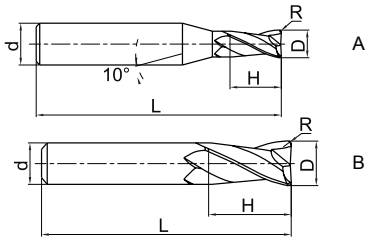
GM-2R series for general machining · GM-2R Serie für allgemeine Bearbeitung

2-flute radius end mills with straight shank
2-Schneiden Radius-Schaftfräser und Zylinderschaft



Type Typ	Dimension(mm) Abmessungen					Teeth Zähne Z	Grade Sorte KMG 303
	D	R	d	H	L		
GM-2R-D1.0R0.2	1.0	0.2	4	3	50	2	○
GM-2R-D1.5R0.2	1.5	0.2	4	4	50	2	○
GM-2R-D2.0R0.2	2.0	0.2	4	6	50	2	○
GM-2R-D2.0R0.5	2.0	0.5	4	6	50	2	○
GM-2R-D2.5R0.2	2.5	0.2	4	8	50	2	○
GM-2R-D2.5R0.5	2.5	0.5	4	8	50	2	○
GM-2R-D3.0R0.2	3.0	0.2	4	8	50	2	○
GM-2R-D3.0R0.3	3.0	0.3	4	8	50	2	○
GM-2R-D3.0R0.5	3.0	0.5	4	8	50	2	○
GM-2R-D4.0R0.2	4.0	0.2	4	11	50	2	○
GM-2R-D4.0R0.3	4.0	0.3	4	11	50	2	○
GM-2R-D4.0R0.5	4.0	0.5	4	11	50	2	○
GM-2R-D4.0R1.0	4.0	1.0	4	11	50	2	○
GM-2R-D5.0R0.3	5.0	0.3	6	13	50	2	○
GM-2R-D5.0R0.5	5.0	0.5	6	13	50	2	○
GM-2R-D5.0R1.0	5.0	1.0	6	13	50	2	○
GM-2R-D6.0R0.3	6.0	0.3	6	16	50	2	○
GM-2R-D6.0R0.5	6.0	0.5	6	16	50	2	○
GM-2R-D6.0R1.0	6.0	1.0	6	16	50	2	○
GM-2R-D8.0R0.3	8.0	0.3	8	20	60	2	○
GM-2R-D8.0R0.5	8.0	0.5	8	20	60	2	○
GM-2R-D8.0R1.0	8.0	1.0	8	20	60	2	○
GM-2R-D10.0R0.5	10.0	0.5	10	25	75	2	○
GM-2R-D10.0R1.0	10.0	1.0	10	25	75	2	○
GM-2R-D10.0R1.5	10.0	1.5	10	25	75	2	●
GM-2R-D10.0R2.0	10.0	2.0	10	25	75	2	○
GM-2R-D12.0R0.5	12.0	0.5	12	30	75	2	○
GM-2R-D12.0R1.0	12.0	1.0	12	30	75	2	○
GM-2R-D12.0R1.5	12.0	1.5	12	30	75	2	○
GM-2R-D12.0R2.0	12.0	2.0	12	30	75	2	●

Material Overview · Material Übersicht

✔ = Very suitable · Sehr empfohlen
✔ = Suitable · Empfohlen

Workpiece material Werkstückstoff											
Carbon steel Kohlenstoff Stahl	Alloy steel Legierter Stahl	Quenched and tempered steel · Vergüteter Stahl		Hardened steel · Gehärteter Stahl		Stainless steel · Rostfreier Stahl	Cast iron, Nodular cast iron Grauguss GGG	Copper alloy Kupfer Leg	Aluminum alloy Alu Leg	Titanium alloy Titan Leg	Heat resist alloy warmfeste Leg
		~40HRC	~50HRC	~55HRC	~68HRC						
✔	✔	✔	✔			✔	✔			✔	✔

● Ex Stock / ab Lager ○ On demand / auf Anfrage

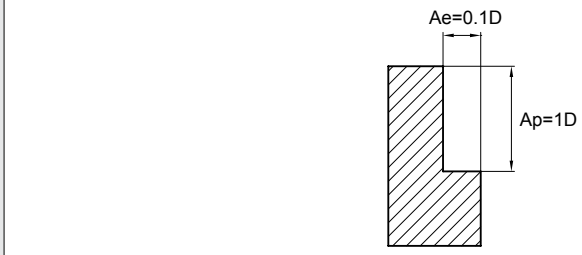
Recommended cutting data · Empfohlene Schnittdaten

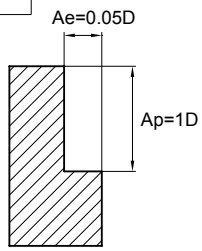
GM-2R

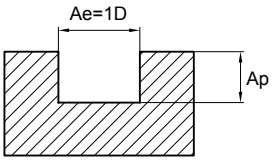
Workpiece material Werkstück-material	Cast iron, Nodular cast iron Grauguss GGG		Carbon steel, Alloy steel Kohlenstoffstahl Leg. Stahl ~750N/mm²		Carbon steel, Alloy steel Kohlenstoffstahl Leg. Stahl ~30HRC		Pre-hardened steel, Quenched and tempered steel Vergüteter Stahl ~40HRC		Stainless steel Rostfreier Stahl		Pre-hardened steel, Quenched and tempered steel Vergüteter Stahl ~50HRC	
Diameter Ø Durchmesser (mm)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)
1	20000	200	20000	200	20000	160	20000	160	20000	60	20000	120
2	15000	320	15000	320	15000	290	15000	280	11150	84	13000	180
3	14000	545	14000	545	13000	510	10600	420	7500	120	8500	330
4	10800	560	10800	560	10000	520	8000	430	5500	130	6500	335
5	8200	580	8200	580	7600	540	6400	450	4500	130	5000	355
6	7000	600	7000	600	6400	550	5300	460	3700	140	4200	360
8	5200	600	5200	600	4800	550	4000	460	2800	140	3200	365
10	4200	580	4200	580	3800	540	3200	445	2200	140	2500	350
12	3500	580	3500	580	3200	540	2650	445	1850	140	2100	350

Max. cutting depth

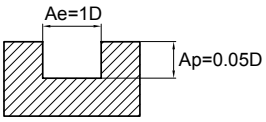
max Schnitttiefe







Milling slot · Nutenfräsen	
Ø	Ap
Ø1≤D<Ø3	0.15D
Ø3≤D	0.3D



1. The above table shows the standard value of side milling. When slot milling, of rotating speed 50%~70% and feed rate like mentioned above 40%~60%.
2. Please select high precise machine and tool holder.
3. Please use air blow or cutting liquid with high mist retardant property.
4. Down milling is recommended in side milling.
5. Vibration and unusual noise may be generated if the machine rigidity and workpiece fixture stability is low, please reduce the rotating speed and feed rate like mentioned above.
6. Make overhang as short as possible if no interference.

1. Die obige Tabelle zeigt Standard Werte für das Eckfräsen. Bei Nutenfräsen, Schnittgeschwindigkeit auf 50-70% und den Vorschub auf 40-60% reduzieren.
2. Bitte präzise Maschinen und Werkzeughalter verwenden.
3. Bitte Luftkühlung oder Schneidflüssigkeit benutzen.
4. Empfohlene Fräsmethode: Gleichlauffräsen.
5. Bei Vibrationen oder unüblichen Geräuschen reduzieren Sie die Schnittdaten (wie oben empfohlen) entsprechend.
6. Werkzeugauskragung so kurz wie möglich wählen.