

2 Flutes DIA for Graphite Milling



Size R0.5~R6

DCB

MG

DIA

35°

R
±0.01

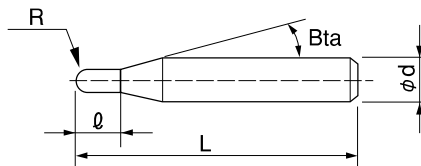
Shank Dia
0/-0.005

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

Diamond coated 2 flute ball end mills for Graphite Electrode milling.
New diamond coating with a highly adhesive base layer offers excellent wear resistance and longer tool life.



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 9 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 ¥
DCB 2010	R0.5	5	16°	60	4	16,000
DCB 2020	R1	10	16°	70	4	17,000
DCB 2030	R1.5	15	16°	80	4	21,000
DCB 2040	R2	20	—	100	4	24,000
DCB 2050	R2.5	20	—	100	5	28,000
DCB 2060	R3	30	—	150	6	41,500
DCB 2080	R4	40	—	150	8	45,000
DCB 2100	R5	50	—	180	10	57,500
DCB 2120	R6	55	—	180	12	87,500

Milling Conditions for DCB

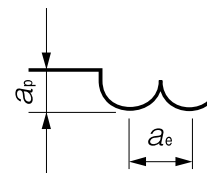
WORK MATERIAL		GRAPHITE			
Model Number	Radius of Ball Nose (mm)	Spindle Speed (min ⁻¹)	Feed Rate (mm/min)	a_p Axial Depth (mm)	a_e Radial Depth (mm)
2010	R0.5	10,000	140	0.1	0.3
2020	R1	10,000	300	0.2	0.6
2030	R1.5	10,000	900	0.3	0.9
2040	R2	10,000	900	0.4	1.2
2050	R2.5	10,000	1,200	0.5	1.5
2060	R3	10,000	1,460	0.6	1.8
2080	R4	7,500	1,350	0.8	2.4
2100	R5	6,000	1,440	1	3
2120	R6	5,000	1,400	1.2	3.6

◆ High speed milling

WORK MATERIAL		GRAPHITE			
Model Number	Radius of Ball Nose (mm)	Spindle Speed (min ⁻¹)	Feed Rate (mm/min)	a_p Axial Depth (mm)	a_e Radial Depth (mm)
2010	R0.5	50,000	700	0.1	0.3
2020	R1	45,000	1,350	0.2	0.6
2030	R1.5	30,000	2,700	0.3	0.9
2040	R2	22,500	2,025	0.4	1.2
2050	R2.5	18,000	2,160	0.5	1.5
2060	R3	15,000	2,190	0.6	1.8
2080	R4	11,500	2,300	0.8	2.4
2100	R5	9,000	2,340	1	3
2120	R6	7,500	2,250	1.2	3.6

Note:

- Use a milling machine dedicated for Graphite.
- Recommend air blow for Graphite.

For 3D milling / Finishing
Milling Amount (mm)DCB Series
Aluminum:A7075
Milling VideoDCB Series
Graphite:TTK-5(80HS)
Milling VideoØ3mm Shank
V SeriesUDC-PCD
SeriesCBN
Series

Square

Long Neck
Square

Radius

Long Neck
RadiusTaper Neck
RadiusBall / Long
Shank BallLong Neck
BallTaper Neck
Ball

Taper

Barrel

Spiral
V Cutter

Drill

Technical Data