

CoroCut® MB

For internal precision machining

Min. bore diameter from 10 mm

For guaranteed precision in internal grooving,
threading and turning

The CoroCut MB (minibar) tools are characterized by simple handling, easy and accurate indexing of the insert, mounted with a screw from the front without removing the tool holder from the machine turret.



CoroCut MB tooling

All inserts fit into the same bar.

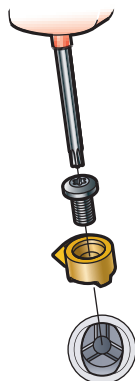
Inserts available for:

- Grooving
- Turning/profiling
- Back boring
- Threading

Accuracy

Good repeatability due to high precision insert and tip seat with three location points.

Rigid insert screw clamping ensures stability and secure machining.



Shank alternatives

Two shank alternatives, steel bars or carbide bars, available in cylindrical versions to be used with EasyFix sleeves and bars with flats for screw clamping.

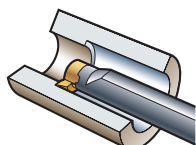
Increased stability and accessibility from eccentric head and oval cross section.

CoroCut® MB – Inserts

Application	Insert size 07	Insert size 9
	Min hole 10 mm	Min hole 14 mm
Grooving		
Turning		—
Threading		—

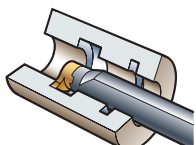
First choice recommendation

Turning



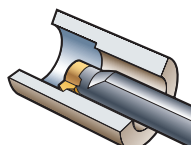
Insert: MB-07T093-02-10R
Holder: MB-A16-16-07R
Material: low alloy steel
 v_c m/min: 100
 a_p mm: 1
 f_r mm/rev: 0.08

Grooving



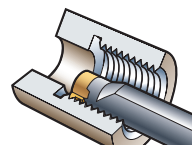
Insert: MB-07G200-00-10R
Holder: MB-A16-16-07R
Material: low alloy steel
 v_c m/min: 100
 f_r mm/rev: 0.05

Back boring



Insert: MB-07B030-02-11R
Holder: MB-A16-16-07R
Material: low alloy steel
 v_c m/min: 100
 a_p mm: 1
 f_r mm/rev: 0.05

Threading



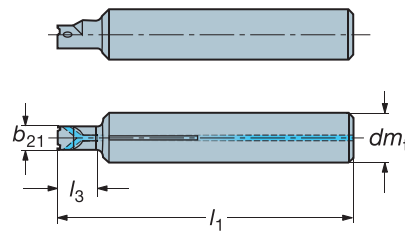
Insert: MB-07TH050VM-10R
Holder: MB-A16-16-07R
Material: low alloy steel
 v_c m/min: 100
 nap : 5

Boring bars

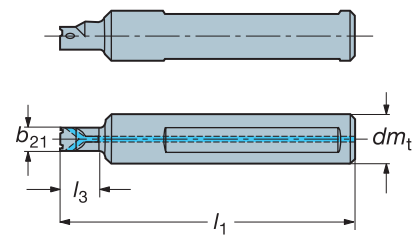
Turning, profiling, grooving and threading

CoroCut® MB steel shank boring bars

Cylindrical



Cylindrical with flats



All with internal coolant supply

Bar dia.			Dimensions, mm			
dm_t	Insert size ¹⁾	Ordering code	b_{21}	l_1	l_3	Gauge inserts
Cylindrical						
16	07	MB-A16-16-07R	7.4	97	16	MB-07..
16	09	MB-A16-20-09R	9.5	100	20	MB-09..
Cylindrical with flats						
16	07	MB-A16-16-07	7.4	97	16	MB-07..
16	09	MB-A16-20-09	9.5	100	20	MB-09..

¹⁾ To correspond with insert size on insert

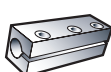
Main spare parts

Insert size	Insert screw	Key (Torx Plus)	Torque Nm
07	5513 039-01	5680 051-03 (9IP)	1.4
09	5513 039-02	5680 049-01 (15IP)	3.0

For coolant connector, see page C31



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INTERNAL MACHINING CoroCut® MB

Boring bars

Turning, profiling, grooving and threading

CoroCut® MB carbide shank boring bars

All with internal coolant supply

Bar dia.		Dimensions, mm				
dm_t	Ordering code	Insert size ¹⁾	b_{21}	l_1	l_3	Gauge inserts
Cylindrical						
12	MB-E12-24-07R	07	7.4	92	24	MB-07..
12	MB-E12-32-07R	07	7.4	100	32	MB-07..
12	MB-E12-48-07R	07	7.4	115	48	MB-07..
12	MB-E12-34-09R	09	9.5	100	34	MB-09..
12	MB-E12-45-09R	09	9.5	110	45	MB-09..
12	MB-E12-64-09R	09	9.5	130	64	MB-09..
16	MB-E16-34-09R	09	9.5	100	34	MB-09..
16	MB-E16-45-09R	09	9.5	110	45	MB-09..
16	MB-E16-64-09R	09	9.5	130	64	MB-09..
Cylindrical with flats						
12	MB-E12-24-07	07	7.4	92	24	MB-07..
12	MB-E12-32-07	07	7.4	100	32	MB-07..
12	MB-E12-48-07	07	7.4	115	48	MB-07..
12	MB-E12-34-09	09	9.5	100	34	MB-09..
12	MB-E12-45-09	09	9.5	110	45	MB-09..
12	MB-E12-64-09	09	9.5	130	64	MB-09..
16	MB-E16-34-09	09	9.5	100	34	MB-09..
16	MB-E16-45-09	09	9.5	110	45	MB-09..
16	MB-E16-64-09	09	9.5	130	64	MB-09..

¹⁾ To correspond with insert size on insert

Main spare parts

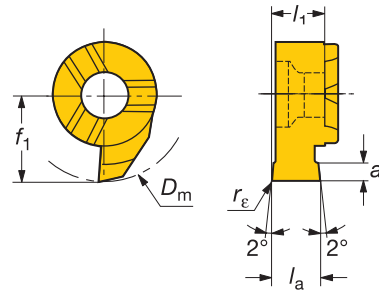
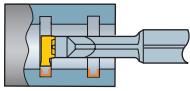
Insert size	Insert screw	Key (Torx Plus)	Torque Nm
07	5513 039-01	5680 051-03 (9IP)	1.4
09	5513 039-02	5680 049-01 (15IP)	3.0

For coolant connector, see page C31.

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CoroCut® MB inserts

Grooving



Tolerances, mm:

- la = + 0.05
- 0
- re = ± 0.02
- l1 = ± 0.02
- Centre height:
- + 0.05
- 0

Tolerances for circlip grooves inserts, mm:

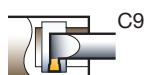
- la = + 0.03 mm
- 0
- l1 = ± 0.02 mm
- Centre height:
- + 0.05 mm
- 0

Right hand style shown

Selection criteria, mm					Insert size ¹⁾	Ordering code	Dimensions, mm		Material Grades			
	la	re	Dm min	ar max			f1	l1	P	M	N	S
									GC	GC	GC	GC
									1025	1025	1025	1025
									GC	GC	GC	GC
	1.00		10	1.8	07	MB-07G100-00-10R/L	5.8	3.9	★	★	★	★
	1.50		10	1.8		MB-07G150-00-10R/L	5.8	3.9	★	★	★	★
	2.00		10	1.8		MB-07G200-00-10R/L	5.8	3.9	★	★	★	★
	2.50		10	1.8		MB-07G250-00-10R/L	5.8	3.9	★	★	★	★
	3.00		10	1.8		MB-07G300-00-10R/L	5.8	3.9	★	★	★	★
	3.18		10	1.8		MB-07G318-00-10R/L	5.8	3.9	★	★	★	★
	1.00		11	2.8	07	MB-07G100-00-11R/L	6.8	3.9	★	★	★	★
	1.50		11	2.8		MB-07G150-00-11R/L	6.8	3.9	★	★	★	★
	2.00		11	2.8		MB-07G200-00-11R/L	6.8	3.9	★	★	★	★
	2.50		11	2.8		MB-07G250-00-11R/L	6.8	3.9	★	★	★	★
	3.00		11	2.8		MB-07G300-00-11R/L	6.8	3.9	★	★	★	★
	3.18		11	2.8		MB-07G318-00-11R/L	6.8	3.9	★	★	★	★
	1.00		12	3.4	07	MB-07G100-00-12R/L	7.4	3.9	★	★	★	★
	1.50		12	3.4		MB-07G150-00-12R/L	7.4	3.9	★	★	★	★
	2.00		12	3.4		MB-07G200-00-12R/L	7.4	3.9	★	★	★	★
	1.50		14	4	09	MB-09G150-00-14R/L	9	5.3	★	★	★	★
	2.00		14	4		MB-09G200-00-14R/L	9	5.3	★	★	★	★
	2.00	0.2	14	4		MB-09G200-02-14R/L	9	5.3	★	★	★	★
	2.50		14	4		MB-09G250-00-14R/L	9	5.3	★	★	★	★
	3.00		14	4		MB-09G300-00-14R/L	9	5.3	★	★	★	★
	1.50		16	5.5	09	MB-09G150-00-16R/L	10.5	5.2	★	★	★	★
	2.00		16	5.5		MB-09G200-00-16R/L	10.5	5.2	★	★	★	★
	2.00	0.2	16	5.5		MB-09G200-02-16R/L	10.5	5.2	★	★	★	★
	2.50		16	5.5		MB-09G250-00-16R/L	10.5	5.2	★	★	★	★
	2.50	0.2	16	5.5		MB-09G250-02-16R/L	10.5	5.2	★	★	★	★
	3.00		16	5.5		MB-09G300-00-16R/L	10.5	5.2	★	★	★	★
	3.00	0.2	16	5.5		MB-09G300-02-16R/L	10.5	5.2	★	★	★	★
	1.50		17	6.5	09	MB-09G150-00-17R/L	11.5	5.2	★	★	★	★
	2.00		17	6.5		MB-09G200-00-17R/L	11.5	5.2	★	★	★	★
	2.50		17	6.5		MB-09G250-00-17R/L	11.5	5.2	★	★	★	★
	3.00		17	6.5		MB-09G300-00-17R/L	11.5	5.2	★	★	★	★
For circlip grooves												
	0.73		10	1.2	07	MB-07G070-00-10R/L	5.8	3.8	★	★	★	★
	0.83		10	1.3		MB-07G080-00-10R/L	5.8	3.8	★	★	★	★
	0.93		10	1.5		MB-07G090-00-10R/L	5.8	3.8	★	★	★	★
	1.20		10	1.8		MB-07G120-00-10R/L	5.8	3.9	★	★	★	★
	1.40		10	1.8		MB-07G140-00-10R/L	5.8	3.9	★	★	★	★
	1.70		10	1.8		MB-07G170-00-10R/L	5.8	3.9	★	★	★	★
	0.73		14	1.2	09	MB-09G070-00-14R/L	9	5.2	★	★	★	★
	0.83		14	1.3		MB-09G080-00-14R/L	9	5.2	★	★	★	★
	0.93		14	1.5		MB-09G090-00-14R/L	9	5.2	★	★	★	★
	1.20		14	4		MB-09G120-00-14R/L	9	5.3	★	★	★	★
	1.40		14	4		MB-09G140-00-14R/L	9	5.3	★	★	★	★
	1.70		14	4		MB-09G170-00-14R/L	9	5.3	★	★	★	★
									P25	M25	N25	S25

¹⁾ To correspond with insert size on holder.

R = Right hand, L = Left hand



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INTERNAL MACHINING CoroCut® MB

CoroCut® MB inserts

Turning and turning/copying

Entering angle 45° MB-07T045 Turning/profiling

Entering angle 93° MB-07T093 Turning

Entering angle 93° MB-07TE 93 Copying

Entering angle 90° MB-07B Back boring

Tolerances, mm:

$r_e = \pm 0.02$
 $l_1 = \pm 0.02$
 Centre height:
 $+0.05/-0$ mm

Right hand style shown

	Selection criteria, mm				Insert size ¹⁾	Ordering code	Dimensions, mm			P	M	N	S
	r_e	D_m min	a_r max				f_1	l_1	l_7	GC	GC	GC	GC
	0.2	10	1.5		07	MB-07T045-02-10R/L	5.8	2	4	★	★	★	★
	0.2	10	1.8		07	MB-07T093-02-10R/L	5.6	3.9		★	★	★	★
	0.2	10	1.8		07	MB-07TE93-02-10R/L	5.8	3.9		★	★	★	★
	0.2	11	2.6		07	MB-07B030-02-11R/L	6.8	1.3	4	★	★	★	★
										P25	M25	N25	S25

¹⁾ To correspond with insert size on holder.

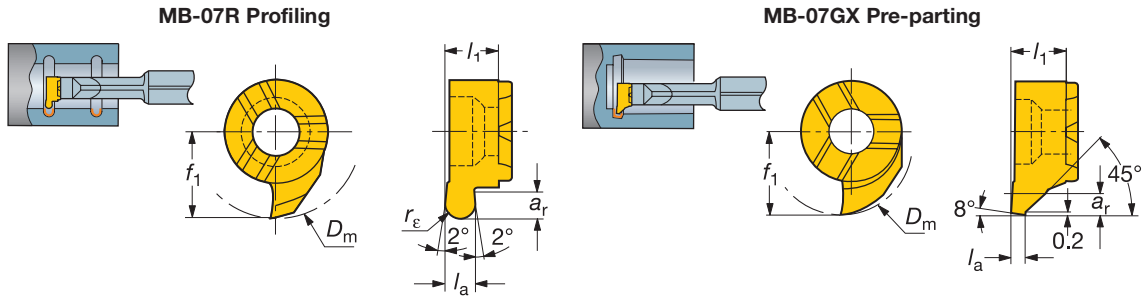
R = Right hand, L = Left hand
 ★ = First choice

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CoroCut® MB inserts

Profiling and pre-parting



Tolerances, mm:

$l_a = +0.05$

- 0

$r_\epsilon = \pm 0.02$

$l_1 = \pm 0.02$

Centre height:

+ 0.05

- 0

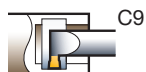
Right hand style shown

	Selection criteria, mm					Insert size ¹⁾	Ordering code	Dimensions, mm		Material Grades			
	l_a	r_ϵ	D_m min	a_r max				f_1	l_1	P GC	M GC	N GC	S GC
	0.80	0.4	10	1.8		07	MB-07R080-04-10R/L	5.8	3.9	★	★	★	★
	1.20	0.6	10	1.8			MB-07R120-06-10R/L	5.8	3.9	★	★	★	★
	1.80	0.9	10	1.8			MB-07R180-09-10R/L	5.8	3.9	★	★	★	★
	2.00	1	10	1.8			MB-07R200-10-10R/L	5.8	3.9	★	★	★	★
	0.80	0.4	14	1.8		09	MB-09R080-04-14R/L	9	5.2	★	★	★	★
	1.20	0.6	14	4			MB-09R120-06-14R/L	9	5.3	★	★	★	★
	1.80	0.9	14	4			MB-09R180-09-14R/L	9	5.3	★	★	★	★
	1.80	0.9	14	4			MB-09R200-10-14R/L	9	5.3	★	★	★	★
	2.20	1.1	14	4			MB-09R220-11-14R/L	9	5.3	★	★	★	★
	3.00	1.5	14	4			MB-09R300-15-14R/L	9	5.3	★	★	★	★
	1		10	1.5		07	MB-07GX100-00-10R/L	5.8	3.9	★	★	★	★
										P25	M25	N25	S25

¹⁾ To correspond with insert size on holder.

R = Right hand, L = Left hand

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INTERNAL MACHINING CoroCut® MB

Threading

Metric 60°
NPT 60°
UN 60°
V-profile 60°

Whitworth 55°

Tolerances, mm:
 $f_4 = +0.05$
 -0
 $r_e = \pm 0.02$
 $l_1 = \pm 0.02$
Centre height:
 $+0.05$
 -0

Right hand style shown

	Selection criteria, mm						Ordering code	Dimensions, mm				Material			
	r_e	D_m min	a_r max	Insert size ¹⁾	Pitch, mm	Pitch, t.p.i.		f_1	l_1	l_7	W_T	P	M	N	S
											GC	GC	GC	GC	
Metric 60° 	10	0.27		07	0.50		MB-07TH050MM-10R/L	5.8	3.4	3.8	0.06	★	★	★	★
	10	0.54			1.00		MB-07TH100MM-10R/L	5.8	3.2	3.8	0.12	★	★	★	★
	10	0.81			1.50		MB-07TH150MM-10R/L	5.8	3	3.8	0.18	★	★	★	★
	10	0.95			1.75		MB-07TH175MM-10R/L	5.8	2.9	3.8	0.21	★	★	★	★
	10	1.08			2.00		MB-07TH200MM-10R/L	5.8	2.75	3.8	0.25	★	★	★	★
	10	1.35			2.50		MB-07TH250MM-10R/L	5.8	2.55	3.8	0.31	★	★	★	★
NPT 60° 	10	1.19		07		18	MB-07TH180NT-10R	5.8	2.9	3.8	0.05	★	★	★	★
	10	1.48				14	MB-07TH140NT-10R	5.8	2.7	3.8	0.07	★	★	★	★
UN 60° 	10	0.42		07		32	MB-07TH320UN-10R	5.8	3.4	3.9	0.1	★	★	★	★
	10	0.49				28	MB-07TH280UN-10R	5.8	3.4	3.9	0.11	★	★	★	★
	10	0.57				24	MB-07TH240UN-10R	5.8	3.3	3.9	0.13	★	★	★	★
	10	0.68				20	MB-07TH200UN-10R	5.8	3.2	3.9	0.15	★	★	★	★
	10	0.76				18	MB-07TH180UN-10R	5.8	3.2	3.9	0.17	★	★	★	★
	10	0.86				16	MB-07TH160UN-10R	5.8	3.1	3.9	0.19	★	★	★	★
V-profile 60° 	10	0.41		07	0.50-0.75	32	MB-07TH050VM-10R/L	5.8	3.4	3.8	0.06	★	★	★	★
	10	0.55			1.00-1.25	24-28	MB-07TH100VM-10R/L	5.8	3.2	3.8	0.12	★	★	★	★
	10	0.81			1.50-1.75	16-20	MB-07TH150VM-10R/L	5.8	3	3.8	0.18	★	★	★	★
	10	1.08			2.00-2.25	12-14	MB-07TH200VM-10R/L	5.8	2.75	3.8	0.25	★	★	★	★
	10	1.35			2.50	10-11	MB-07TH250VM-10R/L	5.8	2.55	3.8	0.31	★	★	★	★
	Whitworth 55° 	0.18	10	0.85	07		19	MB-07TH190WH-10R/L	5.8	2.8	3.8		★	★	★
0.24		10	1.16			14	MB-07TH140WH-10R/L	5.8	2.6	3.8		★	★	★	★
0.31		10	1.48			11	MB-07TH110WH-10R/L	5.8	2.3	3.8		★	★	★	★
											P25	M25	N25	S25	

¹⁾ To correspond with insert size on holder.

R = Right hand, L = Left hand

★ = First choice

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