

4 Flutes HARDMAX



Size R1~R6

HFB

Super
MG

HARD
MAX

40°

R
±0.005
R1~R1.5

R
±0.007
R2~R3

R
±0.01
R4~R6

Shank Dia
0/-0.005

Patented in Japan, China, Taiwan, Korea, Germany, Switzerland, and Liechtenstein

Material Applications (★ Highly Recommended ● Recommended ○ Suggested)

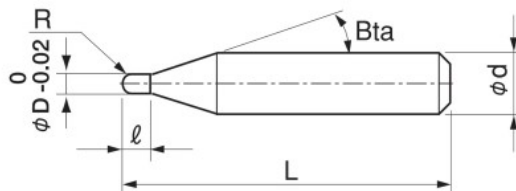
Work Material																	
Carbon Steels S45C S55C	Alloy Steels SK / SCM SUS	Prehardened Steels NAK HPM	Hardened Steels					Cast Iron	Aluminum Alloys	Graphite	Copper	Plastics	Glass Filled Plastics	Titanium Alloys	Heat Resistant Alloys	Cemented Carbide	Hard Brittle (Non-Metallic) Materials
			~50HRC	~55HRC	~60HRC	~65HRC	~70HRC										
			●	●	●	●	●										

Features

Dramatically improved the milling efficiency. Maximum 27 times higher chip evacuation compared to conventional tool.
New ball tip design offers polish-less bottom surface finishing.

Affordable pricing.

Diameter Tolerance: 0/-0.02



The shank taper angle shown is not an exact value and to avoid contact with the work piece, we recommend the user controls the precise value of this angle. Shank taper angle should not make contact with the work piece.

Total 8 models

Unit (mm)

Model Number	Radius of Ball Nose R	Length of Cut ℓ	Shank Taper Angle Bta	Overall Length L	Shank Diameter φd	Suggested Retail Price ¥
HFB 4020-0300	R1	3	16°	50	4	6,720
HFB 4020-0300-6	R1	3	16°	50	6	7,790
HFB 4030-0450	R1.5	4.5	16°	60	6	6,890
HFB 4040-0600	R2	6	16°	70	6	6,890
HFB 4060-0900	R3	9	—	80	6	8,610
HFB 4080-1200	R4	12	—	90	8	12,300
HFB 4100-1500	R5	15	—	100	10	16,320
HFB 4120-1800	R6	18	—	110	12	20,660