

DF END MILLS

CARBIDE

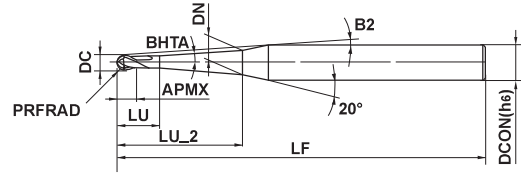
DF3XB

Ball nose, Medium cut length, 3 flute, Taper neck, For graphite



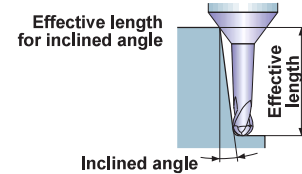
Aluminium Alloy	Copper Alloy	Graphite	GFRP CFRP	Machinable Ceramics
○	◎	◎	○	○

SQUARE



BALL

R	$0.5 \leq \text{PRFRAD} \leq 2$			
	± 0.01			
h6	DCON=6			
	$\begin{matrix} 0 \\ -0.008 \end{matrix}$			



● Ball nose taper end mill with Mitsubishi's unique diamond coating for graphite machining.

Unit : mm

RADIUS

TAPER

Order Number	PRFRAD	DC	BHTA	APMX	LU_2	LU	B2	DN	LF	DCON	No. of Flutes	Stock	Type	Effective length for inclined angle			
														30°	1°	2°	3°
DF3XBR0050L030	0.5	1	0.5°	1.5	30	3	4.0°	1.42	100	6	3	●	1	30.4	32.1	32.8	34.6
DF3XBR0050L040	0.5	1	0.5°	1.5	40	3	3.2°	1.60	100	6	3	●	1	40.4	41.4	43.6	46.0
DF3XBR0050L050	0.5	1	0.5°	1.5	50	3	2.6°	1.77	100	6	3	●	1	50.4	51.7	54.4	*
DF3XBR0100L040	1	2	0.5°	3	40	5	2.6°	2.52	100	6	3	●	1	40.7	41.7	43.9	*
DF3XBR0100L060	1	2	0.5°	3	60	5	1.8°	2.86	130	6	3	●	1	60.7	62.2	*	*
DF3XBR0100L080	1	2	0.5°	3	80	5	1.4°	3.21	130	6	3	●	1	80.7	82.7	*	*
DF3XBR0150L060	1.5	3	0.5°	4.5	60	7.5	1.4°	3.82	130	6	3	●	1	60.8	62.2	*	*
DF3XBR0150L080	1.5	3	0.5°	4.5	80	7.5	1.1°	4.17	130	6	3	●	1	80.8	82.8	*	*
DF3XBR0200L100	2	4	0.5°	6	100	9	0.6°	5.49	160	6	3	●	1	100.8	*	*	*

* No interference

RECOMMENDED CUTTING CONDITIONS

Work material		Graphite				Copper, Copper alloys			
R PRFRAD (mm)	Neck length LU_2 (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)	Revolution (min ⁻¹)	Feed rate (mm/min)	Depth of cut ap (mm)	Depth of cut ae (mm)
R0.5	30	20000	1100	0.05	0.13	16000	700	0.04	0.13
	40	15000	750	0.04	0.11	12000	480	0.03	0.11
	50	12000	500	0.03	0.10	9600	320	0.02	0.10
R1	40	20000	1800	0.13	0.40	16000	1100	0.10	0.40
	60	15000	900	0.09	0.27	12000	580	0.07	0.27
	80	12000	600	0.07	0.20	9600	380	0.06	0.20
R1.5	60	14000	1700	0.15	0.45	11000	1100	0.12	0.45
	80	12000	1200	0.12	0.35	9600	770	0.10	0.35
R2	100	10000	1100	0.20	0.50	8000	700	0.16	0.50

PRFRAD:Radius

- 1) When high machining accuracy is needed, or the workpiece becomes chipped, we recommend lowering the feed rate.
- 2) Use a milling machine dedicated for graphite.
- 3) If the rigidity of the machine or the work materials installation is very low, or chattering and noise are generated, reduce the revolution and feed rate proportionately.

● : Inventory maintained in Japan.