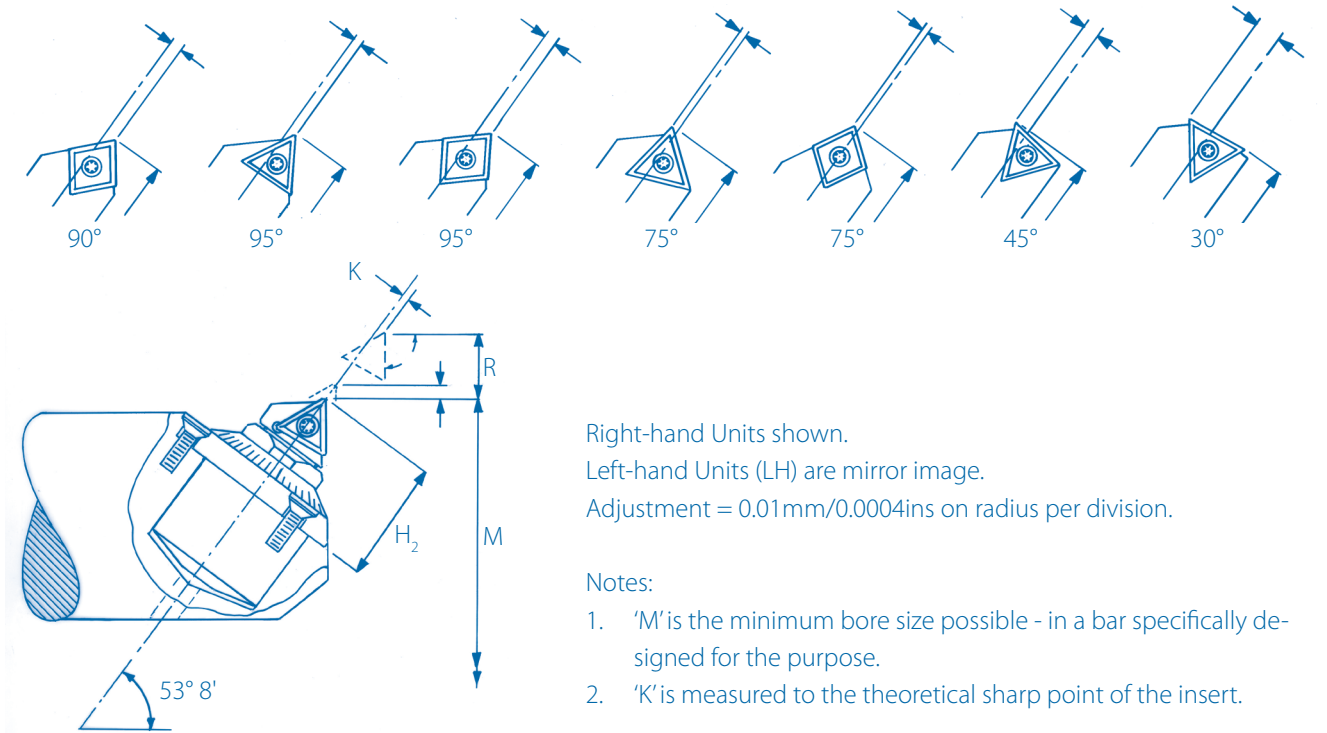




MBTR/SAB Bush Units – For Fine-Finishing

Technical Specification



MBTR/SAB Bush Units – Angular Mounted - Size 1 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	24.00	.945	0.20	.008	2.00	.079	13.10	.516	1.35	.053	TC__06T1 (02)	MBTR/SAB1-2B2 MBTR/SAB1-2B2-LH MBTR/SAB1-2B2L MBTR/SAB1-2B2L-LH MBTR/SAB1-2B245
75°							13.70	.539	-1.50	-.059		
45°							13.70	.539	-1.60	-.063		

MBTR/SAB Bush Units – Angular Mounted – Size 2 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	30.00	1.181	0.28	.011	4.00	.157	16.50	0.650	1.32	.052	MBTR/SAB2-3B1 MBTR/SAB2-3B1-LH	TC__06T1 (02)
							18.70	.736	0.80	.031	MBTR/SAB2-3B2 MBTR/SAB2-3B2-LH	TC__0902 (04)
							16.35	.644	0.20	.031	MBTR/SAB2-3B2C MBTR/SAB2-3B2C-LH	CC__0602 (04)
75°	30.00	1.181	0.28	.011	4.00	.157	18.80	.740	1.10	.043	MBTR/SAB2-3B2L MBTR/SAB2-3B2L-LH	TC__0902 (04)
45°							19.75	.778	-1.60	-.063	MBTR/SAB2-3B245	

MBTR/SAB Bush Units – Angular Mounted - Size 3 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			
90°	40.00	1.575	0.40	0.16	5.60	.220	22.80	.898	2.30	.091	TC__ 1102 (04)	MBTR/SAB3-5B2M	
							21.75	.856	1.20	.047		CC__ 0602 (04)	MBTR/SAB3-5B2LH-M
							75°	22.40	.882	1.30	.051	TC__ 1102 (04)	MBTR/SAB3-5B2CM
													MBTR/SAB3-5B2CLH-M
45°	22.85	.900	-1.60	-.063	TC__ 1102 (04)	MBTR/SAB3-5B2LM							
						MBTR/SAB3-5B2L-LHM							
0°	16.30	.642				MBTR/SAB3-5B245M							
						MBTR/SAB3-5B245-LH							
						MBTR/SAB3-5B230M							

MBTR/SAB Bush Units – Angular Mounted - Size 4 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	58.0	2.283	0.60	.024	8.00	.315	31.55	1.242	-.040	-.016	TC__ 16T3 (08)	MBTR/SAB4-7B2
							32.57	1.282	1.60	.063		CC__ 09T3 (04)
							75°	29.40	1.157	-3.20	-.126	TC__ 16T3 (08)
MBTR/SAB4-7B2C-LH												
45°	31.50	1.240					MBTR/SAB4-7B2L					
			MBTR/SAB4-7B2L-LH									
						MBTR/SAB4-7B245						

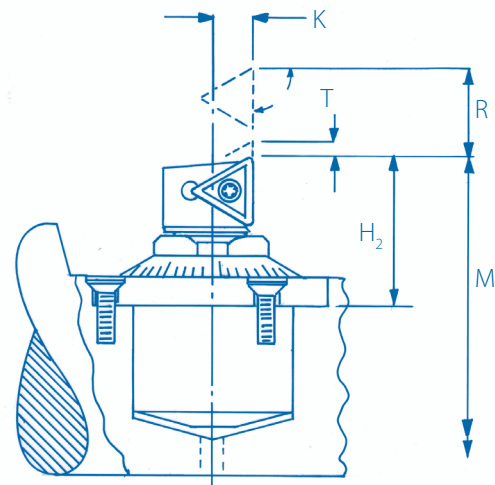
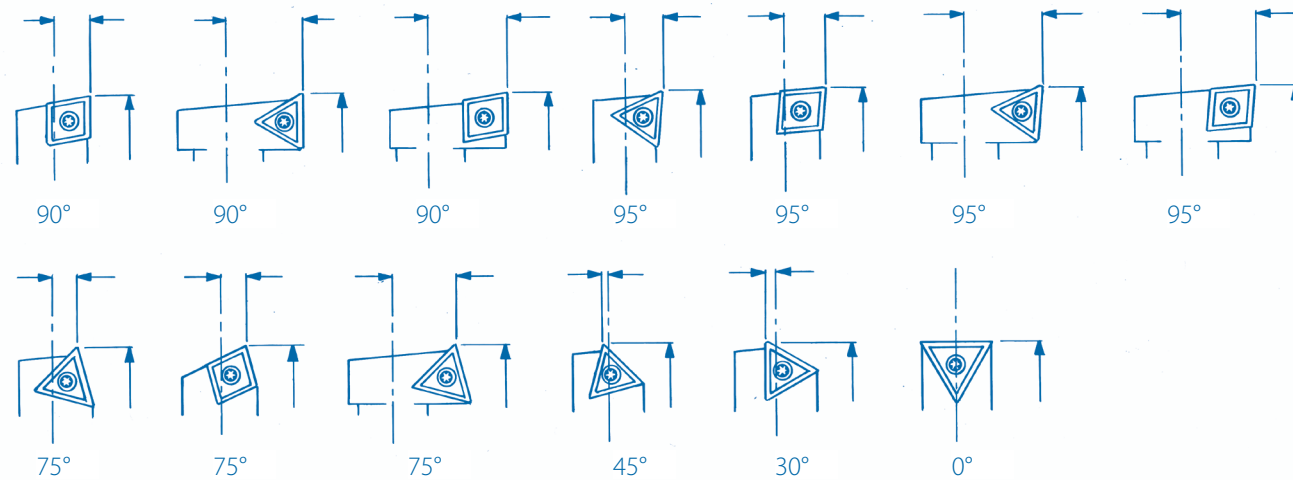
For operating instructions please see page 80

Spares and Accessories - MBTR/SAB Bush Units - Angular Mounted

Tool	Insert Screw	Retaining Screw & Wrench Kit	Adjusting Wrench	Torx Wrench	Torx Driver
MBTR/SAB1-2B2	RS2045	BTR001/10/3	R26	R27	R27D
MBTR/SAB1-2B2LH					
MBTR/SAB1-2B2L					
MBTR/SAB1-2B245					
MBTR/SAB2-3B1	RS2263	BTR001/10/3	R36	R37	R37D
MBTR/SAB2-3B1-LH					
MBTR/SAB2-3B2					
MBTR/SAB2-3B2-LH					
MBTR/SAB2-3B2C	RS2560	BTR001/7/3	R36	R37	R37D
MBTR/SAB2-3B2C-LH					
MBTR/SAB2-3B2L					
MBTR/SAB2-3B2L-LH					
MBTR/SAB2-3B245	RS2263	BTR001/10/3	R36	R37	R37D
MBTR/SAB3-5B2M					
MBTR/SAB3-5B2LH-M					
MBTR/SAB3-5B2CM					
MBTR/SAB3-5B2CLH-M	RS2560	BTR001/7/3	R36	R37	R37D
MBTR/SAB3-5B2LM					
MBTR/SAB3-5B2L-LHM					
MBTR/SAB3-5B245M					
MBTR/SAB3-5B245-LH	RS4084	BTR001/8/3	R76	R77	R77D
MBTR/SAB3-5B230M					
MBTR/SAB4-7B2					
MBTR/SAB4-7B2-LH					
MBTR/SAB4-7B2C	RS4084	BTR001/8/3	R76	R77	R77D
MBTR/SAB4-7B2C-LH					
MBTR/SAB4-7B2L					
MBTR/SAB4-7B2L-LH					
MBTR/SAB4-7B245					

MBTR/SAB Bush Units – For Fine-Finishing

Technical Specification



Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01mm/0.0004ins on radius per division.

- Notes:
- 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
 - 'K' is measured to the theoretical sharp point of the insert.

MBTR/SAB Bush Units – Square Mounted - Size 1 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	25.0	.984	0.25	.010	2.50	.098	13.10	.516	2.00	.079	TC__06T1 (02)	MBTR/SAB1-2B5
									7.50	.295		MBTR/SAB1-2B5-LH
									2.00	.079		MBTR/SAB1-2F55
75°	25.0	.984	0.25	.010	2.50	.098	13.10	.516	2.00	.079	TC__06T1 (02)	MBTR/SAB1-2B5L
7.50									.295	MBTR/SAB1-2B5L-LH		
2.00									.079	MBTR/SAB1-2B5L-LH		
45°	25.0	.984	0.25	.010	2.50	.098	13.70	.539	-0.80	-.031	TC__06T1 (02)	MBTR/SAB1-2B545
0°									13.20	.520		-

MBTR/SAB Bush Units – Square Mounted - Size 2 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			
90°	33.0	1.300	0.35	.014	5.00	.197	17.55	.691	3.00	.118	TC__0902 (04)	MBTR/SAB2-3B5	
							16.35	.644	4.00	.157		CC__0602 (04)	MBTR/SAB2-B5-LH
							18.15	.715	9.40	.370		TC__0902 (04)	MBTR/SAB2-3B5C
17.55	.691	2.00	.079	MBTR/SAB2-3B5C-LH									
19.75	.778	-	-	MBTR/SAB2-3B5S									
75°	33.0	1.300	0.35	.014	5.00	.197	17.55	.691	2.00	.079	TC__0902 (04)	MBTR/SAB2-3B5S-LH	
0°												19.75	.778
45°	33.0	1.300	0.35	.014	5.00	.197	19.75	.778	-0.80	-.031	TC__0902 (04)	MBTR/SAB2-3B545	
0°												19.75	.778

MBTR/SAB Bush Units – Square Mounted - Size 3 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			
90°	45.0	1.770	0.50	.020	7.00	.276	21.95	.864	5.40	.213	TC__1102 (04)	MBTR/SAB3-5B5M	
							21.75	.864	5.40	.213		CC__0602 (04)	MBTR/SAB3-5B5-LHM
							15.00	.591	TC__1102 (04)	MBTR/SAB3-5B5CM			
21.95	.864	3.20	.126	MBTR/SAB3-5B5-LHM									
21.95	.864	3.20	.126	MBTR/SAB3-5F5SM									
75°	45.0	1.770	0.50	.020	7.00	.276	21.95	.864	3.20	.126	TC__1102 (04)	MBTR/SAB3-5B5L	
0°												21.85	.860
45°	45.0	1.770	0.50	.020	7.00	.276	21.85	.860	-1.60	-.063	TC__1102 (04)	MBTR/SAB3-5B545M	
0°												21.85	.860

MBTR/SAB Bush Units – Square Mounted - Size 4 Units (for fine-finishing)

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adj		H2 Min Height		K Tool Point Offset		Insert	Unit Code	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			
90°	63.0	2.480	0.75	.030	10.0	.394	31.50	1.240	8.35	.329	TC__16T3 (08)	MBTR/SAB4-7B5	
							31.40	1.236	6.35	.250		CC__09T3 (08)	MBTR/SAB2-7B5-LH
							31.50	1.240	6.20	.244			MBTR/SAB4-7B5C
75°	63.0	2.480	0.75	.030	10.0	.394	31.50	1.240	6.20	.244	TC__16T3 (08)	MBTR/SAB4-7B5L	
0°												29.00	1.142
45°	63.0	2.480	0.75	.030	10.0	.394	29.00	1.142	-1.60	-.630	TC__16T3 (08)	MBTR/SAB4-7B545	
0°												29.00	1.142

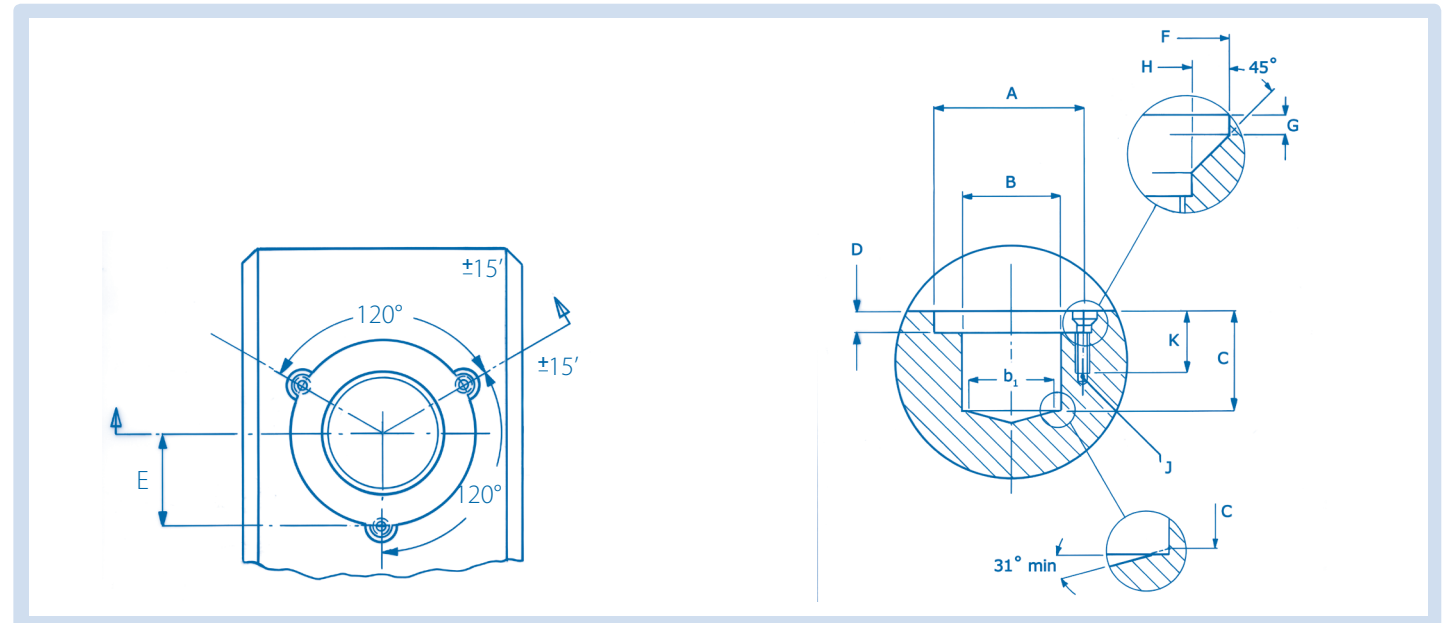
For operating instructions please see page 80

Spares and Accessories - MBTR/SAB Bush Units - Square Mounted

Tool	Insert Screw	Retaining Screw & Wrench Kit	Adjusting Wrench	Torx Wrench	Torx Driver
MBTR/SAB1-2B5	RS2045	BTR001/10/3	R26	R27	R27D
MBTR/SAB1-2B5-LH					
MBTR/SAB1-2B5L					
MBTR/SAB1-2B5L-LH					
MBTR/SAB1-2B545					
MBTR/SAB1-2F55					
MBTR/SAB1-2B90	RS2263	BTR001/10/3	R36	R37	R37D
MBTR/SAB2-3B5					
MBTR/SAB2-3B5-LH					
MBTR/SAB2-3B5C					
MBTR/SAB2-3B5C-LH					
MBTR/SAB2-3B5S					
MBTR/SAB2-3B5S-LH	RS2263	BTR001/10/3	R36	R37	R37D
MBTR/SAB2-3B55					
MBTR/SAB2-3B55-LH					
MBTR/SAB2-3B5L					
MBTR/SAB2-3B5L-LH					
MBTR/SAB2-3B545					
MBTR/SAB2-3B90	RS2560	BTR001/7/3	R36	R37	R37D
MBTR/SAB3-5B5M					
MBTR/SAB3-5B5-LHM					
MBTR/SAB3-5B5CM					
MBTR/SAB3-5B5C-LHM					
MBTR/SAB3-5F5SM					
MBTR/SAB3-5B5LM	RS4084	BTR001/8/3	R76	R77	R77D
MBTR/SAB3-5B5L-LHM					
MBTR/SAB3-5B545M					
MBTR/SAB3-5B90M					
MBTR/SAB4-7B5					
MBTR/SAB2-7B5-LH					
MBTR/SAB4-7B5C					
MBTR/SAB4-7B5L					
MBTR/SAB4-7B5L-LH					
MBTR/SAB4-7B545					
MBTR/SAB4-7B90					



Mounting Dimensions For MBTR/SAB Units



Dimension	Tolerance		MBU1 MBTR/SAB1		MBU2 MBTR/SAB2		MBU3 MBTR/SAB3		MBU4 MBTR/SAB4	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
A	+0.2	+0.008	19.0	.7480	25.0	.9843	30.0	1.1811	46.0	1.8110
∅	-0	-0								
B			16.0	.6299	20.0	.7874	22.0	.8661	32.0	1.2598
H7										
∅										
b1	Drill point min		14.50	.571	18.50	.728	20.50	.807	30.50	1.200
C	+0.2	+0.008	12.50	.492	15.50	.610	24.00	.945	36.00	1.417
	-0	-0								
D			3.70	.146	4.00	.157	5.00	.197	6.30	.248
E	+/-0.05	+/-0.002	9.65	.380	12.5	.492	15.4	.606	23.0	.906
F	+0.1	+0.004	4.6	.181	4.6	.181	6.5	.256	11.6	.457
∅	-0	-0								
G			2.5	.098	1.6	.063	1.8	.071	0	0
H			3.2	.126	3.2	.126	4.3	.169	5.4	.213
∅										
J			M3X0.5		M3X0.5		M4X0.7		M5X0.8	
K			10.0	.393	9.0	.354	13.0	.512	16.0	.630

For operating instructions please see page 80