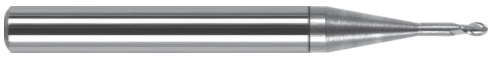
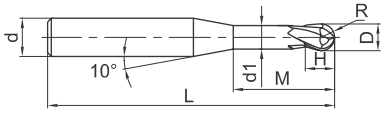
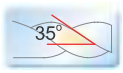
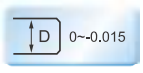
NM-2BP series for machining cooper · NM-2BP Serie für die Bearbeitung von Kupfer

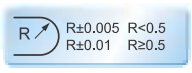
2-flute short cutting edge ball nose micro end mills with straight shank and long
2-Schneiden Micro Kugelkopffräser, mit kurzer Schneide und Zylinderschaft (lang)











Type Typ	Dimension(mm) Abmessungen							Teeth Zähne Z	Grade Sorte KMG309
	D	R	H	d_1	M	d	L		
NM-2BP-R0.25-M04	0.5	0.25	0.7	0.45	4.0	4.0	50	2	●
NM-2BP-R0.25-M06	0.5	0.25	0.7	0.45	6.0	4.0	50	2	●
NM-2BP-R0.3-M04	0.6	0.3	0.9	0.55	4.0	4.0	50	2	●
NM-2BP-R0.3-M06	0.6	0.3	0.9	0.55	6.0	4.0	50	2	●
NM-2BP-R0.3-M08	0.6	0.3	0.9	0.55	8.0	4.0	50	2	●
NM-2BP-R0.4-M04	0.8	0.4	1.2	0.75	4.0	4.0	50	2	●
NM-2BP-R0.4-M06	0.8	0.4	1.2	0.75	6.0	4.0	50	2	●
NM-2BP-R0.4-M08	0.8	0.4	1.2	0.75	8.0	4.0	50	2	●
NM-2BP-R0.4-M10	0.8	0.4	1.2	0.75	10.0	4.0	50	2	●
NM-2BP-R0.5-M04	1.0	0.5	1.5	0.95	4.0	4.0	50	2	●
NM-2BP-R0.5-M06	1.0	0.5	1.5	0.95	6.0	4.0	50	2	●
NM-2BP-R0.5-M08	1.0	0.5	1.5	0.95	8.0	4.0	50	2	●
NM-2BP-R0.5-M10	1.0	0.5	1.5	0.95	10.0	4.0	50	2	●
NM-2BP-R0.5-M12	1.0	0.5	1.5	0.95	12.0	4.0	50	2	●
NM-2BP-R0.75-M08	1.5	0.75	2.3	1.45	8.0	4.0	50	2	●
NM-2BP-R0.75-M16	1.5	0.75	2.3	1.45	16.0	4.0	50	2	●
NM-2BP-R1.0-M06	2.0	1.0	3.0	1.95	6.0	4.0	50	2	●
NM-2BP-R1.0-M08	2.0	1.0	3.0	1.95	8.0	4.0	50	2	●
NM-2BP-R1.0-M10	2.0	1.0	3.0	1.95	10.0	4.0	50	2	●
NM-2BP-R1.0-M12	2.0	1.0	3.0	1.95	12.0	4.0	50	2	●
NM-2BP-R1.0-M16	2.0	1.0	3.0	1.95	16.0	4.0	50	2	●
NM-2BP-R1.0-M20	2.0	1.0	3.0	1.95	20.0	4.0	60	2	●
NM-2BP-R1.5-M10	3.0	1.5	4.5	2.85	10.0	6.0	50	2	●
NM-2BP-R1.5-M20	3.0	1.5	4.5	2.85	20.0	6.0	60	2	●
NM-2BP-R2.0-M10	4.0	2.0	6.0	3.85	10.0	6.0	60	2	●
NM-2BP-R2.0-M16	4.0	2.0	6.0	3.85	16.0	6.0	60	2	●
NM-2BP-R2.0-M20	4.0	2.0	6.0	3.85	20.0	6.0	60	2	●
NM-2BP-R2.0-M25	4.0	2.0	6.0	3.85	25.0	6.0	60	2	●
NM-2BP-R2.5-M16	5.0	2.5	7.5	4.85	16.0	6.0	60	2	●
NM-2BP-R2.5-M25	5.0	2.5	7.5	4.85	25.0	6.0	70	2	●

Material Overview · Material Übersicht

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

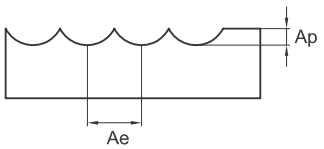
KMG309

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	~60HRC	~68HRC						
								✔			

Code key R331
ISO Kennzeichen
Cutting data R472-R476
Schnittdaten
Graphics identification & application R333
Graphische Werkzeug- & Anwendungsbeschr.
Order form for non-standard products R497-R498
Bestellformular für Sonderwerkzeuge

Recommended cutting data · Empfohlene Schnittdaten

NM-2BP

Workpiece material Werkstückstoff		Copper / Copper alloy Kupfer / Kupferlegierung			
Diameter Ø Durchmesser (mm)	Effective length Effektive Länge (mm)	Rotating Drehzahl (min^{-1})	Feed Vorschub (mm/min)	Ap (mm)	Ae (mm)
R0.25	4	40000	750	0.01	0.025
	6	36000	500	0.008	0.02
R0.3	4	40000	900	0.012	0.03
	6	40000	750	0.010	0.02
	8	30000	400	0.008	0.01
R0.4	4	40000	1050	0.016	0.04
	6	40000	800	0.012	0.03
	8	40000	500	0.01	0.02
	10	30000	400	0.008	0.01
R0.5	4	40000	1050	0.02	0.05
	6	40000	800	0.016	0.04
	8	40000	500	0.014	0.03
	10	33000	400	0.012	0.02
	12	35000	300	0.010	0.010
R0.75	8	40000	900	0.03	0.075
	16	20000	400	0.015	0.04
R1.0	6	40000	1100	0.04	0.10
	8	40000	900	0.034	0.08
	10	40000	750	0.028	0.065
	12	40000	500	0.022	0.05
	16	30000	400	0.018	0.04
	20	20000	300	0.012	0.03
R1.5	10	40000	1100	0.06	0.15
	20	32000	600	0.03	0.08
R2.0	10	32000	1100	0.08	0.20
	16	32000	900	0.06	0.16
	20	32000	600	0.04	0.12
	25	20000	400	0.02	0.08
R2.5	16	25000	1250	0.10	0.25
	25	20000	900	0.06	0.12
Max. cutting depth max Schnitttiefe					

1. Please select high precise machine and tool holder.
2. Please use water-soluble cutting liquid.
3. Make overhang as short as possible if no interference.

1. Bitte Maschine und Werkzeugaufnahme mit hoher Präzission und Stabilität wählen.
2. Bitte wasserlösliche Kühlmittel verwenden.
3. Die Werkzeugauskragung so kurz wie möglich wählen.