



TOOLING SYSTEMS LIMITED



MICROBORE UNIT RANGE

www.microbore.com

MICROBORE TOOLING SYSTEMS LTD

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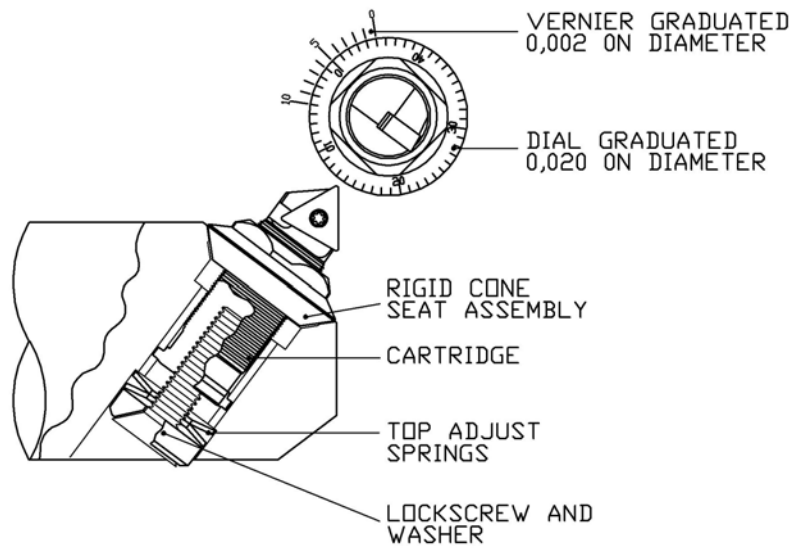
NOTES



MICROBORE ADJUSTABLE THREADED CARTRIDGES



For precision boring, turning and facing operations.

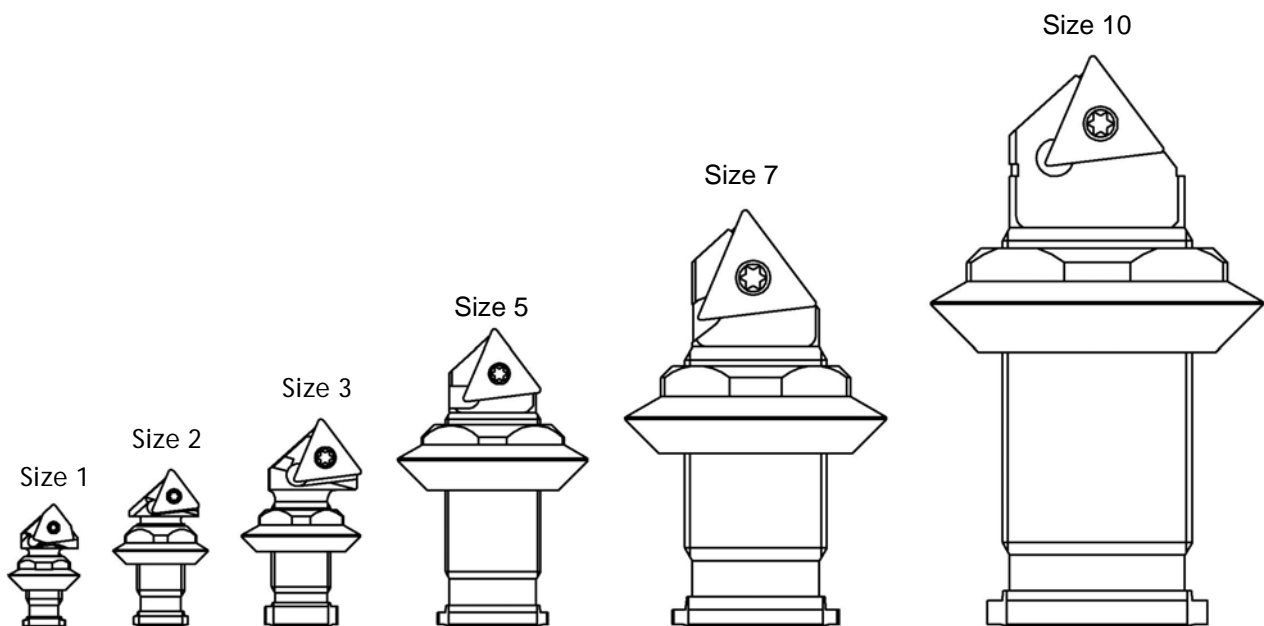


Microbore Tooling Systems approach

A cutting tool system must have a broad range of sizes and tool shapes to choose from so that the correct tool can be selected for a specific application. Microbore® offers more cartridges, in more sizes, in more shapes and in more carbide grades than any other manufacturer of adjustable cutting tools.

Rigidity and Speed of Adjustment

Microbore® cartridge units are axially locked into a 360° cone seat that provides metal-to-metal support. It gives maximum rigidity to the cutting edge of the tool that is necessary to obtain high accuracy, high stock removal and longer tool life.



Microbore units are available in six basic sizes 1, 2, 3, 5, 7, and 10. Each size is available in a variety of styles with either indexable inserts or brazed carbide cutting edges.

MICROBORE UNIT IDENTIFICATION CODES



Microbore cartridges are stamped with a combination of letters and figures which identify the size and length of the cartridge, tool style and the grade of carbide (Brazed) or size of insert.

Most standard units are available in both right and left hand cutting. For standard left hand units, prefix the order code with LH. For left hand headed up units replace the letter 'B' with 'T'.

Standard Indexable Units

METRIC	SIZE	LENGTH	STYLE	INSERT	DIAL
M	7	A	2	T16	- 80

Headed Indexable Units

METRIC	SIZE	STYLE	APPROACH	INSERT	DIAL
M	050	BS	090	T11	- 50

Standard Brazed Units

METRIC	SIZE	LENGTH	STYLE	GRADE	DIAL
M	3	B	2	F	- 40

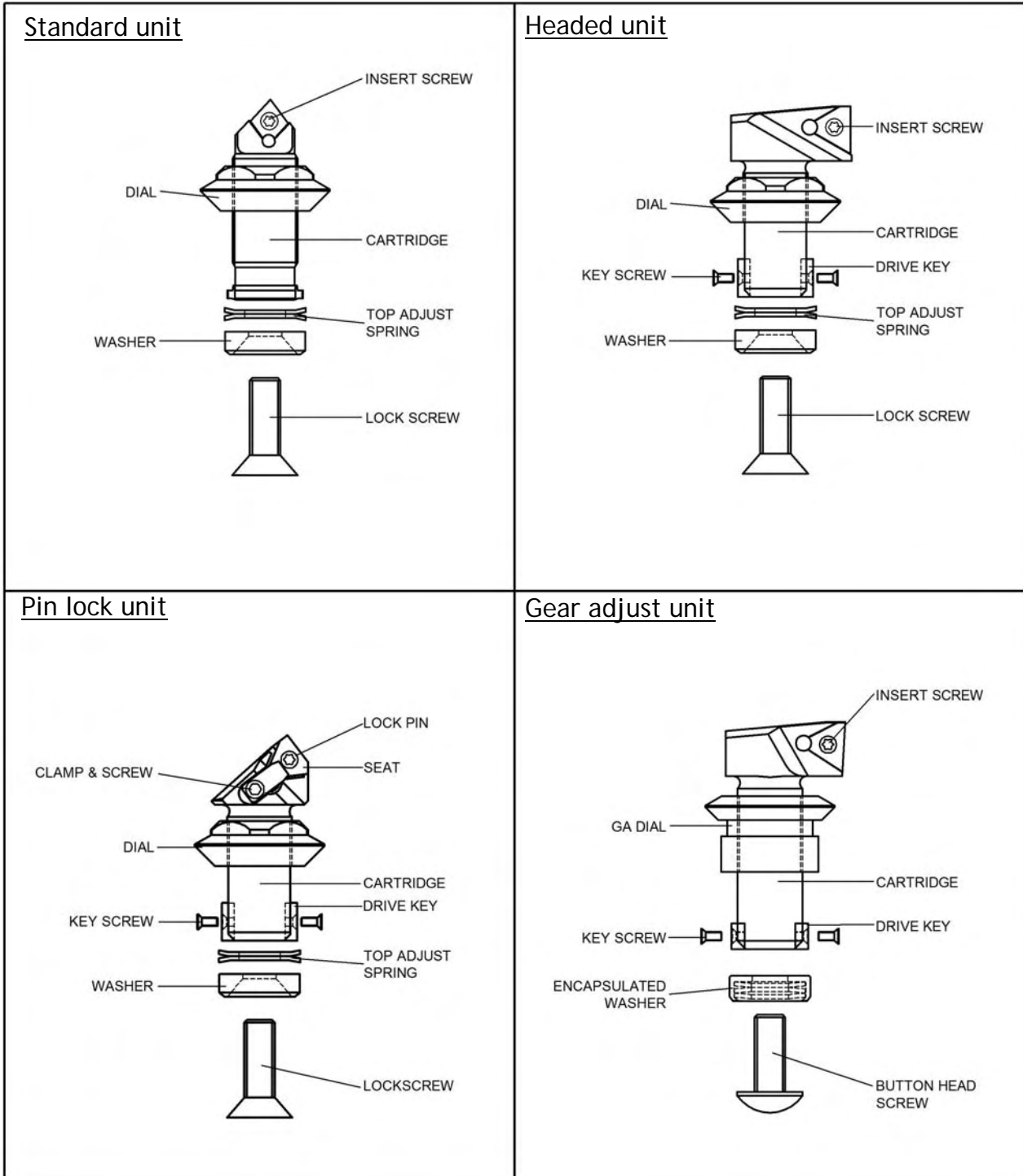
Standard Microbore cartridges in a wide range of sizes are available in the comprehensive range of tool shapes. Microbore cartridges come with zero top rake; however cartridges having 12° top rake are available for machining aluminium and other light alloys. Microbore cartridges having non-standard dimensions, carbide grades, and tool point radius, are designed and manufactured to suit customer requirements.

Carbide Grades for Brazed Units

K05-K20	F	Fine boring of Cast Iron and Non-Ferrous materials
	12F	To suit Aluminium and Magnesium alloys
P05-P20	E	Fine boring of Steel
	12E	General machining of Steels at medium speeds

Other grades of carbide are available on request.

MICROBORE UNIT SPARES IDENTIFICATION SHEET



All units are supplied complete as shown including an insert key , but less inserts.

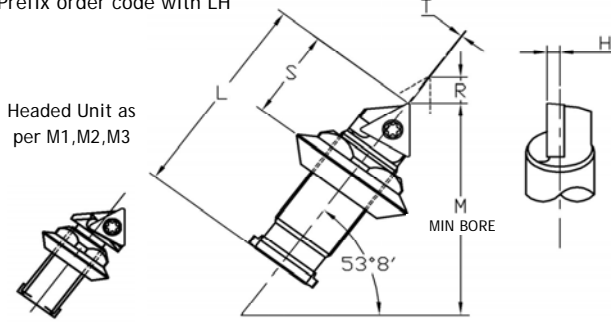
Replacement cartridges are supplied with insert screw, but less inserts.

To improve rigidity when cut depth exceeds 0,5mm, it is recommend that the top adjustment springs be removed. See standard boring bar range catalogue page 21 for setting information.

MICROBORE TRIANGULAR INDEXABLE UNITS



Left Hand Available from size 3.
Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
*M1A2WB03-40	WBG T030102	16.3	16.0	3.0	8.7	1.4	0.8
*M1B2WB03-40	LW Sumitomo	13.5	13.3	1.2	8.7	1.4	0.8

*M2A2T06-40	TC_06T1_	21.0	20.9	4.5	9.7	1.3	1.2
*M2B2T06-40		17.9	18.2	2.0	9.7	1.3	1.2
*M2B2ST06-40		15.6	15.9	0.8	9.7	1.3	1.2

*M3A2T09-40	TC_0902_	27.7	26.2	6.4	13.4	2.6	1.6
*M3B2T09-40		23.7	23.0	3.2	13.4	2.6	1.6

M5A2T11-40	TC_1102_	39.7	41.3	10.3	16.0	0.2	2.4
M5B2T11-40		33.3	35.7	5.6	16.0	0.2	2.4

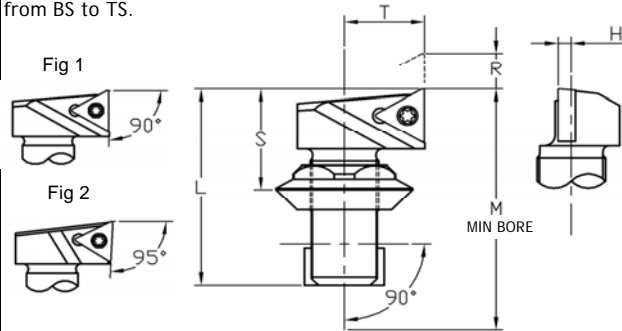
M7A2T16-80	TC_16T3_	55.6	58.7	12.7	25.4	-1.6	3.2
M7B2T16-80		49.2	53.2	7.9	25.4	-1.6	3.2

M10A2T16-80	TC_16T3_	76.2	78.6	22.2	31.8	-0.8	4.8
M10B2T16-80		63.5	68.3	12.7	31.8	-0.8	4.8

* = HEADED UNIT WITH CAPTIVE DIAL

Left Hand available. Modify order code from BS to TS.

HEADED UNITS

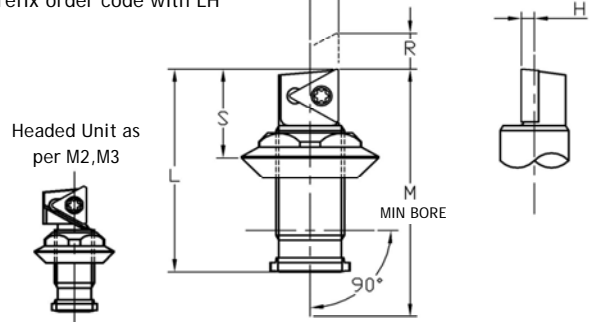


Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
U.K STANDARD HEADED UNIT 90° APPROACH (Fig 1)							
M030BS090T09-50	TC_0902_	26.7	33.3	6.3	13.5	9.4	1.6
M050BS090T11-50	TC_1102_	38.4	47.8	9.1	17.0	15.0	2.4
M070BS090T16-100	TC_16T3_	53.6	65.8	11.7	25.4	19.8	3.2
M100BS090T16-100	TC_16T3_	71.1	85.9	17.5	31.8	25.4	4.8

EUROPEAN STANDARD HEADED UNIT 95° APPROACH (Fig 2)							
M022BS095T06-50	TC_06T1_	18.4	23.0	2.5	10.1	7.6	0.2
M022BS095TC-50	U3.8803L	18.4	23.0	2.5	10.1	7.6	0.2
M032BS095T06-50	TC_06T1_	23.6	37.0	5.7	10.3	9.4	0.8
M032BS095TC-50	U3.8803L	23.6	37.0	5.7	10.3	9.4	0.8
M052BS095TC-50	TC_1102_	37.9	46.0	6.7	16.6	15.0	0.5
M072-0L095TC-100	TC_1102_	66.6	78.0	20.5	26.7	19.8	0.2

All dimensions shown are measured over a qualified O4 insert radius. Dimension 'T' is measured to insert sharp corner, a minus sign denotes insert is behind unit centreline. All cartridges are supplied with insert screw and key. Inserts to be ordered separately.

Left Hand Available from size 3.
Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
*M2A5T06-50	TC_06T1_	21.0	24.3	5.5	9.7	2.0	1.2
*M2B5T06-50		17.9	21.1	2.5	9.7	2.0	1.2

*M3A5T09-50	TC_0902_	26.6	31.0	7.9	12.3	3.0	1.6
*M3B5T09-50		22.6	27.0	4.0	12.3	3.0	1.6

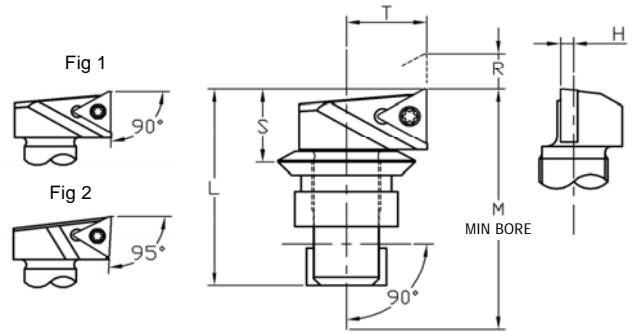
M5A5T11-50	TC_1102_	39.7	48.4	13.5	16.0	5.4	2.4
M5B5T11-50		33.3	42.1	7.1	16.0	5.4	2.4

M7A5T16-100	TC_16T3_	55.6	66.7	16.7	25.4	6.4	3.2
M7B5T16-100		49.2	60.3	10.3	25.4	6.4	3.2

M10A5T16-100	TC_16T3_	76.2	88.9	28.6	31.8	9.5	4.8
M10B5T16-100		63.5	76.2	15.9	31.8	9.5	4.8

* = HEADED UNIT WITH CAPTIVE DIAL

GEAR ADJUST UNITS



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
U.K STANDARD GEAR ADJUST UNIT 90° APPROACH (Fig 1)							
M020-BS090T06-50GA	TC_06T1_	21.0	23.0	4.0	7.7	7.5	1.2
M030-BS090T09-50GA	TC_0902_	26.7	33.3	5.0	11.4	9.4	1.6
M050-BS090T11-50GA	TC_1102_	38.4	47.8	5.0	14.3	15.0	2.4
M070-BS090T16-100GA	TC_16T3_	53.6	65.8	5.0	20.9	19.8	3.2
M100-BS090T16-100GA	TC_16T3_	71.1	85.9	5.0	27.0	25.4	4.8

EUROPEAN STANDARD GEAR ADJUST UNIT 95° APPROACH (Fig 2)							
M022-0L095T06-50GA	TC_06T1_	21.3	25.6	4.5	7.7	7.6	0.2
M022-0L095TC-50GA	U3.8803L	21.3	25.6	4.5	7.7	7.6	0.2
M022BS095T06-50GA	TC_06T1_	18.4	23.0	2.0	7.7	7.6	0.2
M022BS095TC-50GA	U3.8803L	18.4	23.0	2.0	7.7	7.6	0.2
M032-0L095T06-50GA	TC_06T1_	25.1	31.0	5.0	8.3	9.4	0.8
M032-0L095TC-50GA	U3.8803L	25.1	31.0	5.0	8.3	9.4	0.8
M032BS095T06-50GA	TC_06T1_	23.6	31.0	4.5	8.3	9.4	0.8
M032BS095TC-50GA	U3.8803L	23.6	31.0	4.5	8.3	9.4	0.8
M052-0L095TC-50GA	TC_1102_	45.1	53.4	12.4	13.8	15.0	0.5
M052-1L095TC-50GA	TC_1102_	40.0	46.0	7.0	13.8	15.0	0.5
M052BS095TC-50GA	TC_1102_	37.9	48.8	6.7	13.8	15.0	0.5
M072-0L095TC--100GA	TC_1102_	66.6	78.5	21.5	22.5	19.8	0.2

Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.

SPARES LIST



Microbore Unit		Dial	Dial Wrench	Lockscrew		Lockscrew Wrench	Washer	Top Adjust Spring	Insert Screw	Insert Key	
				A Length	B Length						
Angular Mounted Unit Spares	M1A2WB03-40	Captive	1330A	MS101		M2 (2.0mm AF)	N/A	N/A	BHF 0203S	T6	
	M1B2WB03-40				MS100						
	M2A2T06-40	Captive	2330A	MS102		M2 (2.0mm AF)	2306	2243	DIT6	T6	
	M2B2T06-40				MS101						
	M3A2T09-40	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	P2205	T7	
	M3B2T09-40				MS104						
	M5A2T11-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243	P2506	T8	
	M5B2T11-40				MS107						
	M7A2T16-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243	P3511	T15	
	M7B2T16-80				MS110						
M10A2T16-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	P3511	T15		
M10B2T16-80				MS114							
Square Mounted Units Spares	M2A5T06-50	Captive	2330A	MS102		M2 (2.0mm AF)	2306	2243	DIT6	T6	
	M2B5T06-50				MS101						
	M3A5T09-50	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	P2205	T7	
	M3B5T09-50				MS104						
	M5A5T11-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	P2506	T8	
	M5B5T11-50				MS107						
	M7A5T16-100	7760	5330A	MS111		M7 (6.0mm AF)	7306	7243	P3511	T15	
	M7B5T16-100				MS110						
	M10A5T16-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	P3511	T15	
	M10B5T16-100				MS114						
Square Mounted Headed Unit Spares	UK STANDARD SQUARE MOUNTED HEADED UNIT 90° APPROACH (Fig 1)										
	M030BS090T09-50	Captive	2330A	MS105		M3	3306	3243	P2205	T7	
	M050BS090T11-50	5755	5330A	MS108		M5	5306	5243	P2506	T8	
	M070BS090T16-100	7760	5330A	MS117		M7	7306	7243	P3511	T15	
	M100BS090T16-100	10760	10330A	MS115		M10	10306	10243	P3511	T15	
	EUROPEAN STANDARD SQUARE MOUNTED HEADED UNIT 95° APPROACH (Fig 2)										
	M022-BS095T06-50	Captive	2330A	MS102		M2	2306	2243	DIT6	T6	
	M022-BS095TC-50	Captive	2330A	MS102		M2	2306	2243	TXS M2x4	T6	
	M032-BS095T06-50	Captive	2330A	MS105		M3	3306	3243	DIT6	T6	
	M032-BS095TC-50	Captive	2330A	MS105		M3	3306	3243	TXS M2x4	T6	
	M052-BS095TC-50	5755	5330A	MS108		M5	5306	5243	P2506	T8	
	M072-OL095TC-100	7760	5330A	MS117		M7	7306	7243	P3511	T15	
	Gear Adjust Unit Spares	UK STANDARD GEAR ADJUST HEADED UNIT 90° APPROACH (Fig 1)									
		M020-BS090T06-50GA	Captive	2842	MS202		M2		GRE02	DIT6	T6
M030-BS090T09-50GA		Captive	2842	MS205		M3		GRE03	P2205	T7	
M050-BS090T11-50GA		5855	5842	MS208		M5		GRE05	P2506	T8	
M070-BS090T16-100GA		7860	5842	MS211		M7		GRE07	P3511	T15	
M100-BS090T16-100GA		10860	5842	MS215		M10		GRE10	P3511	T15	
EUROPEAN STANDARD GEAR ADJUST HEADED UNIT 95° APPROACH (Fig 2)											
M022-OL095T06-50GA		Captive	2842	MS202		M2		GRE02	DIT6	T6	
M022-OL095TC-50GA		Captive	2842	MS202		M2		GRE02	TXS M2x4	T6	
M022BS095T06-50GA		Captive	2842	MS202		M2		GRE02	DIT6	T6	
M022BS095TC-50GA		Captive	2842	MS202		M2		GRE02	TXS M2x4	T6	
M032-OL095T06-50GA		Captive	2842	MS205		M3		GRE03	DIT6	T6	
M032-OL095TC-50GA		Captive	2842	MS205		M3		GRE03	TXS M2x4	T6	
M032BS095T06-50GA		Captive	2842	MS205		M3		GRE03	DIT6	T6	
M032BS095TC-50GA		Captive	2842	MS205		M3		GRE03	TXS M2x4	T6	
M052-OL095TC-50GA		5855	5842	MS208		M5		GRE05	P2506	T8	
M052-1L095TC-50GA		5855	5842	MS208		M5		GRE05	P2506	T8	
M052BS095TC-50GA		5855	5842	MS208		M5		GRE05	P2506	T8	
M072-OL095TC-100GA		7860	5842	MS211		M7		GRE07	P2506	T8	

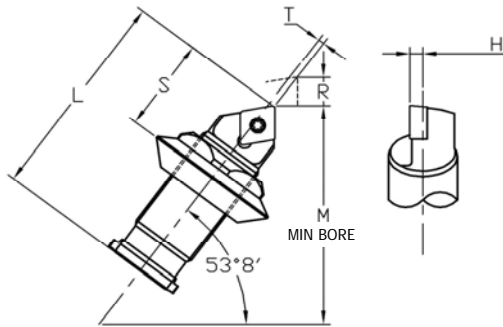
TO ORDER CARTRIDGE ONLY, REMOVE THE DIAL REF. FROM UNIT PART NO. (REMOVE -40, -50, -50, -50GA, -80, -100 OR -100GA)



MICROBORE ISO 80° RHOMBOID INDEXABLE UNITS



Left Hand Available. Prefix order code with LH



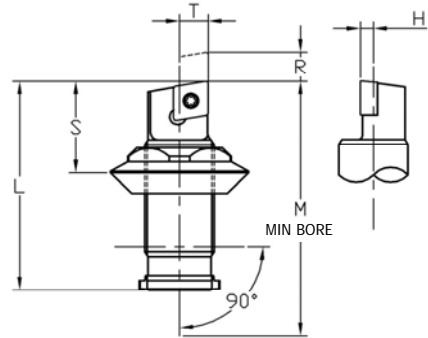
Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
M3A2C06-40	CC_0602_	25.4	26.2	6.4	11.1	0.2	1.6
M3B2C06-40		21.4	23.0	3.2	11.1	0.2	1.6

M5A2C06-40	CC_0602_	39.7	41.3	10.3	16.0	1.2	2.4
M5B2C06-40		33.3	35.7	5.6	16.0	1.2	2.4

M7A2C09-80	CC_09T3_	55.6	58.7	12.7	25.4	-1.6	3.2
M7B2C09-80		49.2	53.2	7.9	25.4	-1.6	3.2

M10A2C12-80	CC_1204_	76.2	78.6	22.2	31.8	-0.8	4.8
M10B2C12-80		63.5	68.3	12.7	31.8	-0.8	4.8

Left Hand Available. Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
M3A5C06-50	CC_0602_	25.4	31.0	7.9	11.1	4.0	1.6
M3B5C06-50		21.4	27.0	4.0	11.1	4.0	1.6

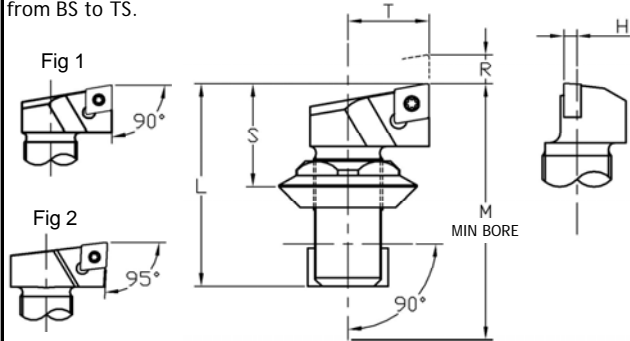
M5A5C06-50	CC_0602_	39.7	48.4	13.5	16.0	5.4	2.4
M5B5C06-50		33.3	42.1	7.1	16.0	5.4	2.4

M7A5C09-100	CC_09T3_	55.6	66.7	16.7	25.4	6.4	3.2
M7B5C09-100		49.2	60.3	10.3	25.4	6.4	3.2

M10A5C12-100	CC_1204_	76.2	88.9	28.6	31.8	9.5	4.8
M10B5C12-100		63.5	76.2	15.9	31.8	9.5	4.8

Left Hand available. Modify order code from BS to TS.

HEADED UNITS

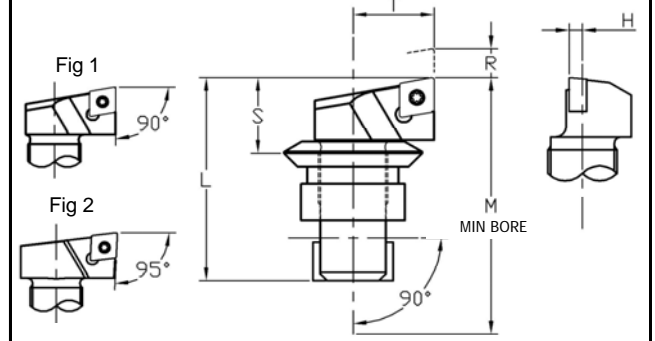


Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
U.K STANDARD HEADED UNIT 90° APPROACH (Fig 1)							
M030BS090C06-50	CC_0602_	26.7	33.3	6.3	13.5	9.4	1.6
M050BS090C06-50	CC_0602_	38.4	47.8	9.1	17.0	15.0	2.4
M070BS090C12-100	CC_1204_	53.6	65.8	11.7	25.4	19.8	3.2
M100BS090C12-100	CC_1204_	71.1	85.9	17.5	31.8	25.4	4.8

EUROPEAN STANDARD HEADED UNIT 95° APPROACH (Fig 2)							
M052BS095C06-50	CC_0602_	37.9	46.0	6.7	16.5	15.0	0.5
M072BS095C09-100	CC_09T3_	55.2	71.0	8.8	26.5	19.8	0.2
M072-0L095C09-100	CC_09T3_	66.8	78.0	20.1	26.5	19.8	0.2

Left Hand available.

GEAR ADJUST UNITS



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
U.K STANDARD GEAR ADJUST UNIT 90° APPROACH (Fig 1)							
M030BS090C06-50GA	CC_0602_	26.7	32.0	3.8	11.3	9.4	1.6
M050BS090C06-50GA	CC_0602_	38.4	46.5	3.8	14.3	15.0	2.4
M070BS090C12-100GA	CC_1204_	53.6	65.0	10.3	20.9	19.8	3.2
M100BS090C12-100GA	CC_1204_	71.1	89.0	14.3	27.0	25.4	4.8

EUROPEAN STANDARD GEAR ADJUST UNIT 95° APPROACH (Fig 2)							
M022-0L095C06-50GA	CC_0602_	22.7	26.7	4.0	9.4	7.6	0.5
M032-0L095C06-50GA	CC_0602_	28.3	33.8	5.0	11.3	9.4	0.8
M052-0L095C06-50GA	CC_0602_	45.1	54.0	12.4	14.1	15.0	0.5
M052-1L095C06-50GA	CC_0602_	40.0	48.8	7.0	14.1	15.0	0.5
M052BS095C06-50GA	CC_0602_	37.9	46.0	3.8	13.8	15.0	0.5
M072BS095C09-100GA	CC_09T3_	55.2	67.2	10.0	22.5	19.8	0.2
M072-0L095C09-100GA	CC_09T3_	66.6	78.5	21.5	22.5	19.8	0.2

All dimensions shown are measured over a qualified 04 insert radius. Dimension 'T' is measured to insert sharp corner, a minus sign denotes insert is behind unit centreline. All cartridges are supplied with insert screw and key. Inserts to be ordered separately.

Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.



SPARES LIST



Microbore Unit		Dial	Dial Wrench	Lockscrew		Lockscrew Wrench	Washer	Top Adjust Spring	Insert Screw	Insert Key
				A Length	B Length					
Angular Mounted Unit Spares	M3A2C06-40	3754	2330A	MS105		M3 (2.5mm AF)	3306	3243	C02505	T7
	M3B2C06-40				MS104					
	M5A2C06-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243	C02506	T7
	M5B2C06-40				MS107					
	M7A2C09-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243	C04008	T15
	M7B2C09-80				MS110					
	M10A2C12-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	C05012	T15
	M10B2C12-80				MS114					

Square Mounted Units Spares	M3A5C06-50	3755	2330A	MS105		M3 (2.5mm AF)	3306	3243	C02505	T7
	M3B5C06-50				MS104					
	M5A5C06-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	C02506	T7
	M5B5C06-50				MS107					
	M7A5C09-100	7760	5330A	MS111		M7 (6.0mm AF)	7306	7243	C04008	T15
	M7B5C09-100				MS110					
	M10A5C12-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	C05012	T15
	M10B5C12-100				MS114					

UK STANDARD SQUARE MOUNTED HEADED UNIT 90° APPROACH (Fig 1)											
Square Mounted Headed Unit Spares	M030BS090C06-50	Captive	2330A	MS105	M3	3306	3243	C02505	T7		
	M050BS090C06-50	5755	5330A	MS108	M5	5306	5243	C02506	T7		
	M070BS090C12-100	7760	5330A	MS117	M7	7306	7243	C05012	T15		
	M100BS090C12-100	10760	10330A	MS115	M10	10306	10243	C05012	T15		
	EUROPEAN STANDARD SQUARE MOUNTED HEADED UNIT 95° APPROACH (Fig 2)										
	M052-BS095C06-50	5755	5330A	MS108	M5	5306	5243	C02506	T7		
	M072-BS095C06-100	7760	5330A	MS117	M7	7306	7243	C04008	T15		
	M072-OL095C06-100	7760	5330A	MS117	M7	7306	7243	C04008	T15		

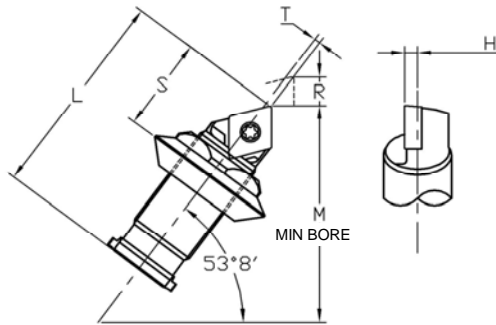
UK STANDARD GEAR ADJUST HEADED UNIT 90° APPROACH (Fig 1)											
Gear Adjust Unit Spares	M030-BS090C06-50GA	Captive	2842	MS205	M3	GRE03	C02505	T7			
	M050-BS090C06-50GA	5855	5842	MS208	M5	GRE05	C02506	T7			
	M070-BS090C12-100GA	7860	5842	MS211	M7	GRE07	C5012	T15			
	M100-BS090C12-100GA	10860	5842	MS215	M10	GRE10	C5012	T15			
	EUROPEAN STANDARD GEAR ADJUST HEADED UNIT 95° APPROACH (Fig 2)										
	M022-OL095C06-50GA	Captive	2842	MS202	M2	GRE02	C02505	T7			
	M032-OL095C06-50GA	Captive	2842	MS205	M3	GRE03	C02505	T7			
	M052-OL095C06-50GA	5855	5842	MS208	M5	GRE05	C02506	T7			
	M052-1L095C06-50GA	5855	5842	MS208	M5	GRE05	C02506	T7			
	M052-BS095C06-50GA	5855	5842	MS208	M5	GRE05	C02506	T7			
M072-OL095C09-100GA	7860	5842	MS211	M7	GRE07	C04008	T15				
M072-BS095C09-100GA	7860	5842	MS211	M7	GRE07	C04008	T15				

TO ORDER CARTRIDGE ONLY, REMOVE THE DIAL REF. FROM UNIT PART NO. (REMOVE -40, -50, -50, -50GA, -80, -100 OR -100GA)

MICROBORE ISO 75° STELLRAM INDEXABLE UNITS



Left Hand Available. Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
M2A2V-40	EP__0402__	19.8	21.0	4.4	8.7	0.3	1.9
M2B2V-40		16.7	18.7	2.0	8.7	0.3	1.9

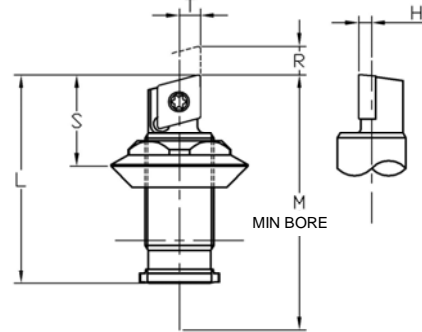
M3A2V-40	EP__0602__	25.4	26.2	6.4	11.1	0.2	1.6
M3B2V-40		21.4	23.0	3.2	11.1	0.2	1.6

M5A2V-40	EP__08M3__	39.7	41.3	10.3	16.0	1.2	2.4
M5B2V-40		33.3	35.7	5.6	16.0	1.2	2.4

M7A2V-80	EC__1204__	55.6	58.7	12.7	25.4	-1.6	3.2
M7B2V-80		49.2	53.2	7.9	25.4	-1.6	3.2

M10A2V-80	EC__1204__	76.2	78.6	22.2	31.8	-0.8	4.8
M10B2V-80		63.5	68.3	12.7	31.8	-0.8	4.8

Left Hand Available. Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
M2A5V-50	EP__0402__	19.8	24.2	5.6	8.7	3.0	1.9
M2B5V-50		16.7	21.0	2.4	8.7	3.0	1.9

M3A5V-50	EP__0602__	25.4	31.0	7.9	11.1	4.0	1.6
M3B5V-50		21.4	27.0	4.0	11.1	4.0	1.6

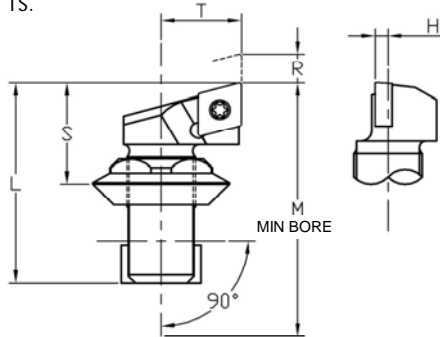
M5A5V-50	EP__08M3__	39.7	48.4	13.5	16.0	4.0	2.4
M5B5V-50		33.3	42.1	7.1	16.0	4.0	2.4

M7A5V-100	EC__1204__	55.6	66.7	16.7	25.4	6.4	3.2
M7B5V-100		49.2	60.3	10.3	25.4	6.4	3.2

M10A5V-100	EC__1204__	76.2	88.9	28.6	31.8	9.5	4.8
M10B5V-100		63.5	76.2	15.9	31.8	9.5	4.8

Left Hand available. Modify order code from BS to TS.

HEADED UNITS



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
M020BS090V-50	EP__0402__	21.1	26.0	5.6	11.0	7.5	1.1

M030BS090V-50	EP__0602__	26.7	33.3	6.3	13.5	9.4	1.6
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M050BS090V-50	EP__08M3__	38.4	47.8	9.1	17.0	15.0	2.4
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M070BS090V-100	EC__1204__	53.6	65.8	11.7	25.4	19.8	3.2
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M100BS090V-100	EC__1204__	71.1	85.9	17.5	31.8	25.4	4.8
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All dimensions shown are measured over a qualified 04 insert radius. Dimension 'T' is measured to insert sharp corner, a minus sign denotes insert is behind unit centreline. All cartridges are supplied with insert screw and key. Inserts to be ordered separately.

Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.

SPARES LIST



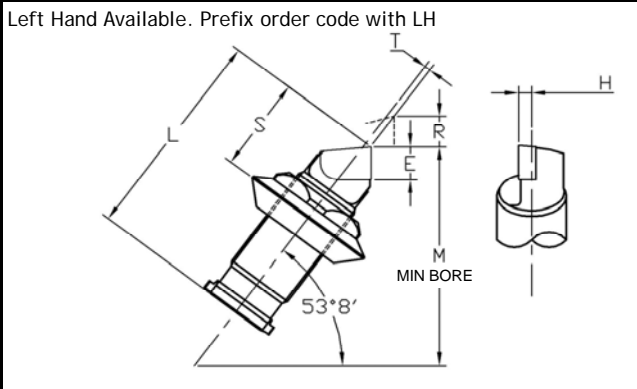
Microbore Unit		Dial	Dial Wrench	Lockscrew		Lockscrew Wrench	Washer	Top Adjust Spring	Insert Screw	Insert Key
				A Length	B Length					
				Lockscrew						
Angular Mounted Unit Spares	M2A2V-40	2254	2330A	MS102		M2 (2.0mm AF)	2306	2243	F2004T	T6
	M2B2V-40				MS101					
	M3A2V-40	3754	2330A	MS105		M3 (2.5mm AF)	3306	3243	F2505T	T7
	M3B2V-40				MS104					
	M5A2V-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243	D4008	T15
	M5B2V-40				MS107					
	M7A2V-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243	D5010	T20
	M7B2V-80				MS110					
	M10A2V-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	D5013	T20
	M10B2V-80				MS114					

Square Mounted Units Spares	M2A5V-50	2255	2330A	MS102		M2 (2.0mm AF)	2306	2243	F2004T	T6
	M2B5V-50				MS101					
	M3A5V-50	3755	2330A	MS105		M3 (2.5mm AF)	3306	3243	F2505T	T7
	M3B5V-50				MS104					
	M5A5V-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	D4008	T15
	M5B5V-50				MS107					
	M7A5V-100	7760	5330A	MS111		M7 (6.0mm AF)	7306	7243	D5010	T20
	M7B5V-100				MS110					
	M10A5V-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	D5013	T20
	M10B5V-100				MS114					

Square Mounted Headed Unit Spares	M020BS090V-50	Captive	2330A	MS102		M2 (2.0mm AF)	2306	2243	F2004T	T6	
	M030BS090V-50	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	F2505T	T7	
	M050BS090V-50		5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	D4008	T15
	M070BS090V-100		7760	5330A	MS117		M7 (6.0mm AF)	7306	7243	D5013	T20
	M100BS090V-100		10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	D5013	T20

TO ORDER CARTRIDGE ONLY, REMOVE THE DIAL REF. FROM UNIT PART NO. (REMOVE -40, -50, -50 -80 OR -100)

MICROBORE BRAZED CARBIDE UNITS



Microbore Unit	Carbide Grades	Dimensions in mm						
		L	M	R	S	T	H	E
M1A2**-40	E, 12E, F &	14.3	16.0	3.2	6.4	0.4	0.8	2.0
M1B2**-40	12F	11.5	13.3	1.2	6.4	0.4	0.8	2.0

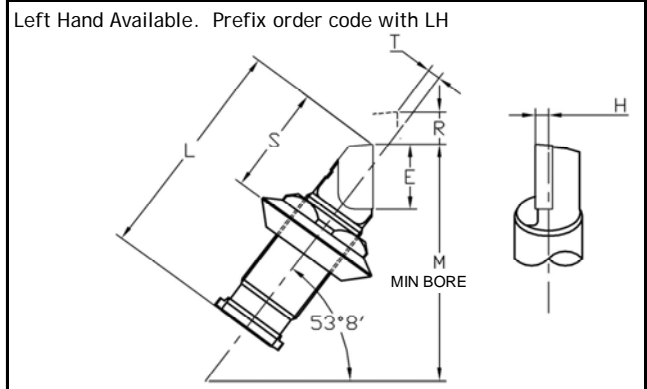
M2A2**-40	E, 12E, F &	19.8	21.0	4.4	8.7	0.4	1.2	2.8
M2B2**-40	12F	16.7	18.7	2.0	8.7	0.4	1.2	2.8

M3A2**-40	E, 12E, F &	25.4	26.2	6.4	11.1	0.8	1.6	3.2
M3B2**-40	12F	21.4	23.0	3.2	11.1	0.8	1.6	3.2

M5A2**-40	E, 12E, F &	39.7	41.3	10.3	16.0	1.2	2.4	6.4
M5B2**-40	12F	33.3	35.7	5.6	16.0	1.2	2.4	6.4

M7A2**-80	E, 12E, F &	55.6	58.7	12.7	25.4	-1.6	3.2	15.1
M7B2**-80	12F	49.2	53.2	7.9	25.4	-1.6	3.2	15.1

M10A2**-80	E, 12E, F &	76.2	78.6	22.2	31.8	-0.8	4.8	19.1
M10B2**-80	12F	63.5	68.3	12.7	31.8	-0.8	4.8	19.1



Microbore Unit	Carbide Grades	Dimensions in mm						
		L	M	R	S	T	H	E
M1A3**-40	E, 12E, F &	15.1	17.5	3.2	7.1	0.8	0.8	3.6
M1B3**-40	12F	12.3	14.9	1.2	7.1	0.8	0.8	3.6

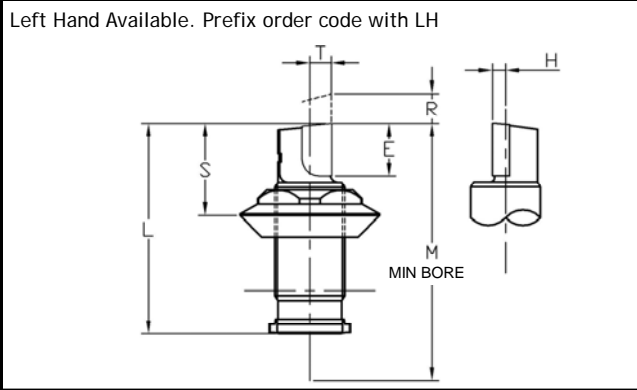
M2A3**-40	E, 12E, F &	21.4	23.0	4.4	10.3	1.2	1.2	5.6
M2B3**-40	12F	18.3	20.6	2.0	10.3	1.2	1.2	5.6

M3A3**-40	E, 12E, F &	27.0	29.4	6.4	12.7	1.6	1.6	7.5
M3B3**-40	12F	23.0	26.2	3.2	12.7	1.6	1.6	7.5

M5A3**-40	E, 12E, F &	42.9	46.0	10.3	19.1	2.4	2.4	11.9
M5B3**-40	12F	36.5	40.5	5.6	19.1	2.4	2.4	11.9

M7A3**-80	E, 12E, F &	58.7	62.7	12.7	28.6	4.8	3.2	19.8
M7B3**-80	12F	52.4	57.9	7.9	28.6	4.8	3.2	19.8

M10A3**-80	E, 12E, F &	82.6	86.5	22.2	38.1	6.4	4.8	27.8
M10B3**-80	12F	69.9	76.2	12.7	38.1	6.4	4.8	27.8



Microbore Unit	Carbide Grades	Dimensions in mm						
		L	M	R	S	T	H	E
M1A5**-50	E, 12E, F &	14.3	18.3	4.0	6.4	1.6	0.8	3.2
M1B5**-50	12F	11.5	15.1	1.6	6.4	1.6	0.8	3.2

M2A5**-50	E, 12E, F &	19.8	24.2	5.6	8.7	2.0	1.2	4.0
M2B5**-50	12F	16.7	21.0	2.4	8.7	2.0	1.2	4.0

M3A5**-50	E, 12E, F &	25.4	31.0	7.9	11.1	2.4	1.6	5.6
M3B5**-50	12F	21.4	27.0	4.0	11.1	2.4	1.6	5.6

M5A5**-50	E, 12E, F &	39.7	48.4	13.5	16.0	4.0	2.4	9.1
M5B5**-50	12F	33.3	42.1	7.1	16.0	4.0	2.4	9.1

M7A5**-100	E, 12E, F &	55.6	66.7	16.7	25.4	6.4	3.2	15.9
M7B5**-100	12F	49.2	60.3	10.3	25.4	6.4	3.2	15.9

M10A5**-100	E, 12E, F &	76.2	88.9	28.6	31.8	9.5	4.8	19.1
M10B5**-100	12F	63.5	76.2	15.9	31.8	9.5	4.8	19.1







Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.

When ordering please add the carbide grade to the Microbore part No. in the space provided. Eg. M5A2**-40 could become M5A2**12E**-40 when the appropriate carbide grade is added.

Dimension 'T' is measured to sharp corner, a minus sign denotes corner is behind unit centreline.

SPARES LIST



Microbore Unit								
		Dial	Dial Wrench	Lockscrew		Lockscrew Wrench	Washer	Top Adjust Spring
				A Length	B Length			
Angular Mounted Unit Spares	M1A2**-40	1204	1330A	MS101		M2 (2.0mm AF)	N/A	N/A
	M1B2**-40				MS100			
	M2A2**-40	2254	2330A	MS102		M2 (2.0mm AF)	2306	2243
	M2B2**-40				MS101			
	M3A2**-40	3754	2330A	MS105		M3 (2.5mm AF)	3306	3243
	M3B2**-40				MS104			
	M5A2**-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243
	M5B2**-40				MS107			
	M7A2**-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243
	M7B2**-80				MS110			
M10A2**-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	
M10B2**-80				MS114				
Angular Mounted Unit Spares	M1A3**-40	1204	1330A	MS101		M2 (2.0mm AF)	N/A	N/A
	M1B3**-40				MS100			
	M2A3**-40	2254	2330A	MS102		M2 (2.0mm AF)	2306	2243
	M2B3**-40				MS101			
	M3A3**-40	3754	2330A	MS105		M3 (2.5mm AF)	3306	3243
	M3B3**-40				MS104			
	M5A3**-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243
	M5B3**-40				MS107			
	M7A3**-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243
	M7B3**-80				MS110			
M10A3**-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	
M10B3**-80				MS114				
Square Mounted Units Spares	M1A5**-50	1205	1330A	MS101		M2 (2.0mm AF)	N/A	N/A
	M1B5**-50				MS100			
	M2A5**-50	2255	2330A	MS102		M2 (2.0mm AF)	2306	2243
	M2B5**-50				MS101			
	M3A5**-50	3755	2330A	MS105		M3 (2.5mm AF)	3306	3243
	M3B5**-50				MS104			
	M5A5**-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243
	M5B5**-50				MS107			
	M7A5**-100	7760	5330A	MS111		M7 (6.0mm AF)	7306	7243
	M7B5**-100				MS110			
M10A5**-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	
M10B5**-100				MS114				

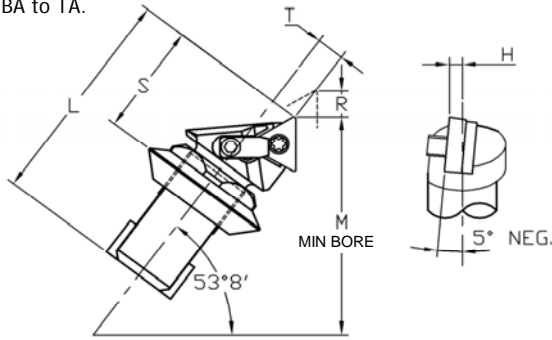
TO ORDER CARTRIDGE ONLY, REMOVE THE DIAL REF. FROM UNIT PART NO. (REMOVE -40, -50, -50, -80 OR -100)

MICROBORE PIN LOCK / CLAMP INDEXABLE UNITS



Left Hand available. Modify order code from BA to TA.

HEADED UNITS



Microbore Cartridge	Insert	Dimensions in mm					
		L	M	R	S	T	H
M030BA090TN2C-40	TN_1103_	29.0	30.0	5.0	16.0	2.7	1.6

M050BA090TN2E-40	TN_1103_	41.4	40.4	7.4	20.0	5.1	2.4
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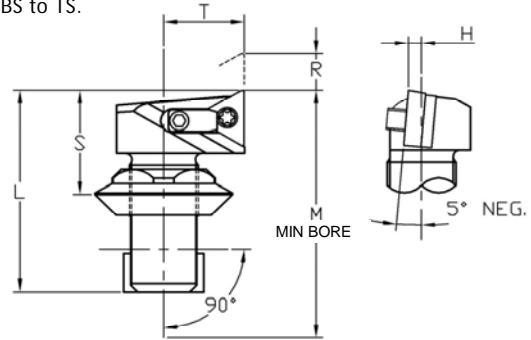
M070BA090TN3F-80	TN_1604_	58.7	58.7	9.4	30.5	5.6	3.2
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M100BA090TN4F-80	TN_2204_	77.2	77.0	14.0	37.9	6.1	4.8
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All dimensions shown are measured over a qualified 04 insert radius. All cartridges are supplied with insert screw and key. Inserts to be ordered separately.

Left Hand available. Modify order code from BS to TS.

HEADED UNITS



Microbore Cartridge	Insert	Dimensions in mm					
		L	M	R	S	T	H
M030BS090TN2E-50	TN_1103_	26.7	33.3	6.4	13.5	9.4	1.6

M050BS090TN2E-50	TN_1103_	38.4	47.8	9.1	17.0	15.0	2.4
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M070BS090TN3F-100	TN_1604_	53.6	65.8	11.7	25.4	19.8	3.2
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M100BS090TN4F-100	TN_2204_	71.1	85.9	17.5	31.7	25.4	4.8
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Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.

ONLY SUPPLIED IN UNIT FORM, SINGLE CARTRIDGES NOT AVAILABLE.

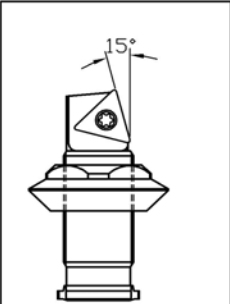
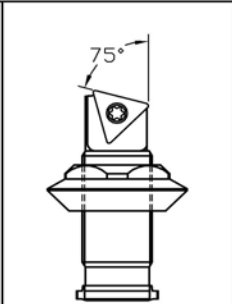
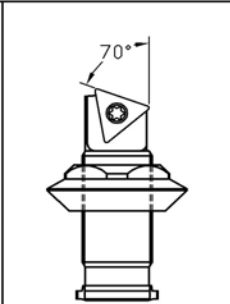
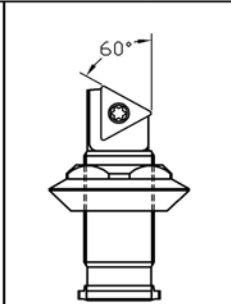
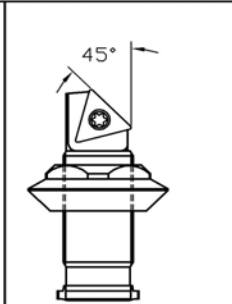
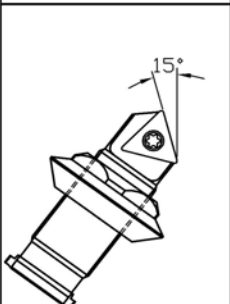
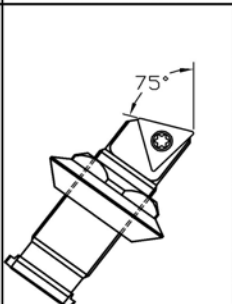
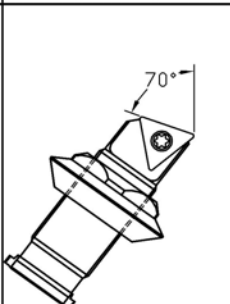
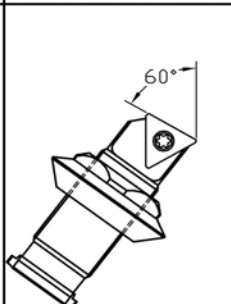
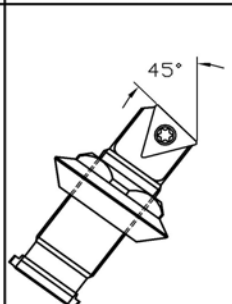
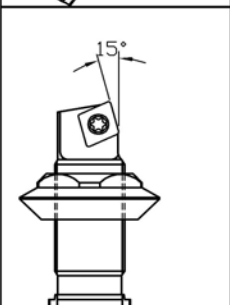
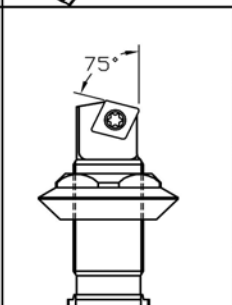
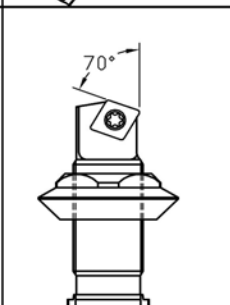
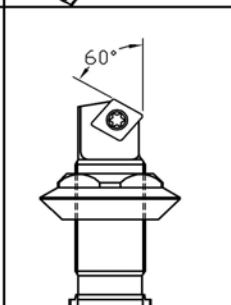
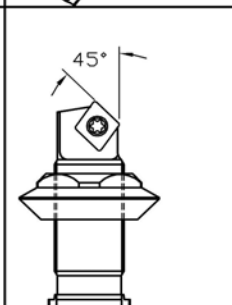
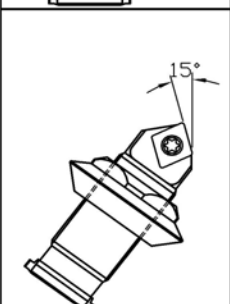
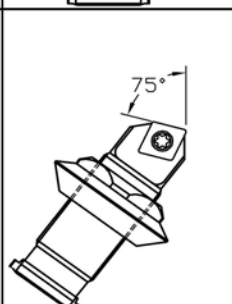
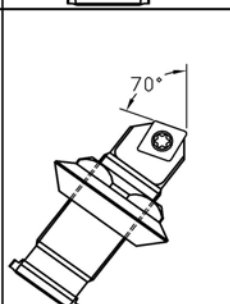
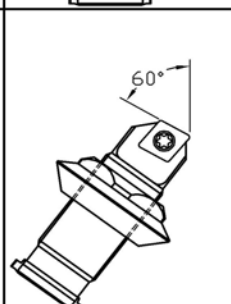
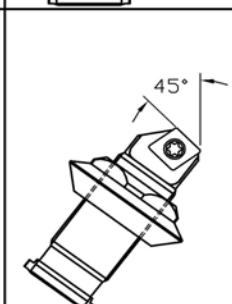
SPARES LIST

Microbore Unit	Dial	Dial Wrench	Lock-screw	Lock-screw Wrench	Washer	Top Adjust Spring	Clamp	Clamp Screw	Clamp Screw Wrench	Lock Pin	Lock Pin Wrench	Seat	Seat Screw
M030BA090TN2C-40	Captive	2330A	MS105	M3 (2.5mm AF)	3306	3243	N/A	N/A	N/A	NLM 23	1.5mm A/F	N/A	N/A
M050BA090TN2E-40	5754	5330A	MS108	M5 (4.0mm AF)	5306	5243	DLM3	M2x0.4x8 SHCS	1.5mm A/F	NLM 23	1.5mm A/F	N/A	N/A
M070BA090TN3F-80	7758	5330A	MS117	M7 (6.0mm AF)	7306	7243	DLM5	XNSM-0515	2.5mm A/F	NLM34L	2.0mm A/F	ITSN 322	SM34
M100BA090TN4F-80	10758	10330A	MS115	M10 (8.0mm AF)	10306	10243	DLM7	XNSM-0515	2.5mm A/F	NLM46	2.5mm A/F	ITSN 432	SM46
M030BS090TN2E-50	Captive	2330A	MS105	M3 (2.5mm AF)	3306	3243	DLM3	M2x0.4x8 SHCS	1.5mm A/F	NLM 23	1.5mm A/F	N/A	N/A
M050BS090TN2E-50	5755	5330A	MS108	M5 (4.0mm AF)	5306	5243	DLM5	XNSM-0515	2.5mm A/F	NLM 23	1.5mm A/F	N/A	N/A
M070BS090TN3F-100	7760	5330A	MS117	M7 (6.0mm AF)	7306	7243	DLM7	XNSM-0515	2.5mm A/F	NLM34L	2.0mm A/F	ITSN 322	SM34
M100BS090TN4F-100	10760	10330A	MS115	M10 (8.0mm AF)	10306	10243	DLM9	XNSM-0825	4.0mm A/F	NLM46	2.5mm A/F	ITSN 432	SM46

VARIATIONS OF AVAILABLE MICROBORE UNITS

These semi standard units are obtainable on short delivery. Please enquire about availability before placing an order.

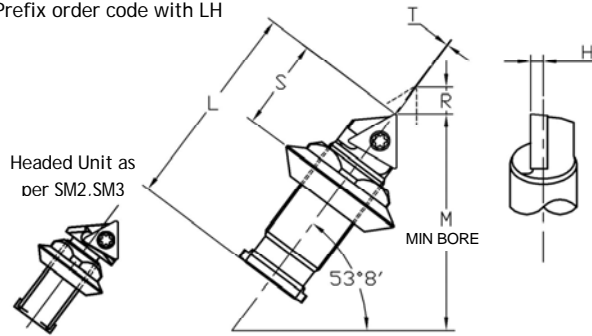
We will design and manufacture individual units to the customers own specification if required.

	15° Lead Angle	75° Lead Angle	70° Lead Angle	60° Lead Angle	45° Lead Angle
Square Mounted Unit with Triangular Insert					
Angular Mounted Unit with Triangular Insert					
Square Mounted Unit with Rhomboid Insert					
Angular Mounted Unit with Rhomboid Insert					

SUMITOMO ELECTRIC TRIANGULAR INDEXABLE UNITS



Left Hand Available.
Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
*SM2A2TB06-40	TB__0601__	21.0	20.9	4.5	9.7	1.4	1.2
*SM2B2TB06-40		17.9	18.2	2.0	9.7	1.4	1.2

*SM3A2T09-40	TC__0902__	27.7	26.2	6.4	13.4	2.6	1.6
*SM3B2T09-40		23.7	23.0	3.2	13.4	2.6	1.6

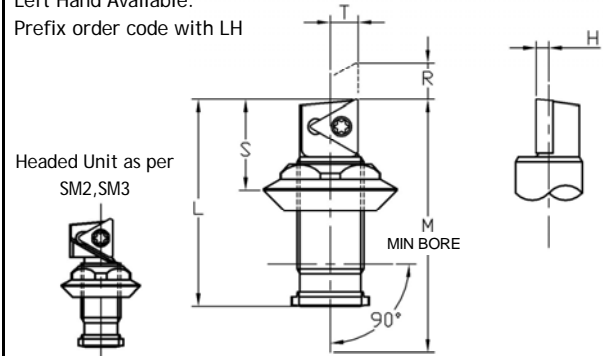
SM5A2T11-40	TC__1102__	39.7	41.3	10.3	16.0	0.2	2.4
SM5B2T11-40		33.3	35.7	5.6	16.0	0.2	2.4

SM7A2T16-80	TC__16T3__	55.6	58.7	12.7	25.4	-1.6	3.2
SM7B2T16-80		49.2	53.2	7.9	25.4	-1.6	3.2

SM10A2T16-80	TC__16T3__	76.2	78.6	22.2	31.8	-0.8	4.8
SM10B2T16-80		63.5	68.3	12.7	31.8	-0.8	4.8

* = HEADED UNIT WITH CAPTIVE DIAL

Left Hand Available.
Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
*SM2A5TB06-40	TB__0601__	21.0	24.3	5.5	9.7	2.0	1.2
*SM2B5TB06-40		17.9	21.1	2.5	9.7	2.0	1.2

*SM3A5T09-50	TC__0902__	26.6	31.0	7.9	12.3	3.0	1.6
*SM3B5T09-50		22.6	27.0	4.0	12.3	3.0	1.6

SM5A5T11-50	TC__1102__	39.7	48.4	13.5	16.0	5.4	2.4
SM5B5T11-50		33.3	42.1	7.1	16.0	5.4	2.4

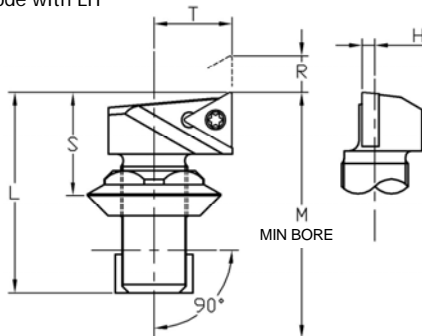
SM7A5T16-100	TC__16T3__	55.6	66.7	16.7	25.4	6.4	3.2
SM7B5T16-100		49.2	60.3	10.3	25.4	6.4	3.2

SM10A5T16-100	TC__16T3__	76.2	88.9	28.6	31.8	9.5	4.8
SM10B5T16-100		63.5	76.2	15.9	31.8	9.5	4.8

* = HEADED UNIT WITH CAPTIVE DIAL

Left Hand Available.
Prefix order code with LH

HEADED UNITS



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
SM030BS090T09-50	TC__0902__	26.7	33.3	6.3	13.5	9.4	1.6
SM050BS090T11-50	TC__1102__	38.4	47.8	9.1	17.0	15.0	2.4
SM070BS090T16-100	TC__16T3__	53.6	65.8	11.7	25.4	19.8	3.2
SM100BS090T16-100	TC__16T3__	71.1	85.9	17.5	31.8	25.4	4.8

All dimensions shown are measured over a qualified 04 insert radius. Dimension 'T' is measured to insert sharp corner, a minus sign denotes insert is behind unit centreline. All cartridges are supplied with insert screw and key. Inserts to be ordered separately.

Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.

SPARES LIST



Microbore Unit		Dial	Dial Wrench	Lockscrew		Lockscrew Wrench	Washer	Top Adjust Spring	Insert Screw	Insert Key
				A Length	B Length					
Angular Mounted Unit Spares	SM2A2TB06-40	Captive	2330A	MS102		M2 (2.0mm AF)	2306	2243	BHF 0203S	T6
	SM2B2TB06-40				MS101					
	SM3A2T09-40	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	BFTX 02206	T6
	SM3B2T09-40				MS104					
	SM5A2T11-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243	BFTX 02507	T8
	SM5B2T11-40				MS107					
	SM7A2T16-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243	BFTX 0410	T15
	SM7B2T16-80				MS110					
	SM10A2T16-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	BFTX 0410	T15
	SM10B2T16-80				MS114					

Square Mounted Units Spares	SM2A5TB06-50	Captive	2330A	MS102		M2 (2.0mm AF)	2306	2243	BHF 0203S	T6
	SM2B5TB06-50				MS101					
	SM3A5T09-50	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	BFTX 02206	T6
	SM3B5T09-50				MS104					
	SM5A5T11-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	BFTX 02507	T8
	SM5B5T11-50				MS107					
	SM7A5T16-100	7760	5330A	MS111		M7 (6.0mm AF)	7306	7243	BFTX 0410	T15
	SM7B5T16-100				MS110					
	SM10A5T16-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	BFTX 0410	T15
	SM10B5T16-100				MS114					

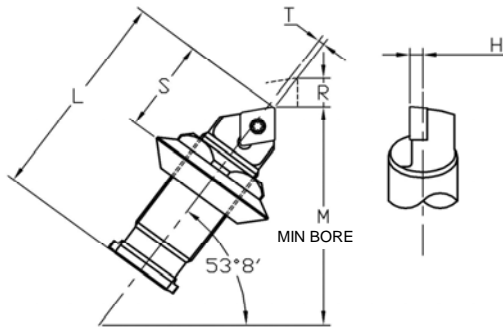
Square Mounted Headed Unit Spares	SM030BS090T09-50	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	BFTX 02206	T6
	SM050BS090T11-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	BFTX 02507	T8
	SM070BS090T16-100	7760	5330A	MS117		M7 (6.0mm AF)	7306	7243	BFTX 0410	T15
	SM100BS090T16-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	BFTX 0410	T15

TO ORDER CARTRIDGE ONLY, REMOVE THE DIAL REF. FROM UNIT PART NO. (REMOVE -40, -50, -50, -80, OR -100)

SUMITOMO ELECTRIC ISO RHOMBOID INDEXABLE UNITS



Left Hand Available. Prefix order code with LH



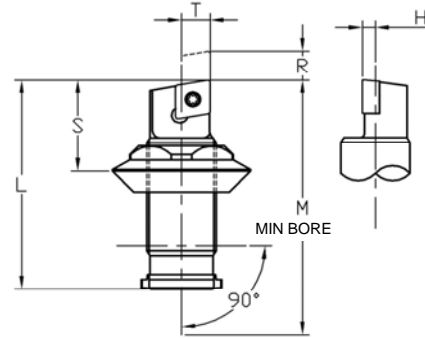
Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
SM3A2C06-40	CC_ _0602_ _	25.4	26.2	6.4	11.1	0.2	1.6
SM3B2C06-40		21.4	23.0	3.2	11.1	0.2	1.6

SM5A2C06-40	CC_ _0602_ _	39.7	41.3	10.3	16.0	1.2	2.4
SM5B2C06-40		33.3	35.7	5.6	16.0	1.2	2.4

SM7A2C09-80	CC_ _09T3_ _	55.6	58.7	12.7	25.4	-1.6	3.2
SM7B2C09-80		49.2	53.2	7.9	25.4	-1.6	3.2

SM10A2C12-80	CC_ _1204_ _	76.2	78.6	22.2	31.8	-0.8	4.8
SM10B2C12-80		63.5	68.3	12.7	31.8	-0.8	4.8

Left Hand Available. Prefix order code with LH



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
SM3A5C06-50	CC_ _0602_ _	25.4	31.0	7.9	11.1	4.0	1.6
SM3B5C06-50		21.4	27.0	4.0	11.1	4.0	1.6

SM5A5C06-50	CC_ _0602_ _	39.7	48.4	13.5	16.0	5.4	2.4
SM5B5C06-50		33.3	42.1	7.1	16.0	5.4	2.4

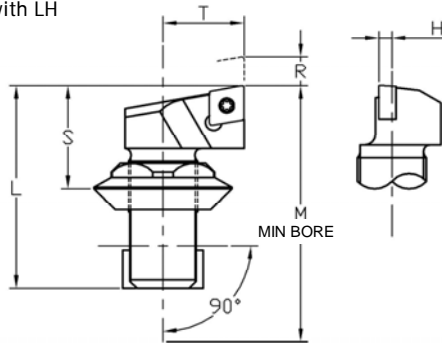
SM7A5C09-100	CC_ _09T3_ _	55.6	66.7	16.7	25.4	6.4	3.2
SM7B5C09-100		49.2	60.3	10.3	25.4	6.4	3.2

SM10A5C12-100	CC_ _1204_ _	76.2	88.9	28.6	31.8	9.5	4.8
SM10B5C12-100		63.5	76.2	15.9	31.8	9.5	4.8

Left Hand Available.

Prefix order code with LH

HEADED UNITS



Microbore Unit	Insert	Dimensions in mm					
		L	M	R	S	T	H
SM030BS090C06-50	CC_ _0602_ _	26.7	33.3	6.3	13.5	9.4	1.6
SM050BS090C06-50	CC_ _0602_ _	38.4	47.8	9.1	17.0	15.0	2.4
SM070BS090C12-100	CC_ _1204_ _	53.6	65.8	11.7	25.4	19.8	3.2
SM100BS090C12-100	CC_ _1204_ _	71.1	85.9	17.5	31.8	25.4	4.8

All dimensions shown are measured over a qualified 04 insert radius. Dimension 'T' is measured to insert sharp corner, a minus sign denotes insert is behind unit centreline. All cartridges are supplied with insert screw and key. Inserts to be ordered separately.

Alternative style units and lead angles can be supplied to order. Please enquire for delivery time.

SPARES LIST



Microbore Unit		Dial	Dial Wrench	Lockscrew		Lockscrew Wrench	Washer	Top Adjust Spring	Insert Screw	Insert Key
				A Length	B Length					
Angular Mounted Unit Spares	SM3A2C06-40	3754	2330A	MS105		M3 (2.5mm AF)	3306	3243	BFTX 02506	T8
	SM3B2C06-40				MS104					
	SM5A2C06-40	5754	5330A	MS108		M5 (4.0mm AF)	5306	5243	BFTX 02506	T8
	SM5B2C06-40				MS107					
	SM7A2C09-80	7758	5330A	MS111		M7 (6.0mm AF)	7306	7243	BFTX 0409	T10
	SM7B2C09-80				MS110					
	SM10A2C12-80	10758	10330A	MS115		M10 (8.0mm AF)	10306	10243	BFTX 0511	T20
SM10B2C12-80				MS114						

Square Mounted Units Spares	SM3A5C06-50	3755	2330A	MS105		M3 (2.5mm AF)	3306	3243	BFTX 02506	T8
	SM3B5C06-50				MS104					
	SM5A5C06-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	BFTX 02506	T8
	SM5B5C06-50				MS107					
	SM7A5C09-100	7760	5330A	MS111		M7 (6.0mm AF)	7306	7243	BFTX 0409	T10
	SM7B5C09-100				MS110					
	SM10A5C12-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	BFTX 0511	T20
SM10B5C12-100				MS114						

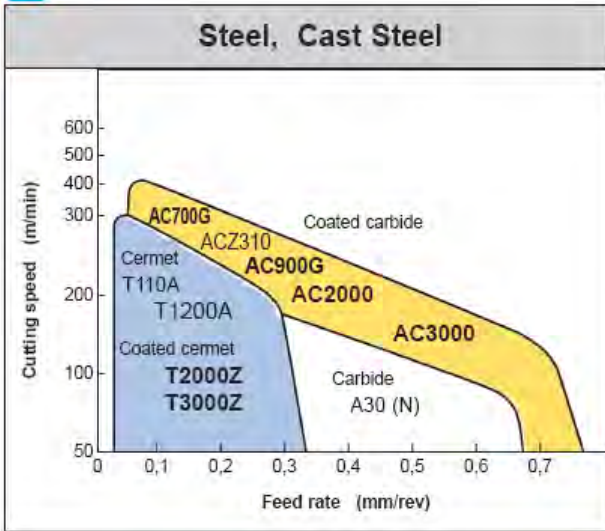
Square Mounted Headed Unit Spares	SM030BS090C06-50	Captive	2330A	MS105		M3 (2.5mm AF)	3306	3243	BFTX 02506	T8
	SM050BS090C06-50	5755	5330A	MS108		M5 (4.0mm AF)	5306	5243	BFTX 02506	T8
	SM070BS090C12-100	7760	5330A	MS117		M7 (6.0mm AF)	7306	7243	BFTX 0511	T20
	SM100BS090C12-100	10760	10330A	MS115		M10 (8.0mm AF)	10306	10243	BFTX 0511	T20

TO ORDER CARTRIDGE ONLY, REMOVE THE DIAL REF. FROM UNIT PART NO. (REMOVE -40, -50, -50, -80, OR -100)

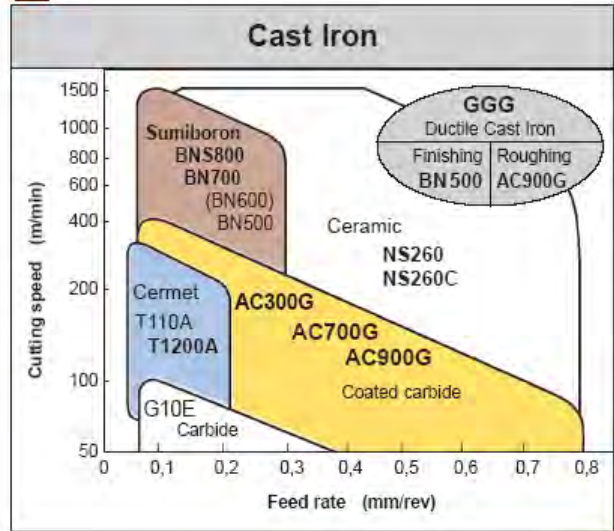
RECOMMENDED CUTTING CONDITIONS FOR SUMITOMO ELECTRIC INSERT GRADES



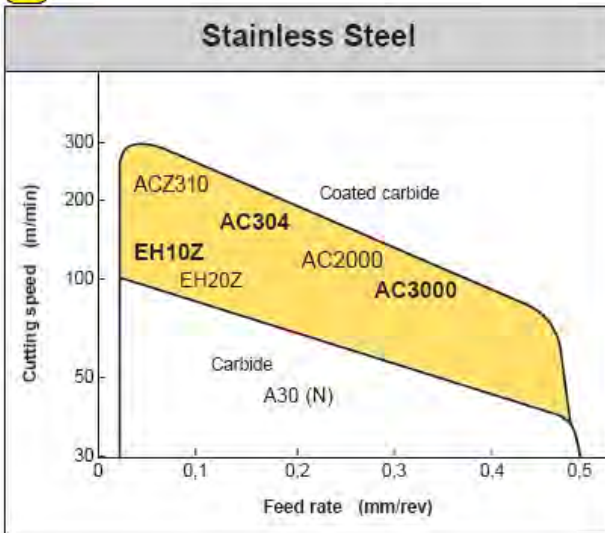
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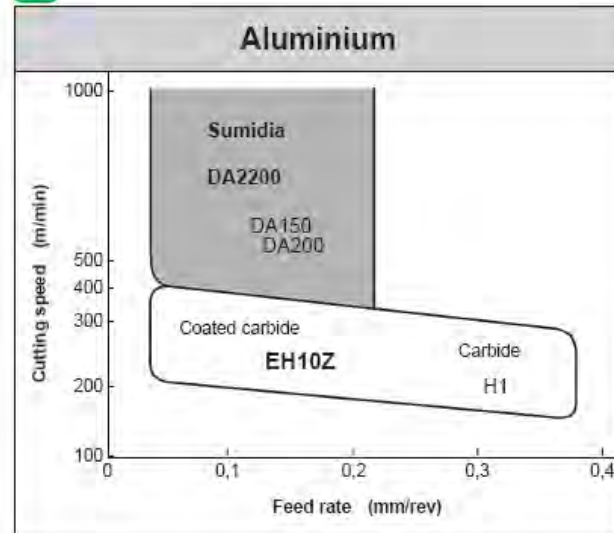
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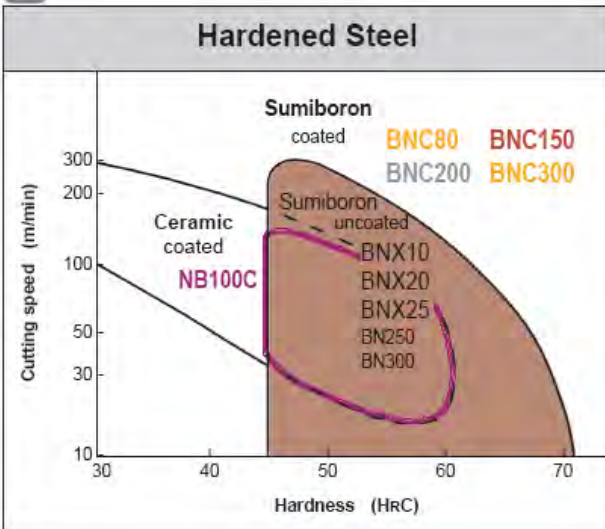
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S

