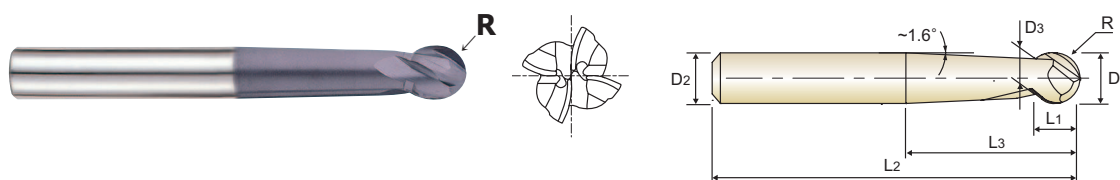


CARBIDE, 4 FLUTE LONG LENGTH BALL NOSE-MMC

VOLLHARTMETALL, 4 SCHNEIDEN LANG STIRNRADIUS-MMC

- ▶ Designed for copy milling.
- ▶ Increased feed rates.
- ▶ 15° inclination.
- ▶ Easy to regrind.
- ▶ Radius Tolerance $\pm 0.01\text{mm}$.

- ▶ Geeignet zum Kopierfräsen.
- ▶ Höhere Vorschub möglich.
- ▶ 15° Neigung.
- ▶ Leicht nachschleifbar.
- ▶ Radius Toleranz $\pm 0.01\text{ mm}$.



● 4 FLUTE LONG LENGTH- SPHERE VERSION

● 4 SCHNEIDEN LANG-KUGELFORM

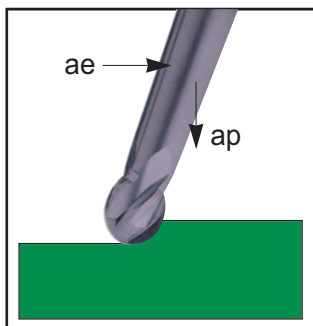
Unit : mm

EDP No.	Radius of Ball Nose	Mill Diameter	Shank Diameter	Length of Cut	Length Below Shank	Overall Length	Neck Diameter
PLAIN	R (± 0.01)	D ₁	D ₂	L ₁	L ₃	L ₂	D ₃
EM864050	R2.5	5.0	6	3.9	38	80	4.1
EM864060	R3.0	6.0	6	4.9	28	100	4.7
EM864080	R4.0	8.0	8	6.3	33	100	6.5
EM864100	R5.0	10.0	10	7.9	40	100	8.2
EM864120	R6.0	12.0	12	9.5	49	100	9.8
EM864160	R8.0	16.0	16	12.4	59	150	13.4

Mill Dia. Tolerance(mm)	Shank Dia. Tolerance
0~-0.03	h6

◎ : Excellent ○ : Good

Carbon Steels	Alloy Steels	Prehardened Steels	Hardened Steels		High Hardened Steels	Copper	Graphite	Cast Iron	Aluminum	Stainless Steels	Titanium	Inconel
~HB225	HB225~325	HRC30~40	HRc40~45	HRc45~55	HRC55~70							
○	◎	◎	◎	○	○			○				

CARBIDE, 4 FLUTE BALL NOSE MMC
VOLLHARTMETALL, 4 SCHNEIDEN STIRNRADIUS MMC


▶ $ap = 0.05 \times D$
▶ $ae = 0.02 \times D$

EM673, EM864 SERIES
■ NORMAL SPEED

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON		ALLOY STEELS HEAT RESISTANT STEELS		HARDENED STEELS	
HARDNESS	~ HRc30		HRc30 ~ HRc40		HRc45 ~ HRc65	
STRENGTH	~ 1000N/mm ²		1000 ~ 1250N/mm ²		1500N/mm ² ~	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
R2.5 × 5.0	21000	4000	20000	4000	7000	1400
R3.0 × 6.0	17000	4000	16000	3500	6000	1300
R4.0 × 8.0	13000	3500	12000	3000	4500	1100
R5.0 × 10.0	10500	3000	10000	2500	3500	1000
R6.0 × 12.0	9000	2800	8000	2500	3000	950
R8.0 × 16.0	6000	2800	5500	2200	2000	800

RPM = rev./min.
FEED = mm/min.

■ HIGH SPEED

MATERIAL	NON-ALLOYED STEELS ALLOY STEELS CAST IRON		ALLOY STEELS HEAT RESISTANT STEELS		HARDENED STEELS	
HARDNESS	~ HRc30		HRc30 ~ HRc40		HRc45 ~ HRc65	
STRENGTH	~ 1000N/mm ²		1000 ~ 1250N/mm ²		1500N/mm ² ~	
DIAMETER	RPM	FEED	RPM	FEED	RPM	FEED
R2.5 × 5.0	28000	5600	27000	5300	11000	2100
R3.0 × 6.0	23000	5100	22000	4900	9000	1900
R4.0 × 8.0	18000	4600	17000	4300	7000	1700
R5.0 × 10.0	14000	3900	13000	3700	5000	1400
R6.0 × 12.0	12000	3700	11000	3500	4500	1300
R8.0 × 16.0	9000	3100	8000	3000	3300	1100

RPM = rev./min.
FEED = mm/min.