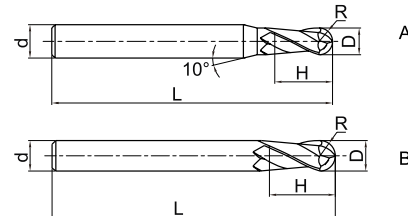


Milling · Fräsen

Solid Carbide end mills · Vollhartmetallschaftfräser

GM-2B

2-flute ball nose end mills with straight shank
2-Schneiden Kugelkopffräser mit Zylinderschaft



Type Typ	Dimension(mm) Abmessungen					Teeth Zähne Z	Geometry Ausführung	Grade Sorte KMG 303
	D	R	d	H	L			
GM-2B-R0.5S	1.0	0.5	4	2	50	2	A	●
GM-2B-R0.75S	1.5	0.75	4	3	50	2	A	●
GM-2B-R1.0S	2.0	1.0	4	4	50	2	A	●
GM-2B-R1.25S	2.5	1.25	4	5	50	2	A	●
GM-2B-R1.5S	3.0	1.5	4	6	50	2	A	●
GM-2B-R2.0S	4.0	2.0	4	8	50	2	B	●
GM-2B-R0.5	1.0	0.5	6	2	50	2	A	●
GM-2B-R0.75	1.5	0.75	6	3	50	2	A	●
GM-2B-R1.0	2.0	1.0	6	4	50	2	A	●
GM-2B-R1.25	2.5	1.25	6	5	50	2	A	●
GM-2B-R1.5	3.0	1.5	6	6	50	2	A	●
GM-2B-R1.75	3.5	1.75	6	8	50	2	A	●
GM-2B-R2.0	4.0	2.0	6	8	50	2	A	●
GM-2B-R2.5	5.0	2.5	6	10	50	2	A	●
GM-2B-R2.75	5.5	2.75	6	12	50	2	A	●
GM-2B-R3.0	6.0	3.0	6	12	50	2	B	●
GM-2B-R3.5	7.0	3.5	8	14	60	2	A	●
GM-2B-R4.0	8.0	4.0	8	16	60	2	B	●
GM-2B-R4.5	9.0	4.5	10	18	75	2	A	●
GM-2B-R5.0	10	5.0	10	20	75	2	B	●
GM-2B-R6.0	12	6.0	12	24	75	2	B	●
GM-2B-R7.0	14	7.0	14	28	75	2	B	●
GM-2B-R8.0	16	8.0	16	32	100	2	B	●
GM-2B-R10.0	20	10.0	20	40	100	2	B	●

Material Overview · Material Übersicht

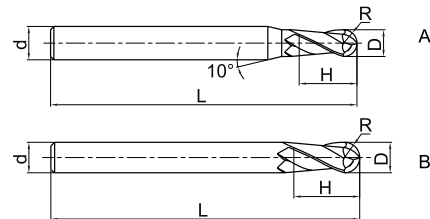
✓ = Very suitable · Sehr empfohlen
✓ = Suitable · Empfohlen

KMG303	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

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

2-flute ball nose end mills with with straight shank and long cutting edge
 2-Schneiden Kugelkopfräser mit langer Schneide und Zylinderschaft



Type Typ	Dimension (mm) Abmessungen					Teeth Zähne Z	Geometry Ausführung	Grade Sorte KMG 303
	D	R	d	H	L			
GM-2BL-R1.0	2.0	1.0	6.0	4.0	75	2	A	●
GM-2BL-R1.25	2.5	1.25	6.0	5.0	75	2	A	●
GM-2BL-R1.5	3.0	1.5	6.0	6.0	75	2	A	●
GM-2BL-R1.75	3.5	1.75	6.0	8.0	75	2	A	●
GM-2BL-R2.0	4.0	2.0	6.0	8.0	75	2	A	●
GM-2BL-R2.5	5.0	2.5	6.0	10.0	75	2	A	●
GM-2BL-R2.75	5.5	2.75	6.0	12.0	75	2	A	●
GM-2BL-R3.0	6.0	3.0	6.0	12.0	75	2	B	●
GM-2BL-R3.5	7.0	3.5	8.0	14.0	75	2	A	●
GM-2BL-R4.0	8.0	4.0	8.0	16.0	100	2	B	●
GM-2BL-R4.5	9.0	4.5	10.0	18.0	100	2	A	●
GM-2BL-R5.0	10.0	5.0	10.0	20.0	100	2	B	●
GM-2BL-R6.0	12.0	6.0	12.0	24.0	100	2	B	●
GM-2BL-R7.0	14.0	7.0	14.0	28.0	100	2	B	●
GM-2BL-R8.0	16.0	8.0	16.0	32.0	150	2	B	●
GM-2BL-R10.0	20.0	10.0	20.0	40.0	150	2	B	●

B

Solid Carbide end mills
 Vollhartmetallschaftfräser

Material Overview · Material Übersicht

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

KMG303

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						
✓	✓	✓	✓			✓	✓				

Code key B231
 ISO Kennzeichen

Cutting data B431-456
 Schnittdaten

Graphics identification & application B232
 Graphische Werkzeug- & Anwendungsbeschr.

Order form for non-standard products B497-B498
 Bestellformular für Sonderwerkzeuge

Milling · Fräsen

Solid Carbide end mills · Vollhartmetallschaftfräser

Recommended cutting data · Empfohlene Schnittdaten

GM-2B | GM-2BL

Workpiece material Werkstückstoff	Cast iron, Nodular cast iron Grauguss GGG		Carbon steel, Alloy steel Kohlenstoffstahl Leg. Stahl ~750N/mm ²		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)
R0.5	40000	800	40000	800	38000	700	32000	320	22300	200	25000	275
R1.0	24000	900	24000	900	19000	760	16000	400	11150	230	13000	275
R1.5	15500	950	15500	950	12750	760	10600	450	7400	290	8500	280
R2.0	11500	950	11500	950	9550	760	8000	550	5550	370	6500	370
R2.5	9500	1050	9500	1050	7650	800	6400	550	4450	370	5000	375
R3.0	8000	1050	8000	1050	6400	800	5300	580	3700	390	4200	390
R4.0	6000	1300	6000	1300	4800	950	4000	700	2750	455	3200	440
R5.0	4800	1200	4800	1200	3800	900	3200	650	2200	430	2500	440
R6.0	4000	1100	4000	1100	3200	840	2650	610	1850	430	2100	420
R8.0	3000	1050	3000	1050	2400	800	2000	600	1350	380	1600	375
R10.0	2400	950	2400	950	1900	680	1600	560	1100	370	1250	330

Max. cutting depth max Schnitttiefe	

1. Please select high precise machine and tool holder.
2. Please use air blow or cutting liquid with high mist retardant property.
3. 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.
4. Make overhang as short as possible if no interference.

1. Bitte präzise Maschine und Werkzeugaufnahmen wählen.
2. Als Kühlmittel bitte Luft oder MQL (Minimalmengen) verwenden..
3. Bei Vibrationen oder unüblichen Geräuschen reduzieren Sie die Schnittdaten (wie oben empfohlen) entsprechend.
4. Werkzeugauskrantung so kurz wie möglich wählen.

B

Solid Carbide end mills
Vollhartmetallschaftfräser