2.3	12	45	1.45
G8A45926	1.5	4	2.3	14	50	1.45
G8A45927	1.5	4	2.3	16	50	1.45
G8A45928	1.5	4	2.3	18	55	1.45
G8A45810	1.5	4	2.3	20	55	1.45
G8A45958	2.0	4	3.0	6	45	1.95
G8A45020	2.0	4	3.0	8	45	1.95
G8A45959	2.0	4	3.0	10	45	1.95
G8A45960	2.0	4	3.0	12	45	1.95
G8A45961	2.0	4	3.0	14	50	1.95
G8A45962	2.0	4	3.0	16	50	1.95
G8A45963	2.0	4	3.0	18	55	1.95
G8A45964	2.0	4	3.0	20	55	1.95
G8A45966	2.0	4	3.0	25	60	1.95
G8A45814	2.0	4	3.0	30	70	1.95
G8A45030	3.0	6	4.5	8	45	2.85
G8A45975	3.0	6	4.5	10	45	2.85
G8A45976	3.0	6	4.5	12	45	2.85
G8A45977	3.0	6	4.5	14	50	2.85
G8A45978	3.0	6	4.5	16	55	2.85
G8A45979	3.0	6	4.5	18	55	2.85
G8A45980	3.0	6	4.5	20	60	2.85
G8A45981	3.0	6	4.5	25	65	2.85
G8A45832	3.0	6	4.5	30	70	2.85
G8A45833	3.0	6	4.5	35	80	2.85
G8A45983	3.0	6	4.5	40	90	2.85

MILL DIA. TOLERANCE(mm)	SHANK DIA. TOLERANCE
0 - 0.012	h6





2 FLUTE, FOR RIB PROCESSING
2刃, 深腔加工用铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

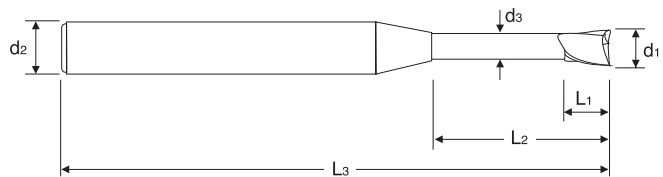
● PLAIN SHANK

● G8A45 Series

Unit : mm

EDP No.	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G8A45040	4.0	6	6.0	12	50	3.85
G8A45801	4.0	6	6.0	16	60	3.85
G8A45802	4.0	6	6.0	20	60	3.85
G8A45803	4.0	6	6.0	25	70	3.85
G8A45834	4.0	6	6.0	30	70	3.85
G8A45835	4.0	6	6.0	35	80	3.85
G8A45836	4.0	6	6.0	40	90	3.85
G8A45837	4.0	6	6.0	45	90	3.85
G8A45838	4.0	6	6.0	50	100	3.85

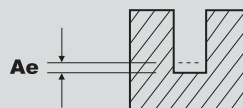
MILL DIA. TOLERANCE(mm)	SHANK DIA. TOLERANCE
0 - 0.012	h6



2 FLUTE, FOR RIB PROCESSING
2刃, 深腔加工用铣刀

G8A45

MATERIAL	ALLOY STEELS HEAT RESISTANT STEELS			HARDENED STEELS			HARDENED STEELS			COPPER		
	HRc 30 ~ HRc 45			HRc 45 ~ HRc 55			HRc 55 ~ HRc 65					
HARDNESS	HRc 30 ~ HRc 45			HRc 45 ~ HRc 55			HRc 55 ~ HRc 65					
DIAMETER(mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)
0.3	43000-50000	330-420	0.006-0.015	39900-46200	265-310	0.004-0.011	23900-32300	105-185	0.003-0.007	48000-50000	550-640	0.010-0.025
0.4	31400-50000	350-590	0.005-0.028	30500-35200	295-340	0.003-0.020	18300-24600	120-200	0.002-0.012	48000-50000	790-920	0.008-0.048
0.5	25650-33000	370-470	0.006-0.035	23750-26000	285-315	0.004-0.025	14200-18000	115-130	0.003-0.015	44000-50000	800-1150	0.010-0.060
0.6	20900-35200	330-560	0.007-0.030	19900-22000	260-290	0.005-0.021	11900-15500	100-120	0.003-0.013	37500-50000	770-1250	0.011-0.051
0.8	16150-26400	360-590	0.009-0.040	15200-16700	280-310	0.006-0.028	9000-11700	110-125	0.004-0.017	28500-47000	770-1300	0.015-0.068
1.0	12300-18700	350-540	0.011-0.028	10500-11500	250-280	0.008-0.020	6300-8050	100-115	0.005-0.012	22500-34000	810-1300	0.018-0.048
1.2	10450-17600	350-590	0.025-0.070	9100-10000	250-280	0.015-0.042	5400-7000	100-115	0.009-0.026	22500-31500	950-1350	0.036-0.101
1.5	9100-17600	430-830	0.017-0.077	7000-8000	250-280	0.012-0.055	4300-5500	100-115	0.007-0.033	14500-25000	770-1320	0.028-0.132
2.0	6350-10550	340-570	0.021-0.140	6100-6700	270-300	0.015-0.100	3600-4700	100-120	0.009-0.060	11500-18500	770-1250	0.036-0.240
3.0	4300-7050	550-900	0.056-0.210	3990-4600	445-515	0.040-0.150	2400-3200	105-310	0.024-0.090	9000-13000	1400-2110	0.096-0.360
4.0	3200-5300	400-675	0.074-0.280	3000-3400	335-380	0.053-0.200	1800-2400	75-230	0.032-0.120	6750-9750	1050-1575	0.128-0.480



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

4 FLUTE, STUB CUT LENGTH WITH EXTENDED NECK 4刃, 超短, 带颈部的圆鼻铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

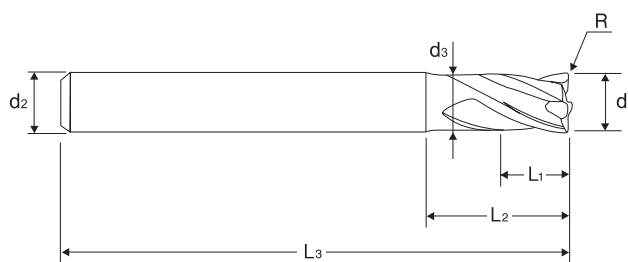
● PLAIN SHANK

● G8A37 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A37010	0.1	1	3	1.5		40	
G8A37901	0.1	1	6	1.5		40	
G8A37015	0.1	1.5	3	2.2		40	
G8A37902	0.1	1	6	2.2		40	
G8A37020	0.1	2	3	3	6	40	1.95
G8A37903	0.1	2	6	3	6	40	1.95
G8A37025	0.1	2.5	3	4	6	40	2.4
G8A37904	0.1	2.5	6	4	6	40	2.4
G8A37030	0.1	3	6	4	7	45	2.9
G8A37035	0.1	3.5	6	5	9	45	3.35
G8A37040	0.1	4	6	5	9	45	3.85
G8A37045	0.1	4.5	6	6	10	45	4.35
G8A37050	0.2	5	6	6	11	50	4.85
G8A37060	0.2	6	6	7	14	50	5.85
G8A37080	0.2	8	8	9	18	60	7.7
G8A37100	0.2	10	10	12	25	75	9.7
G8A37120	0.3	12	12	15	30	75	11.7
G8A37160	0.3	16	16	18	38	90	15.7
G8A37200	0.3	20	20	24	45	100	19.7

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
from 1 to 5	0 ~ -0.012	h6
from 6 ~	0 ~ -0.015	

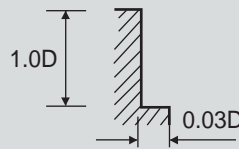




4 FLUTE, STUB CUT LENGTH - SIDE CUTTING 4刃, 超短, 带颈部的圆鼻铣刀 侧铣

●G8A37

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRC 30 ~ HRC 40		HRC 40 ~ HRC 50		HRC 50 ~ HRC 55		HRC 55 ~ HRC 60		HRC 60 ~ HRC 65		HRC 65 ~ HRC 70	
HARDNESS												
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	1480	38000	1050	25500	710	20500	430	16000	270	12500	175
2	33300	1750	26000	1250	17500	840	14500	520	11000	320	9500	230
3	21800	1750	17300	1250	11500	840	9500	520	7500	320	6400	230
4	16700	1800	13200	1300	8800	880	7200	540	5600	335	4750	240
5	15700	2000	12500	1500	8300	1000	6400	580	5100	370	4450	270
6	13100	1950	10350	1400	6900	950	5300	560	4200	350	3700	260
8	9880	1880	7800	1350	5200	900	4000	520	3200	330	2800	240
10	7800	1750	6150	1260	4100	840	3200	480	2550	310	2200	220
12	6650	1750	5250	1260	3500	840	2650	480	2100	300	1860	220
16	4900	1500	3900	1100	2600	730	2000	420	1600	270	1400	200
20	3900	1300	3100	970	2050	650	1600	380	1300	250	1100	180



RPM = REVOLUTION PER MIN.
FEED = mm/min.

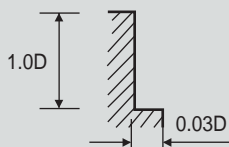


4 FLUTE, EXTENDED NECK - SIDE CUTTING

4刃, 颈部延伸 侧铣

●G8A02

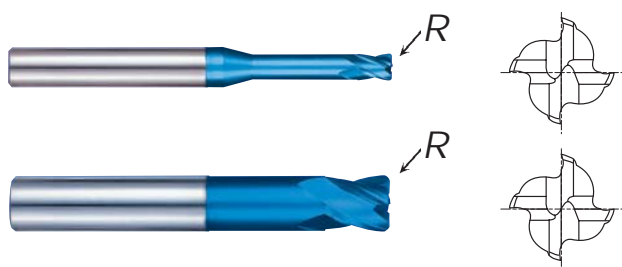
MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRC 30 ~ HRC 40		HRC 40 ~ HRC 50		HRC 50 ~ HRC 55		HRC 55 ~ HRC 60		HRC 60 ~ HRC 65		HRC 65 ~ HRC 70	
HARDNESS												
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	1480	38000	1050	25500	710	20500	430	16000	270	12500	175
2	33300	1750	26000	1250	17500	840	14500	520	11000	320	9500	230
3	21800	1750	17300	1250	11500	840	9500	520	7500	320	6400	230
4	16700	1800	13200	1300	8800	880	7200	540	5600	335	4750	240
5	15700	2000	12500	1500	8300	1000	6400	580	5100	370	4450	270
6	13100	1950	10350	1400	6900	950	5300	560	4200	350	3700	260
8	9880	1880	7800	1350	5200	900	4000	520	3200	330	2800	240
10	7800	1750	6150	1260	4100	840	3200	480	2550	310	2200	220
12	6650	1750	5250	1260	3500	840	2650	480	2100	300	1860	220
16	4900	1500	3900	1100	2600	730	2000	420	1600	270	1400	200
20	3900	1300	3100	970	2050	650	1600	380	1300	250	1100	180



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

4FLUTE, CORNER RADIUS WITH EXTENDED NECK 4刃, 带颈部的圆鼻铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

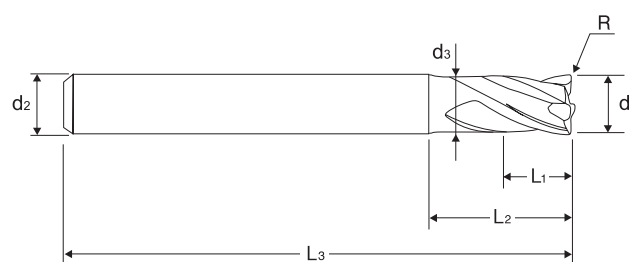
● STUB CUT LENGTH

● G8A47 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A47916	0.3	3.0	6	4	12	55	2.85
G8A47917	0.3	3.0	6	4	16	55	2.85
G8A47918	0.3	3.0	6	4	20	55	2.85
G8A47030	0.5	3.0	6	4	9	55	2.85
G8A47901	0.5	3.0	6	4	16	55	2.85
G8A47902	0.5	3.0	6	4	20	55	2.85
G8A47919	0.3	4.0	6	5	12	55	3.85
G8A47920	0.3	4.0	6	5	16	55	3.85
G8A47921	0.3	4.0	6	5	20	55	3.85
G8A47040	0.5	4.0	6	5	12	55	3.85
G8A47903	0.5	4.0	6	5	16	55	3.85
G8A47904	0.5	4.0	6	5	20	55	3.85
G8A47922	1.0	4.0	6	5	12	55	3.85
G8A47060	0.5	6.0	6	7	20	60	5.85
G8A47905	1.0	6.0	6	7	20	60	5.85
G8A47906	1.5	6.0	6	7	20	60	5.85
G8A47910	0.5	8.0	8	9	25	60	7.7
G8A47080	1.0	8.0	8	9	25	60	7.7
G8A47907	1.5	8.0	8	9	25	60	7.7
G8A47913	2.0	8.0	8	9	25	60	7.7
G8A47911	0.5	10.0	10	11	32	70	9.7
G8A47100	1.0	10.0	10	11	32	70	9.7
G8A47908	1.5	10.0	10	11	32	70	9.7
G8A47914	2.0	10.0	10	11	32	70	9.7
G8A47912	0.5	12.0	12	12	38	80	11.7
G8A47909	1.5	12.0	12	12	38	80	11.7
G8A47120	1.0	12.0	12	12	38	80	11.7
G8A47915	2.0	12.0	12	12	38	80	11.7

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ -0.012	h6
over 6 ~	0 ~ -0.015	



X5070

4FLUTE, CORNER RADIUS WITH EXTENDED NECK 4刃, 带颈部的圆鼻铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

● PLAIN SHANK

● G8B08 Series

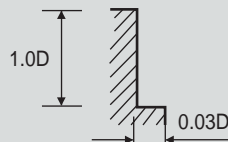
Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8B0806005090	R0.5	6.0	6.0	9	20	90	5.85
G8B0806010090	R1.0	6.0	6.0	9	20	90	5.85
G8B0808005100	R0.5	8.0	8.0	12	25	100	7.7
G8B0808010100	R1.0	8.0	8.0	12	25	100	7.7
G8B0810005100	R0.5	10.0	10.0	15	32	100	9.7
G8B0810010100	R1.0	10.0	10.0	15	32	100	9.7
G8B0810020100	R2.0	10.0	10.0	15	32	100	9.7
G8B0812005110	R0.5	12.0	12.0	18	38	110	11.7
G8B0812010110	R1.0	12.0	12.0	18	38	110	11.7
G8B0812020110	R2.0	12.0	12.0	18	38	110	11.7

MILL DIA. TOLERANCE(mm)	SHANK DIA. TOLERANCE
0 - 0.015	h6

● G8A47, G8B08

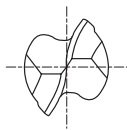
MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRC 30 ~ HRC 40		HRC 40 ~ HRC 50		HRC 50 ~ HRC 55		HRC 55 ~ HRC 60		HRC 60 ~ HRC 65		HRC 65 ~ HRC 70	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	48000	1184	38000	840	25500	568	20500	344	16000	216	12500	140
2	33300	1400	26000	1000	17500	672	14500	416	11000	256	9500	184
3	21800	1400	17300	1000	11500	672	9500	416	7500	256	6400	184
4	16700	1440	13200	1040	8800	704	7200	432	5600	268	4750	192
5	15700	1600	12500	1200	8300	800	6400	464	5100	296	4450	216
6	13100	1560	10350	1120	6900	760	5300	448	4200	280	3700	208
8	9880	1504	7800	1080	5200	720	4000	416	3200	264	2800	192
10	7800	1400	6150	1008	4100	672	3200	384	2550	248	2200	176
12	6650	1400	5250	1008	3500	672	2650	384	2100	240	1860	176
16	4900	1200	3900	880	2600	584	2000	336	1600	216	1400	160
20	3900	1040	3100	776	2050	520	1600	304	1300	200	1100	144



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

2 FLUTE, MINIATURE, BALL NOSE 2刃, 微型, 球头



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卓越的工件表面粗糙度。
- ▶ Designed for high precision milling operation.
为高精度切削设计。
- ▶ Higher wear-resistance.
高耐磨性。

● PLAIN SHANK

● G8A53 Series

Unit : mm

EDP No.	R ±0.005	MILL DIAMETER	SHANK DIAMETER	LENGTH OF CUT	OVERALL LENGTH
G8A53004	0.2	0.4	6	0.4	50
G8A53005	0.25	0.5	6	0.5	50
G8A53006	0.3	0.6	6	0.6	50
G8A53008	0.4	0.8	6	0.8	50
G8A53010	0.5	1.0	6	1.0	50
G8A53012	0.6	1.2	6	1.2	50
G8A53015	0.75	1.5	6	1.5	50
G8A53020	1.0	2.0	6	2.0	50

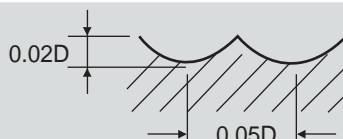
RADIUS TOLERANCE(mm)	SHANK DIA. TOLERANCE
± 0.005	h6

X5070

2 FLUTE, MINIATURE, BALL NOSE 2刃, 微型, 球头

● G8A53

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65	
HARDNESS	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
0.4	50000	1900	50000	1700	45000	1500	40000	1200	35000	1050
0.5	50000	2400	50000	2100	45000	1900	40000	1500	35000	1300
0.6	50000	2900	50000	2500	45000	2200	40000	1800	35000	1600
0.8	50000	3900	50000	3300	45000	3000	40000	2400	35000	2100
1.0	50000	4800	50000	4200	45000	3800	40000	3000	35000	2600
1.2	50000	5100	48000	4300	43000	3850	38000	3000	34000	2700
1.5	50000	5400	48000	4500	43000	4000	37000	3100	33000	2700
2.0	49700	5700	47800	4800	40000	4000	35000	3150	32000	2800



RPM = REVOLUTION PER MIN.
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X5070

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- ▶ Deep slotting is possible by reduced neck.
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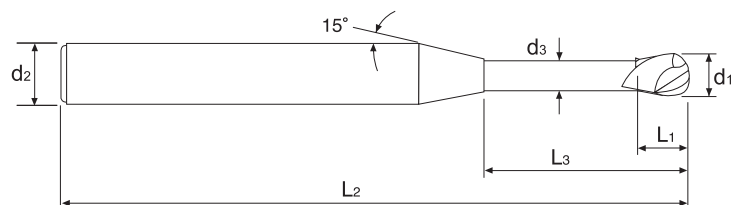
● PLAIN SHANK

● G8A46 Series

Unit : mm

EDP No.	R ±0.005	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A46805	0.3	0.1	4	0.1	0.3	45	0.085
G8A46806	0.3	0.1	4	0.1	0.5	45	0.085
G8A46002	0.1	0.2	4	0.2	0.5	45	0.17
G8A46977	0.1	0.2	4	0.2	1	45	0.17
G8A46958	0.1	0.2	4	0.2	1.5	45	0.17
G8A46003	0.15	0.3	4	0.3	1	45	0.27
G8A46959	0.15	0.3	4	0.3	2	45	0.27
G8A46986	0.15	0.3	4	0.3	3	45	0.27
G8A46004	0.2	0.4	4	0.4	1	45	0.37
G8A46960	0.2	0.4	4	0.4	2	45	0.37
G8A46961	0.2	0.4	4	0.4	3	45	0.37
G8A46981	0.2	0.4	4	0.4	4	45	0.37
G8A46987	0.2	0.4	4	0.4	5	45	0.37
G8A46005	0.25	0.5	4	0.4	2	45	0.45
G8A46979	0.25	0.5	4	0.4	4	45	0.45
G8A46963	0.25	0.5	4	0.4	6	5	0.45
G8A46964	0.25	0.5	4	0.4	8	45	0.45
G8A46957	0.3	0.6	4	0.5	2	45	0.55
G8A46988	0.3	0.6	4	0.5	3	45	0.55
G8A46915	0.3	0.6	4	0.5	4	45	0.55
G8A46989	0.3	0.6	4	0.5	5	45	0.55
G8A46006	0.3	0.6	3	0.5	6	35	0.55
G8A46916	0.3	0.6	4	0.5	6	45	0.55
G8A46917	0.3	0.6	4	0.5	8	45	0.55
G8A46990	0.3	0.6	4	0.5	10	45	0.55
G8A46918	0.4	0.8	4	0.6	2	45	0.75
G8A46919	0.4	0.8	4	0.6	4	45	0.75
G8A46008	0.4	0.8	4	0.6	6	45	0.75
G8A46901	0.4	0.8	4	0.6	8	45	0.75
G8A46965	0.4	0.8	4	0.6	10	45	0.75

RADIUS TOLERANCE(mm)	SHANK DIA. TOLERANCE
± 0.005	h6



X5070

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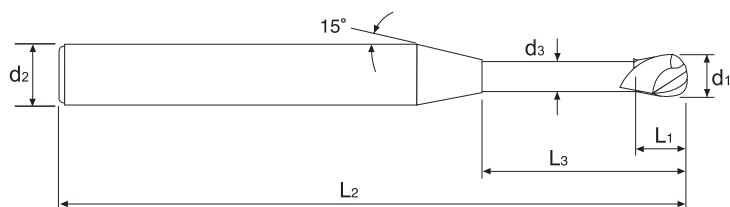
● PLAIN SHANK

● G8A46 Series

Unit : mm

EDP No.	R ±0.005	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A46920	0.5	1.0	4	0.8	3	45	0.95
G8A46921	0.5	1.0	4	0.8	4	45	0.95
G8A46923	0.5	1.0	4	0.8	5	45	0.95
G8A46010	0.5	1.0	4	0.8	6	45	0.95
G8A46924	0.5	1.0	4	0.8	7	45	0.95
G8A46902	0.5	1.0	4	0.8	8	45	0.95
G8A46925	0.5	1.0	4	0.8	9	45	0.95
G8A46903	0.5	1.0	4	0.8	10	45	0.95
G8A46904	0.5	1.0	4	0.8	12	45	0.95
G8A46926	0.5	1.0	4	0.8	14	50	0.95
G8A46927	0.5	1.0	4	0.8	16	50	0.95
G8A46966	0.5	1.0	4	0.8	20	55	0.95
G8A46982	0.6	1.2	4	1.0	6	45	1.15
G8A46012	0.6	1.2	4	1.0	8	45	1.15
G8A46983	0.6	1.2	4	1.0	10	45	1.15
G8A46905	0.6	1.2	4	1.0	12	45	1.15
G8A46930	0.75	1.5	4	1.2	6	45	1.45
G8A46015	0.75	1.5	4	1.2	8	45	1.45
G8A46931	0.75	1.5	4	1.2	10	45	1.45
G8A46906	0.75	1.5	4	1.2	12	45	1.45
G8A46992	0.75	1.5	4	1.2	14	50	1.45
G8A46907	0.75	1.5	4	1.2	16	50	1.45
G8A46932	0.75	1.5	4	1.2	20	55	1.45
G8A46939	1.0	2.0	4	1.6	4	45	1.95
G8A46940	1.0	2.0	4	1.6	6	45	1.95
G8A46020	1.0	2.0	4	1.6	8	45	1.95
G8A46941	1.0	2.0	4	1.6	10	45	1.95
G8A46942	1.0	2.0	4	1.6	12	45	1.95
G8A46943	1.0	2.0	4	1.6	14	50	1.95
G8A46909	1.0	2.0	4	1.6	16	50	1.95
G8A46993	1.0	2.0	4	1.6	18	55	1.95
G8A46910	1.0	2.0	4	1.6	20	55	1.95
G8A46944	1.0	2.0	4	1.6	22	60	1.95
G8A46945	1.0	2.0	4	1.6	25	60	1.95
G8A46967	1.0	2.0	4	1.6	30	70	1.95

RADIUS TOLERANCE(mm)	SHANK DIA. TOLERANCE
± 0.005	h6



X5070

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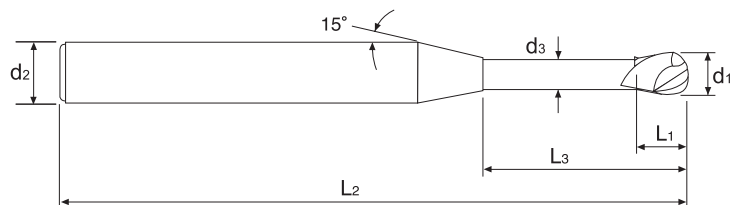
● PLAIN SHANK

● G8A46 Series

Unit : mm

EDP No.	R ±0.005	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A46946	1.5	3.0	6	2.4	8	50	2.85
G8A46947	1.5	3.0	6	2.4	10	50	2.85
G8A46948	1.5	3.0	6	2.4	12	50	2.85
G8A46984	1.5	3.0	6	2.4	14	55	2.85
G8A46030	1.5	3.0	6	2.4	16	55	2.85
G8A46985	1.5	3.0	6	2.4	18	60	2.85
G8A46911	1.5	3.0	6	2.4	20	60	2.85
G8A46968	1.5	3.0	6	2.4	25	65	2.85
G8A46969	1.5	3.0	6	2.4	30	70	2.85
G8A46970	1.5	3.0	6	2.4	35	80	2.85
G8A46949	2.0	4.0	6	3.2	10	60	3.85
G8A46950	2.0	4.0	6	3.2	12	60	3.85
G8A46040	2.0	4.0	6	3.2	16	60	3.85
G8A46912	2.0	4.0	6	3.2	20	65	3.85
G8A46913	2.0	4.0	6	3.2	25	70	3.85
G8A46971	2.0	4.0	6	3.2	30	70	3.85
G8A46972	2.0	4.0	6	3.2	35	80	3.85
G8A46973	2.0	4.0	6	3.2	40	90	3.85
G8A46974	2.0	4.0	6	3.2	45	90	3.85
G8A46975	2.0	4.0	6	3.2	50	100	3.85

RADIUS TOLERANCE(mm)	SHANK DIA. TOLERANCE
± 0.005	h6



X5070

2 FLUTE, BALL NOSE FOR RIB PROCESSING

2刃, 球头, 深腔加工用铣刀

● G8A46

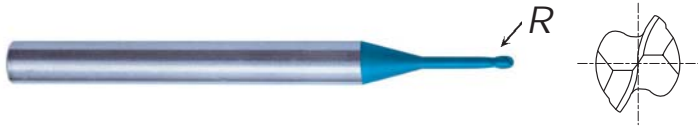
MATERIAL	ALLOY STEELS HEAT RESISTANT STEELS			HARDENED STEELS			HARDENED STEELS			COPPER		
HARDNESS	HRc 30 ~ HRc 45			HRc 45 ~ HRc 55			HRc 55 ~ HRc 65					
DIAMETER(mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)
0.3	48000-50000	480-520	0.010-0.017	48000-50000	440-460	0.008-0.014	46000-50000	390-420	0.007-0.013	48000-50000	690-790	0.002-0.023
0.4	48000-50000	720-790	0.013-0.032	48000-50000	450-550	0.011-0.026	46000-50000	400-460	0.010-0.024	48000-50000	1000-1150	0.019-0.048
0.5	34100-49500	600-870	0.007-0.028	31900-35200	490-540	0.005-0.023	31900-35200	440-480	0.005-0.021	49000-50000	1100-1400	0.010-0.042
0.6	28600-40700	590-850	0.007-0.034	26400-29700	480-540	0.006-0.028	26400-29700	400-480	0.006-0.025	42000-50000	1100-1700	0.011-0.050
0.8	22000-30800	640-890	0.016-0.064	19800-22000	490-550	0.013-0.052	19800-22000	440-500	0.012-0.048	31000-50000	1100-2250	0.024-0.096
1.0	17600-24200	600-850	0.008-0.080	15400-17600	470-540	0.007-0.065	15400-17600	440-500	0.006-0.060	24000-49500	1100-2200	0.012-0.120
1.2	14300-18700	590-780	0.024-0.032	12000-14000	480-540	0.020-0.026	12000-14000	420-480	0.018-0.024	28500-38500	1480-1950	0.036-0.048
1.5	11000-14300	580-760	0.031-0.048	10000-11500	480-540	0.025-0.039	10000-11500	420-480	0.023-0.036	17000-28500	1100-1950	0.046-0.072
2.0	8500-11000	590-800	0.024-0.160	7900-8800	470-530	0.020-0.130	7900-8800	440-480	0.018-0.120	12600-24000	1100-2150	0.036-0.240
3.0	5700-8200	730-1000	0.064-0.240	5300-5800	590-650	0.052-0.195	5300-5800	550-620	0.048-0.120	11900-17000	1850-2700	0.096-0.360
4.0	4300-6200	680-990	0.080-0.320	3950-4400	550-620	0.065-0.026	3850-4400	530-570	0.060-0.240	6600-12500	1260-2500	0.120-0.480



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

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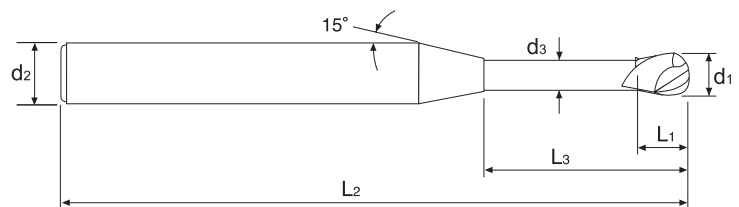
● PLAIN SHANK

● G8A54 Series

Unit : mm

EDP No.	R ±0.005	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A54005	0.25	0.5	6	0.5	1.5	50	0.45
G8A54901	0.25	0.5	6	0.5	3.3	50	0.45
G8A54006	0.3	0.6	6	0.6	2.0	50	0.55
G8A54902	0.3	0.6	6	0.6	4.0	50	0.55
G8A54008	0.4	0.8	6	0.8	2.5	50	0.75
G8A54903	0.4	0.8	6	0.8	5.5	50	0.75
G8A54010	0.5	1.0	6	1.0	3.3	50	0.95
G8A54904	0.5	1.0	6	1.0	6.7	50	0.95
G8A54905	0.5	1.0	6	1.0	12.0	50	0.95
G8A54012	0.6	1.2	6	1.2	4.4	50	1.15
G8A54906	0.6	1.2	6	1.2	8.0	50	1.15
G8A54015	0.75	1.5	6	1.5	5.0	50	1.45
G8A54907	0.75	1.5	6	1.5	9.7	50	1.45
G8A54908	0.75	1.5	6	1.5	15.0	50	1.45
G8A54020	1.0	2.0	6	2.0	6.0	50	1.95
G8A54909	1.0	2.0	6	2.0	13.0	50	1.95
G8A54910	1.0	2.0	6	2.0	20.0	60	1.95

RADIUS TOLERANCE(mm)	SHANK DIA. TOLERANCE
± 0.005	h6

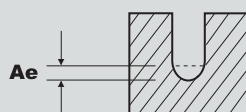


X5070

2 FLUTE, BALL NOSE FOR RIB PROCESSING 2刃, 球头, 深腔加工用铣刀

● G8A54

MATERIAL	ALLOY STEELS HEAT RESISTANT STEELS			HARDENED STEELS			HARDENED STEELS		
HARDNESS	HRc 30 ~ HRc 45			HRc 45 ~ HRc 55			HRc 55 ~ HRc 60		
DIAMETER(mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)	RPM	FEED	Ae (mm)
0.5	34100~49500	600~870	0.0064~0.0280	31900~35200	490~540	0.0052~0.0227	31900~35200	440~480	0.0048~0.0210
0.6	28600~40700	590~850	0.0072~0.0336	26400~29700	480~540	0.0058~0.0273	26400~29700	400~480	0.0054~0.0252
0.8	22000~30800	640~890	0.0160~0.0640	19800~22000	490~550	0.0130~0.0520	19800~22000	440~500	0.0120~0.0480
1.0	17600~24200	600~850	0.0080~0.0800	15400~17600	470~540	0.0065~0.0650	15400~17600	440~500	0.0060~0.0600
1.2	14300~18700	590~780	0.0240~0.0320	12000~14000	480~540	0.0195~0.0260	12000~14000	420~480	0.0180~0.0240
1.5	11000~14300	580~760	0.0304~0.0480	10000~11500	480~540	0.0247~0.0390	10000~11500	420~480	0.0228~0.0360
2.0	8500~11000	590~800	0.0240~0.1600	7900~8800	470~530	0.0195~0.1300	7900~8800	440~480	0.0180~0.1200



RPM = REVOLUTION PER MIN.
FEED = mm/min.



X5070
END MILLS

X5070

2 FLUTE, SHORT LENGTH, BALL NOSE

2刃, 短型, 球头



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Designed for high precision milling operation.
为高精度铣削设计
- ▶ Higher wear-resistance.
高耐磨性。

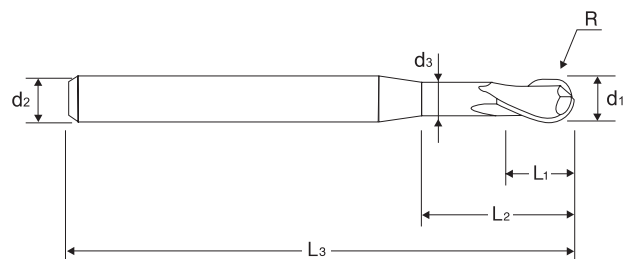
● SHORT LENGTH

● G8A28 Series

Unit : mm

EDP No.	R	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G8A28001	0.05	0.1	4	0.2		40	
G8A28002	0.1	0.2	4	0.3		40	
G8A28003	0.15	0.3	4	0.5		40	
G8A28004	0.2	0.4	4	0.6		40	
G8A28005	0.25	0.5	4	0.7		40	
G8A28006	0.3	0.6	4	0.9		40	
G8A28007	0.35	0.7	4	1.1		40	
G8A28008	0.4	0.8	4	1.2		40	
G8A28009	0.45	0.9	4	1.4		40	
G8A28010	0.5	1.0	6	1.5	3	50	0.95
G8A28015	0.75	1.5	6	2	4	50	1.45
G8A28020	1.0	2.0	6	2.5	5	50	1.95
G8A28025	1.75	2.5	6	3	7	50	2.4
G8A28030	1.5	3.0	6	4	10	60	2.85
G8A28040	2.0	4.0	6	5	10	60	3.85
G8A28050	2.5	5.0	6	6	12	60	4.85
G8A28060	3.0	6.0	6	7	15	60	5.85
G8A28901	4.0	8.0	8	9	15	60	7.7
G8A28080	4.0	8.0	8	9	15	80	7.7
G8A28902	5.0	10.0	10	11	25	60	9.7
G8A28100	5.0	10.0	10	11	25	80	9.7
G8A28120	6.0	12.0	12	14	25	80	11.7

BALL RADIUS TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ - 0,005	h6
over 6 ~	0 ~ - 0,010	



X5070

2 FLUTE, STUB CUT LENGTH, BALL NOSE WITH EXTENDED NECK

2刃, 超短, 球头, 颈部延伸



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Designed for high precision milling operation.
为高精度铣削设计
- ▶ Higher wear-resistance.
高耐磨性。

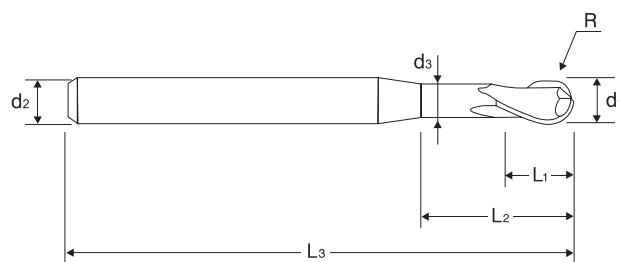
● PLAIN SHANK

● G8A38 Series

Unit : mm

EDP No.	R	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G8A38010	0.5	1	4	1	2.2	50	0.95
G8A38012	0.6	1.2	4	1.2	2.6	50	1.1
G8A38015	0.75	1.5	4	1.5	3.0	50	1.4
G8A38020	1.0	2	6	2	4.0	50	1.9
G8A38030	1.5	3	6	3	6.0	60	2.9
G8A38040	2.0	4	6	4	8.0	70	3.9
G8A38050	2.5	5	6	5	10.0	80	4.9
G8A38060	3.0	6	6	6	12.0	90	5.9
G8A38070	3.5	7	8	7	14.0	90	6.9
G8A38080	4.0	8	8	8	16.0	100	7.9
G8A38090	4.5	9	10	9	18.0	100	8.9
G8A38100	5.0	10	10	10	20.0	100	9.9
G8A38120	6.0	12	12	12	24.0	110	11.9
G8A38140	7.0	14	14	14	28.0	110	13.8
G8A38160	8.0	16	16	16	32.0	140	15.8
G8A38180	9.0	18	18	18	36.0	140	17.8
G8A38200	10.0	20	20	20	40.0	160	19.8
G8A38250	12.5	25	25	25	50.0	180	24.8

BALL RADIUS TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ - 0.005	
over 6 ~	0 ~ - 0.010	h6

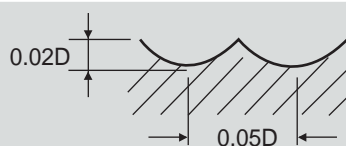




2 FLUTE, SHORT LENGTH, BALL NOSE
2刃, 短型, 球头

●G8A28, G8A38

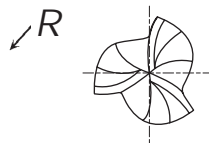
MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65		HRc 65 ~ HRc 70	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
1	50000	4800	50000	4200	45000	3800	40000	3000	35000	2600	35000	2300
2	49700	5700	47800	4800	40000	4000	35000	3150	32000	2800	28500	2300
3	33100	6000	31800	5300	26500	4000	23500	3150	21000	2800	19000	2300
4	24900	6000	23900	5300	20000	4000	17500	3150	16000	2800	14500	2300
5	18600	5800	17800	4900	15000	3750	13500	3050	11500	2550	10500	2100
6	13900	4850	13400	4100	11000	3100	10000	2500	8800	2150	8000	1750
8	11100	4200	10700	3500	9000	2700	8000	2150	7000	1850	6500	1550
10	9300	3700	8900	3100	7500	2400	6600	1900	5800	1650	5300	1380
12	6950	2950	6680	2500	5600	1900	5000	1550	4400	1250	4000	1050
16	5570	2650	5350	2200	4500	1700	4000	1350	3500	1000	3200	850
20	4450	2350	4300	1950	3600	1500	3200	1200	2800	800	2550	660



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

3 FLUTE, LONG LENGTH, BALL NOSE 3刃, 加长(铣刀), 球头



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Designed for high precision milling operation.
为高精度铣削设计
- ▶ Higher wear-resistance.
高耐磨性。

● PLAIN SHANK

● G8A59 Series

Unit : mm

EDP No.	R	MILL DIAMETER	SHANK DIAMETER	LENGTH OF CUT	OVERALL LENGTH
G8A59030	1.5	3.0	6	8.0	60
G8A59040	2	4.0	6	8.0	70
G8A59050	2.5	5.0	6	10.0	80
G8A59060	3	6.0	6	12.0	90
G8A59080	4	8.0	8	14.0	100
G8A59100	5	10.0	10	18.0	100
G8A59120	6	12.0	12	22.0	110
G8A59160	8	16.0	16	30.0	140
G8A59200	10	20.0	20	38.0	160

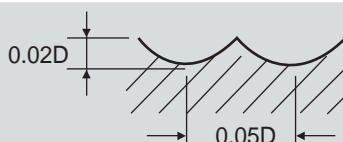
BALL RADIUS TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 6	0 ~ - 0.005	h6
over 6 ~	0 ~ - 0.010	

X5070

3 FLUTE, LONG LENGTH, BALL NOSE 3刃, 加长(铣刀), 球头

G8A59

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HRc 30 ~ HRc 40		HRc 40 ~ HRc 50		HRc 50 ~ HRc 55		HRc 55 ~ HRc 60		HRc 60 ~ HRc 65	
HARDNESS	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
DIAMETER(mm)										
3.0	32000	8600	26840	5800	19840	4280	18680	4040	12780	2760
4.0	24080	7700	20130	5430	14880	3880	14220	3650	9580	2500
5.0	20000	7250	16780	5430	12400	3690	11670	3470	8000	2370
6.0	18000	8570	15200	6220	12200	4500	11100	3830	7590	2460
8.0	13500	7350	11300	5250	9200	3980	8320	3350	5690	2130
10.0	10800	6530	9100	4590	7350	3450	6660	2870	4550	1960
12.0	9050	6100	7590	4260	6130	3190	5530	2400	3800	1640
16.0	6700	4600	5690	3250	4600	2480	4160	1800	2850	1230
20.0	5400	3600	4550	2620	3670	1980	3300	1440	2280	980



RPM = REVOLUTION PER MIN.
FEED = mm/min.

X5070

6 FLUTE, 45° HELIX, CORNER RADIUS

6刃, 45度螺旋角, 圆鼻铣刀



- ▶ Designed to machine high hardened materials.
为加工高硬度材料设计。
- ▶ Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削, 高速切削, 最新开发的原材料和涂层。
- ▶ Excellent workpiece finishes.
卓越的工件表面粗糙度。
- ▶ Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。
- ▶ Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。
- ▶ Higher wear-resistance.
高耐磨性。

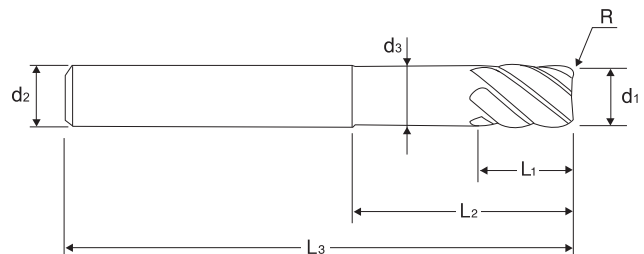
● PLAIN SHANK

● G8A39 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d ₁	SHANK DIAMETER d ₂	LENGTH OF CUT L ₁	LENGTH BELOW SHANK L ₂	OVERALL LENGTH L ₃	NECK DIAMETER d ₃
G8A39916	0.25	6	6	6	14	50	5.85
G8A39060	0.5	6	6	6	14	50	5.7
G8A39080	0.5	8	8	8	24	60	7.7
G8A39100	1.0	10	10	10	30	70	9.7
G8A39120	1.0	12	12	12	30	75	11.7
G8A39901	0.5	6	6	13		70	
G8A39910	0.5	□ 6	6	26		70	
G8A39902	0.5	8	8	19		90	
G8A39911	0.5	□ 8	8	36		90	
G8A39903	0.5	10	10	22		100	
G8A39904	1.0	10	10	22		100	
G8A39912	1.0	□ 10	10	46		100	
G8A39905	0.5	12	12	26		110	
G8A39906	1.0	12	12	26		110	
G8A39913	1.0	□ 12	12	56		110	
G8A39160	1.0	16	16	32		130	
G8A39907	1.5	16	16	32		130	
G8A39914	1.5	□ 16	16	66		130	
G8A39200	1.0	20	20	38		140	
G8A39908	1.5	20	20	38		140	
G8A39909	2.0	20	20	38		140	
G8A39915	2.0	□ 20	20	76		140	

MILL DIA. TOLERANCE(mm)	SHANK TOLERANCE
0 ~ - 0.02 [Extra Long Type '*': 0 ~ - 0.03]	h6

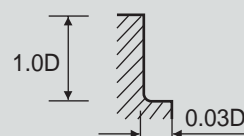
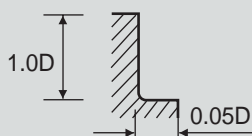


X5070

6 FLUTE, 45° HELIX, CORNER RADIUS 6刃, 45度螺旋角, 圆鼻铣刀

●G8A39

MATERIAL	HARDENED STEELS HEAT RESISTANT STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS		HARDENED STEELS	
	HARDNESS		HARDNESS		HARDNESS		HARDNESS		HARDNESS		HARDNESS	
DIAMETER(mm)	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED	RPM	FEED
6	24800	5350	23500	4900	16000	4900	13500	3300	10500	2100	8000	1450
8	20000	5500	19000	5000	12000	4600	10000	3100	8000	2000	6000	1400
10	16000	4900	15500	4500	9500	4100	8000	2900	6400	1800	4800	1300
12	13000	4500	12500	4100	8000	3800	6600	2500	5300	1600	4000	1150
16	10000	4000	9700	3700	6000	3400	5000	2300	4000	1250	3000	870
20	8000	3350	7800	3400	4800	3200	4000	2100	3200	1020	2400	690



※ The Feed, in long & extra long types, should be reduced by around 50%.

RPM = REVOLUTION PER MIN.
FEED = mm/min.





CRX

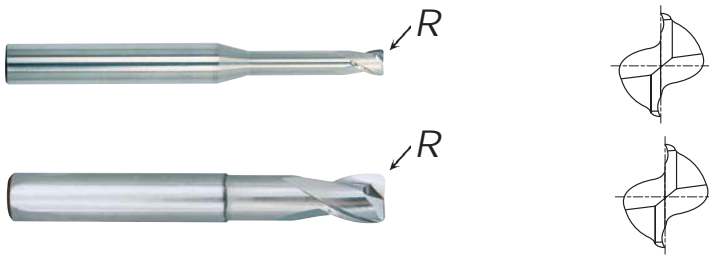
NANO GRAIN
CARBIDE END MILLS



CRX

3D IVE™

2 FLUTE, CORNER RADIUS FOR COPPER 2刃，铜加工用圆鼻铣刀



► Designed to machine copper and other non-ferrous materials.

适用于铜及其他非金属材料

► Suitable for dry cutting, high speed cutting thanks to newly developed raw-material and new coating.
适于干式切削，高速切削，最新开发的原材料和涂层。

► Excellent workpiece finishes.
卓越的工作表面粗糙度。

► Deep slotting is possible by reduced neck.
由于颈部稍细能够加工深槽。

► Corner radius against chipping in high speed machining.
弧型角可防止高速切削时崩刃。

► Higher wear-resistance.
高耐磨性。

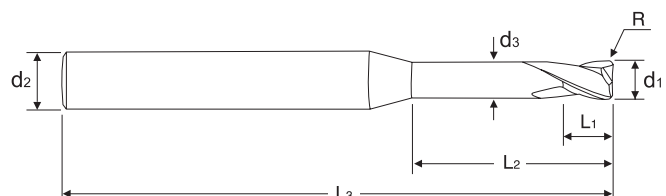
● STUB CUT LENGTH

● G7A64 Series

Unit : mm

EDP No.	CORNER RADIUS R	MILL DIAMETER d_1	SHANK DIAMETER d_2	LENGTH OF CUT L_1	LENGTH BELOW SHANK L_2	OVERALL LENGTH L_3	NECK DIAMETER d_3
G7A64020	0.5	2.0	6	3	9	55	1.95
G7A64030	0.5	3.0	6	4	9	55	2.85
G7A64901	0.5	3.0	6	4	16	55	2.85
G7A64902	0.5	3.0	6	4	20	55	2.85
G7A64040	0.5	4.0	6	5	12	55	3.85
G7A64903	0.5	4.0	6	5	16	55	3.85
G7A64904	0.5	4.0	6	5	20	55	3.85
G7A64060	0.5	6.0	6	7	20	60	5.85
G7A64905	1.0	6.0	6	7	20	60	5.85
G7A64906	1.5	6.0	6	7	20	60	5.85
G7A64080	1.0	8.0	8	9	25	60	7.70
G7A64907	1.5	8.0	8	9	25	60	7.70
G7A64100	1.0	10.0	10	11	32	70	9.70
G7A64908	1.5	10.0	10	11	32	70	9.70
G7A64910	0.5	12.0	12	12	38	80	11.70
G7A64120	1.0	12.0	12	12	38	80	11.70
G7A64909	1.5	12.0	12	12	38	80	11.70

MILL DIA. TOLERANCE(mm)		SHANK DIA. TOLERANCE
DIAMETER	TOLERANCE	
up to 5	0 ~ -0.012	h6
from 6 ~	0 ~ -0.015	

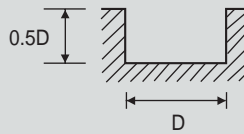




2 FLUTE, CORNER RADIUS FOR COPPER - SLOTTING 2刃, 铜加工用圆鼻铣刀 开槽

●G7A64

MATERIAL	WROUGHT ALUMINIUM(Si < 6%)		UNALLOYED COPPER		THERMOPLASTICS	
	DIAMETER(mm)	RPM	FEED	RPM	FEED	FEED
3	50000	2600	44500	2350	50000	2100
4	50000	3680	33400	2100	50000	2600
6	44500	4670	22300	2100	50000	4200
8	33400	4560	16700	2100	50000	5700
10	26700	4770	13370	2100	40000	5500
12	22200	4660	11100	2100	33500	5600
16	16700	4730	8350	2100	25000	5500
20	13400	4650	6700	2100	20000	5600
25	10700	4700	5350	2100	16000	5500



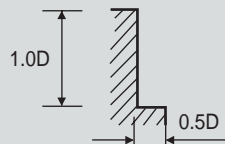
RPM = REVOLUTION PER MIN.
FEED = mm/min.



2 FLUTE, CORNER RADIUS FOR COPPER - SIDE CUTTING 2刃, 铜加工用圆鼻铣刀 侧铣

●G7A64

MATERIAL	WROUGHT ALUMINIUM(Si < 6%)		UNALLOYED COPPER		THERMOPLASTICS	
	DIAMETER(mm)	RPM	FEED	RPM	FEED	FEED
3	50000	4200	50000	3700	50000	3700
4	50000	5300	50000	4700	50000	5000
6	50000	7850	33400	4900	50000	7500
8	37500	7850	25000	4700	50000	8400
10	30000	7850	20000	4800	40000	8400
12	25000	7850	16700	4700	33500	8400
16	18500	6200	12500	4700	25000	8400
20	15000	7200	10000	4700	20000	8400
25	12000	6650	8000	4700	16000	8400



RPM = REVOLUTION PER MIN.
FEED = mm/min.