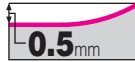


# BRC Type

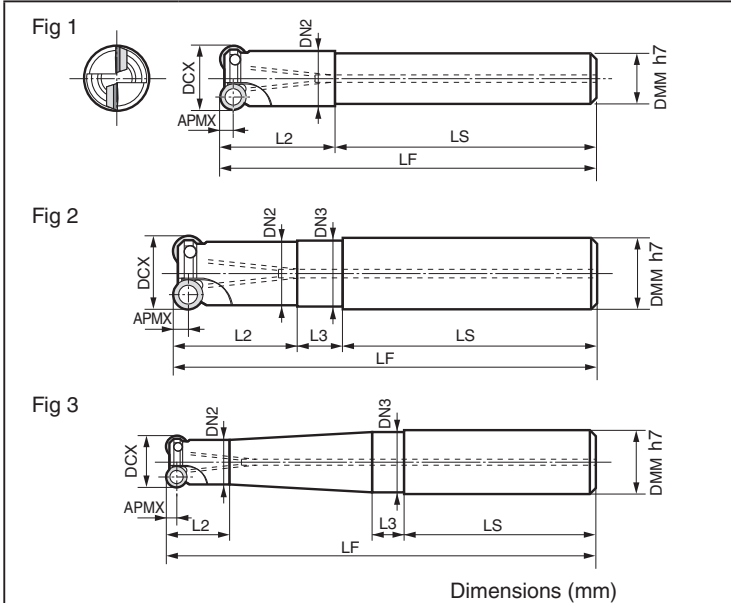
Rake Angle	Radial	0°
	Axial	0°



## Characteristics

- High speed, high efficiency milling of hardened mold material.
- Cost effective with full-top CBN inserts, multiple corner usage.
- Strong clamping with conical insert screw hole design.

## Body (Endmill Type)



Cat. No.	Stock	Dimensions (mm)										Fig	Group No.	
		Max. Diameter	Shank Diameter	Diameter	Diameter	Max. Depth of Cut	Length	Length	Shank Length	Total Length	No. of Teeth			
BRC 071207ES10	▲	12	10	11.0	—	3.5	23	—	52	75	2	1	1	
071207ES12	▲	12	12	11.0	11.5	3.5	22	8	45	75	2	2		
071208ES16	▲	12	16	11.0	15.5	3.5	16	8	48	88	2	3		
071210ES16	▲	12	16	11.0	15.5	3.5	16	8	48	108	2	3		
071212ES16	▲	12	16	11.0	15.5	3.5	16	8	48	128	2	3		
071507ES12	▲	15	12	12.5	—	3.5	16	—	59	75	3	1		
071507ES16	▲	15	16	12.5	13.0	3.5	19	11	48	78	3	2	2	
BRC 071508ES16	▲	15	16	13.5	15.5	3.5	20	8	48	88	2			
071510ES16	▲	15	16	13.5	15.5	3.5	20	8	48	108	2			
071513ES20	▲	15	20	13.5	19.5	3.5	22	8	50	130	2	3		
071515ES20	▲	15	20	13.5	19.5	3.5	22	8	50	150	2			
071517ES25	▲	15	25	13.5	24.5	3.5	22	8	56	176	2			
BRC 102009ES20	▲	20	20	17.0	19.5	5.0	20	8	50	90	2	3	3	
102011ES20	▲	20	20	17.0	19.5	5.0	22	8	50	110	2			
102012ES25	▲	20	25	17.0	24.5	5.0	24	8	56	136	2			
102015ES25	▲	20	25	17.0	24.5	5.0	24	8	56	156	2			
102017ES25	▲	20	25	17.0	24.5	5.0	24	8	56	176	2			

Inserts are not included.

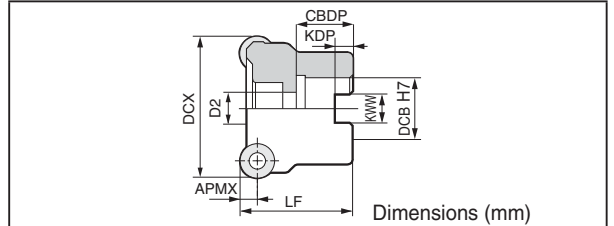
## Recommended Cutting Conditions

ISO	Work Material	Hardness	Depth of Cut $a_p$ (mm)	Cutting Speed $v_c$ (m/min) Min. - Optimum - Max.	Feed Rate $f_z$ (mm/t) Min. - Optimum - Max.	Insert Grade
H	Steel	40 to 45HRC	Up to 0.5	200-500-800	0.1-0.25-0.4	BN7000
		47 to 55HRC	Up to 0.5	150-275-400	0.1-0.2-0.3	BN7000
		58 to 62HRC	Up to 0.5	80-140-200	0.1-0.15-0.2	BN350
K	Gray Cast Iron	—	Up to 0.5	300-900-1500	0.1-0.25-0.4	BN7000

\* For BRC Type Cutter/Endmill and RDHX Type Inserts, use in combination with applicable group numbers.  
Dry cut (Air Blow) and Down cut are recommended.

Note: The cutting conditions above are a guide. Actual conditions will need to be adjusted according to machine rigidity, work clamp rigidity, cutting depth, and other factors.

## Body (Shell Type)



Cat. No.	Stock	Dimensions (mm)									
		Max. Diameter	Hole Size	Bolt	Max. Depth of Cut	Height	Mounting Depth	Grooving Width	Grooving Depth	No. of Teeth	Group No.
BRC 10042R	▲	42	16	9	5	44	20	8.5	6	6	3
10052R	▲	52	22	11	5	50	30	10.5	7	7	
BRC 12042R	▲	42	16	9	6	42	20	8.5	6	5	4
12052R	▲	52	22	11	6	52	30	10.5	7	5	
12066R	▲	66	27	13	6	52	30	12.5	7	6	

Inserts are not included.

## Inserts



Grade	CBN		Dimensions (mm)		
	High Speed/Light	General Purpose	IC	S	
Application	K	K			
	S	S			
	H	H			
Cat. No.	BN350	BN700	BN700	Applicable Endmill (Matching Group No.)	
RDHX 0701M0T			7	1.99	1
0702M0T			7	2.38	2
1003M0T			10	3.18	3
12T3M0T			12	3.97	4

## Parts

Screw	Wrench	Applicable Endmill (Matching Group No.)
BFTB 025048	1.0 TRD07	1
BFTB 02505	1.0 TRD07	2
BFTB 035074	3.4 TRD15	3, 4

Recommended Tightening Torque (N·m)

## Application Examples

Coated Carbide

BRC (BN350)

Cost/Workpiece

Tool: BRC12052R  
Work Material: SNCM435 (Machine Component) 55 to 60HRC  
Grade: BN350  $v_c=250$ m/min  $f_z=0.1$ mm/t  $a_p=0.5$ mm  $a_e=50$ mm

▲ mark : To be replaced by new item (Please confirm stock availability)