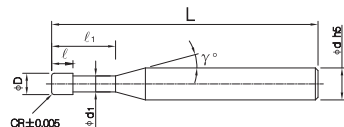


HGXRP 4-Flute Short Corner Radius End Mill



ØD	D Tol. (mm)
D<3	0~-0.010
3<D<6	0~-0.012
6<D<10	0~-0.015
10<D<12	0~-0.018

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	ΦD	CR	ℓ	ℓ ₁	Φd ₁	Υ/°	L	Φd
HGXRP4010R0.05 0450	1	R0.05	1	3	0.95	12	50	4
HGXRP4010R0.1 0450	1	R0.1	1	3	0.95	12	50	4
HGXRP4010R0.2 0450	1	R0.2	1	3	0.95	12	50	4
HGXRP4010R0.3 0450	1	R0.3	1	3	0.95	12	50	4
HGXRP4015R0.1 0450	1.5	R0.1	1.5	4.5	1.42	11	50	4
HGXRP4015R0.2 0450	1.5	R0.2	1.5	4.5	1.42	11	50	4
HGXRP4015R0.3 0450	1.5	R0.3	1.5	4.5	1.42	11	50	4
HGXRP4020R0.05 0450	2	R0.05	2	6	1.9	11	50	4
HGXRP4020R0.1 0450	2	R0.1	2	6	1.9	11	50	4
HGXRP4020R0.2 0450	2	R0.2	2	6	1.9	11	50	4
HGXRP4020R0.3 0450	2	R0.3	2	6	1.9	11	50	4
HGXRP4020R0.5 0450	2	R0.5	2	6	1.9	11	50	4
HGXRP4030R0.1 0450	3	R0.1	3	9	2.9	11	50	4
HGXRP4030R0.1 0660	3	R0.1	3	9	2.9	11	60	6
HGXRP4030R0.1 0675	3	R0.1	3	9	2.9	11	75	6
HGXRP4030R0.2 0450	3	R0.2	3	9	2.9	11	50	4
HGXRP4030R0.2 0650	3	R0.2	3	9	2.9	11	50	6
HGXRP4030R0.2 0660	3	R0.2	3	9	2.9	11	60	6
HGXRP4030R0.2 0675	3	R0.2	3	9	2.9	11	75	6
HGXRP4030R0.3 0450	3	R0.3	3	9	2.9	11	50	4
HGXRP4030R0.3 0660	3	R0.3	3	9	2.9	11	60	6
HGXRP4030R0.3 0675	3	R0.3	3	9	2.9	11	75	6
HGXRP4030R0.5 0450	3	R0.5	3	9	2.9	11	50	4
HGXRP4030R0.5 0650	3	R0.5	3	9	2.9	11	50	6
HGXRP4030R0.5 0660	3	R0.5	3	9	2.9	11	60	6
HGXRP4030R0.5 0675	3	R0.5	3	9	2.9	11	75	6

HGXRP 4-Flute Short Corner Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HGXRP4040R0.1 0450	4	R0.1	4	12	3.9	—	50	4
HGXRP4040R0.1 0660	4	R0.1	4	12	3.9	11	60	6
HGXRP4040R0.1 0675	4	R0.1	4	12	3.9	11	75	6
HGXRP4040R0.2 0450	4	R0.2	4	12	3.9	—	50	4
HGXRP4040R0.2 0650	4	R0.2	4	12	3.9	11	50	6
HGXRP4040R0.2 0660	4	R0.2	4	12	3.9	11	60	6
HGXRP4040R0.2 0675	4	R0.2	4	12	3.9	11	75	6
HGXRP4040R0.3 0450	4	R0.3	4	12	3.9	—	50	4
HGXRP4040R0.3 0660	4	R0.3	4	12	3.9	11	60	6
HGXRP4040R0.3 0675	4	R0.3	4	12	3.9	11	75	6
HGXRP4040R0.5 0450	4	R0.5	4	12	3.9	—	50	4
HGXRP4040R0.5 0660	4	R0.5	4	12	3.9	11	60	6
HGXRP4040R0.5 0675	4	R0.5	4	12	3.9	11	75	6
HGXRP4040R1.0 0450	4	R1	4	12	3.9	—	50	4
HGXRP4040R1.0 0660	4	R1	4	12	3.9	11	60	6
HGXRP4040R1.0 0675	4	R1	4	12	3.9	11	75	6
HGXRP4060R0.1 0650	6	R0.1	6	18	5.85	—	50	6
HGXRP4060R0.1 0660	6	R0.1	6	18	5.85	—	60	6
HGXRP4060R0.1 0675	6	R0.1	6	18	5.85	—	75	6
HGXRP4060R0.2 0650	6	R0.2	6	18	5.85	—	50	6
HGXRP4060R0.2 0660	6	R0.2	6	18	5.85	—	60	6
HGXRP4060R0.2 0675	6	R0.2	6	18	5.85	—	75	6
HGXRP4060R0.2 06100	6	R0.2	6	18	5.85	—	100	6
HGXRP4060R0.3 0650	6	R0.3	6	18	5.85	—	50	6
HGXRP4060R0.3 0660	6	R0.3	6	18	5.85	—	60	6
HGXRP4060R0.3 0675	6	R0.3	6	18	5.85	—	75	6
HGXRP4060R0.3 06100	6	R0.3	6	18	5.85	—	100	6
HGXRP4060R0.5 0650	6	R0.5	6	18	5.85	—	50	6
HGXRP4060R0.5 0660	6	R0.5	6	18	5.85	—	60	6
HGXRP4060R0.5 0675	6	R0.5	6	18	5.85	—	75	6
HGXRP4060R0.5 06100	6	R0.5	6	18	5.85	—	100	6
HGXRP4060R1.0 0650	6	R1	6	18	5.85	—	50	6



HGXRP 4-Flute Short Corner Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HGXRP4060R1.0 0660	6	R1	6	18	5.85	—	60	6
HGXRP4060R1.0 0675	6	R1	6	18	5.85	—	75	6
HGXRP4060R1.0 06100	6	R1	6	18	5.85	—	100	6
HGXRP4080R0.1 0860	8	R0.1	8	24	7.8	—	60	8
HGXRP4080R0.1 0875	8	R0.1	8	24	7.8	—	75	8
HGXRP4080R0.1 08100	8	R0.1	8	24	7.8	—	100	8
HGXRP4080R0.2 0860	8	R0.2	8	24	7.8	—	60	8
HGXRP4080R0.2 0875	8	R0.2	8	24	7.8	—	75	8
HGXRP4080R0.2 08100	8	R0.2	8	24	7.8	—	100	8
HGXRP4080R0.3 0860	8	R0.3	8	24	7.8	—	60	8
HGXRP4080R0.3 0875	8	R0.3	8	24	7.8	—	75	8
HGXRP4080R0.3 08100	8	R0.3	8	24	7.8	—	100	8
HGXRP4080R0.5 0860	8	R0.5	8	24	7.8	—	60	8
HGXRP4080R0.5 0875	8	R0.5	8	24	7.8	—	75	8
HGXRP4080R0.5 08100	8	R0.5	8	24	7.8	—	100	8
HGXRP4080R1.0 0860	8	R1	8	24	7.8	—	60	8
HGXRP4080R1.0 0875	8	R1	8	24	7.8	—	75	8
HGXRP4080R1.0 08100	8	R1	8	24	7.8	—	100	8
HGXRP4100R0.2 1075	10	R0.2	10	30	9.8	—	75	10
HGXRP4100R0.2 10100	10	R0.2	10	30	9.8	—	100	10
HGXRP4100R0.5 1075	10	R0.5	10	30	9.8	—	75	10
HGXRP4100R0.5 10100	10	R0.5	10	30	9.8	—	100	10
HGXRP4100R1.0 1075	10	R1	10	30	9.8	—	75	10
HGXRP4100R1.0 10100	10	R1	10	30	9.8	—	100	10
HGXRP4100R2.0 1075	10	R2	10	30	9.8	—	75	10
HGXRP4120R0.5 1275	12	R0.5	12	36	11.7	—	75	12
HGXRP4120R0.5 12100	12	R0.5	12	36	11.7	—	100	12

HGXRP 4-Flute Short Corner Radius End Mill

Unit : mm

Type No.	Dia.	Corner Radius	Length of Cut	Under Neck Length	Neck Dia.	Neck Taper Angle	Overall Length	Shank Dia.
	φD	CR	ℓ	ℓ ₁	φd ₁	γ/°	L	φd
HGXRP4120R1.0 1275	12	R1	12	36	11.7	—	75	12
HGXRP4120R1.0 12100	12	R1	12	36	11.7	—	100	12
HGXRP4120R2.0 1275	12	R2	12	36	11.7	—	75	12
HGXRP4120R2.0 12100	12	R2	12	36	11.7	—	100	12

TABLE OF RECOMMENDED MILLING MATERIALS

○ Very suitable ◯ Suitable

CARBON STEELS	ALLOY STEELS	PREHARDENED STEELS, HARDENED STEELS				STAINLESS STEELS	CAST IRON	COPPER ALLOYS	ALUMINUM ALLOY	GRAPHITE	TITANIUM ALLOY	HEAT RESISTANT ALLOYS	PLASTIC
PREHARDENED STEELS	TOOL STEELS						DUCTILE CAST IRON						
~40HRC		~50HRC	~55HRC	~60HRC	~65HRC	~35HRC	~350HB						
○		○	○			○	○	○	○		○	○	





Cutting Parameter

HGXP 4-Flute Short Corner Radius End Mill Face Milling

Workpiece	Carbon Steels、Alloy Steels (≤35HRC)				Pre-Hardened Steels (35~45HRC)				Hardened Steels (45-55HRC)			
Type No.	n min ⁻¹	Vf mm/min	ap mm	ae mm	n min ⁻¹	Vf mm/min	ap mm	ae mm	n min ⁻¹	Vf mm/min	ap mm	ae mm
HGXRP4010R_	20000	1800	0.05	0.5	18000	1620	0.05	0.4	16000	1440	0.05	0.32
HGXRP4015R_	17950	2000	0.05	0.65	16155	1800	0.05	0.52	14360	1600	0.05	0.4
HGXRP4020R_	15890	2200	0.1	1	14301	1980	0.1	0.8	12712	1760	0.1	0.64
HGXRP4030R_	12285	2400	0.1	1.5	11056.5	2160	0.1	1.2	9828	1920	0.1	0.96
HGXRP4040R_	9680	2800	0.2	2	8712	2520	0.2	1.6	7744	2240	0.2	1.08
HGXRP4060R_	7260	3000	0.2	3	6534	2700	0.2	2.4	5808	2400	0.2	1.96
HGXRP4080R_	6050	3500	0.2	4	5445	3150	0.2	3.2	4840	2800	0.2	2.52
HGXRP4100R_	5445	3500	0.2	5	4900.5	3150	0.2	4	4356	2800	0.2	3.2
HGXRP4120R_	4840	3600	0.2	6	4356	3240	0.2	4.8	3872	2880	0.2	3.84

HGXP 4-Flute Short Corner Radius End Mill Z-Level Milling

Workpiece	Carbon Steels、Alloy Steels (≤35HRC)				Pre-Hardened Steels (35~45HRC)				Hardened Steels (45-55HRC)			
Type No.	n min ⁻¹	Vf mm/min	ap mm	ae mm	n min ⁻¹	Vf mm/min	ap mm	ae mm	n min ⁻¹	Vf mm/min	ap mm	ae mm
HGXRP4010R_	20000	1800	0.05	0.03	18000	1620	0.05	0.03	16000	1440	0.05	0.02
HGXRP4015R_	17950	2000	0.05	0.05	16155	1800	0.05	0.05	14360	1600	0.05	0.02
HGXRP4020R_	15890	2200	0.1	0.05	14301	1980	0.1	0.05	12712	1760	0.1	0.03
HGXRP4030R_	12285	2400	0.1	0.05	11056.5	2160	0.1	0.05	9828	1920	0.1	0.03
HGXRP4040R_	9680	2800	0.2	0.05	8712	2520	0.2	0.05	7744	2240	0.2	0.05
HGXRP4060R_	7260	3000	0.2	0.08	6534	2700	0.2	0.08	5808	2400	0.2	0.05
HGXRP4080R_	6050	3500	0.2	0.08	5445	3150	0.2	0.08	4840	2800	0.2	0.05
HGXRP4100R_	5445	3500	0.2	0.1	4900.5	3150	0.2	0.1	4356	2800	0.2	0.05
HGXRP4120R_	4840	3600	0.2	0.1	4356	3240	0.2	0.1	3872	2880	0.2	0.05

- For Z-level and face milling, the recommended axial depth of cut (ap) is 0.3 × CR.
- This item can be used for side milling and slotting applications.