

Rigibore Units

Accuracy through Rigidity
A wide range of boring units

Type 'R' for roughing/semi-finishing
Type 'TR' for fine-finishing
Minimum bore 15.87mm
5 different sizes available in right and left hand

Key Features

- Unique Design incorporating a precision ground collet
- Split collet clamps to ACME type thread for accuracy and strength
- Separate graduated dial seated on top face of hole
- Rigidity maintained throughout full adjustment of unit

Key Benefits

- No deflection under load on uneven or intermittent cutting
- Greater repeatability
- Longer Insert Life
- Most positive direct adjustment, high degree of rigidity, no dial slip when adjusting



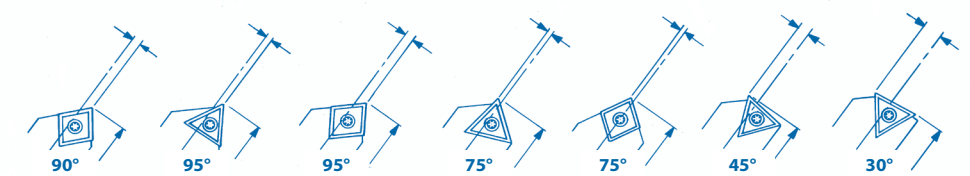
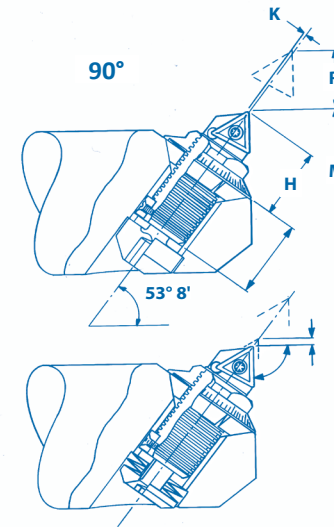
Rigibore Units built into special tools



Rigibore Units in Standard Boring Bars

'R' Units - Angular Mounted - Size 2 Units (R for roughing/semi-finishing)

Technical Specification



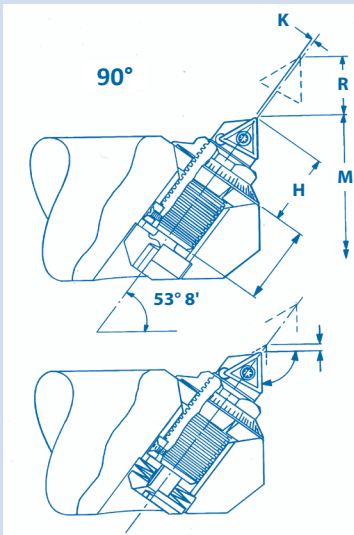
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01mm/0.0004ins on radius per division.

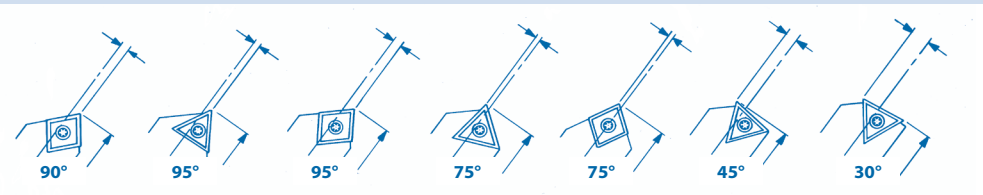
- Notes:
- 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
 - 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				
90°	20.9	0.823	0.2	0.008	4.5	0.177	9.4	0.37	1.35	0.053	TC__ 06T1 (02)	R2A2		
														R2A2-LH
	18.2	0.716			2.0	0.079								R2B2
												R2B2-LH		
	15.87	0.625			0.75	0.029						R2B2S		
												R2B2S-LH		
20.9	0.823	2.0			0.079	12.6	0.496						R2B3	
75°	23.0	0.905			4.5	0.177	10.0	0.393	-1.5	-0.059			R2A2L	
														R2A2L-LH
	20.4	0.803			2.0	0.079								R2B2L
														R2B2L-LH
45°	22.8	0.897			4.5	0.177			-1.6	-0.063			R2A245	
	20.2	0.795			2.0	0.079							R2B245	

'R' Units - Angular Mounted - Size 3 Units (R for roughing/semi-finishing)

Technical Specification





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

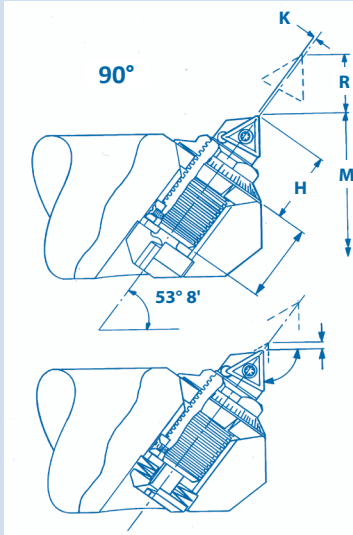
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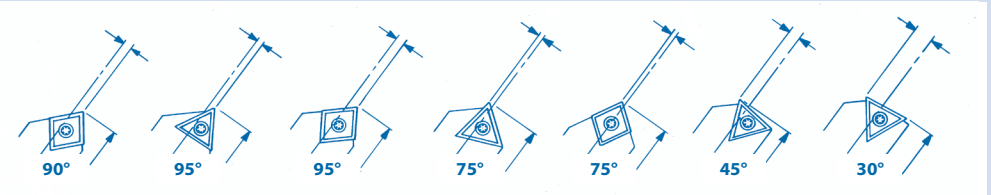
- 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
- 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number				
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						
90°	28.0	1.102	0.28	0.011	7.3	0.290	13.45	0.529	0.8	0.031	TC__0902 (04)	R3A2				
	25.0	0.984			4.0	0.157						11.25	0.443	1.32	0.051	R3A2-LH
																R3B2
	23.0	0.905			7.3	0.290	11.1	0.437	0.2	0.008	TC__06T1 (02)					
	26.8	1.055									R3B1-LH					
	23.7	0.933			4.0	0.157	11.1	0.437	0.2	0.008	CC__0602 (04)	R3A2C				
												R3B2C				
	21.0	0.827			1.5	0.059	13.45	0.530	0.036	0.92	TC__0902 (04)	R3B2C-LH				
95°	25.0	0.984			4.0	0.157						10.47	0.412	-0.33	-0.84	R3B2CS
75°	28	1.102			7.3	0.290	13.55	0.533	1.1	0.036	TC__0902 (04)	R3A2L				
	25	0.984			4.0	0.157						10.47	0.412	-0.33	-0.84	TC__0902 (04)
							21	0.827	1.5	0.059	10.47					0.412
	45°	30.4			1.197	7.3	0.287	14.5	0.571	-1.6	-0.063	TC__0902 (04)	R3B2L			
27.1		1.067			4.0	0.157	14.5						0.571	R3B2L-LH		
								30°	29.6					1.165	7.3	0.287
														R3A245-LH		
												R3B245				
												R3A230				

'R' Units - Angular Mounted - Size 5 Units (R for roughing/semi-finishing)

Technical Specification





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

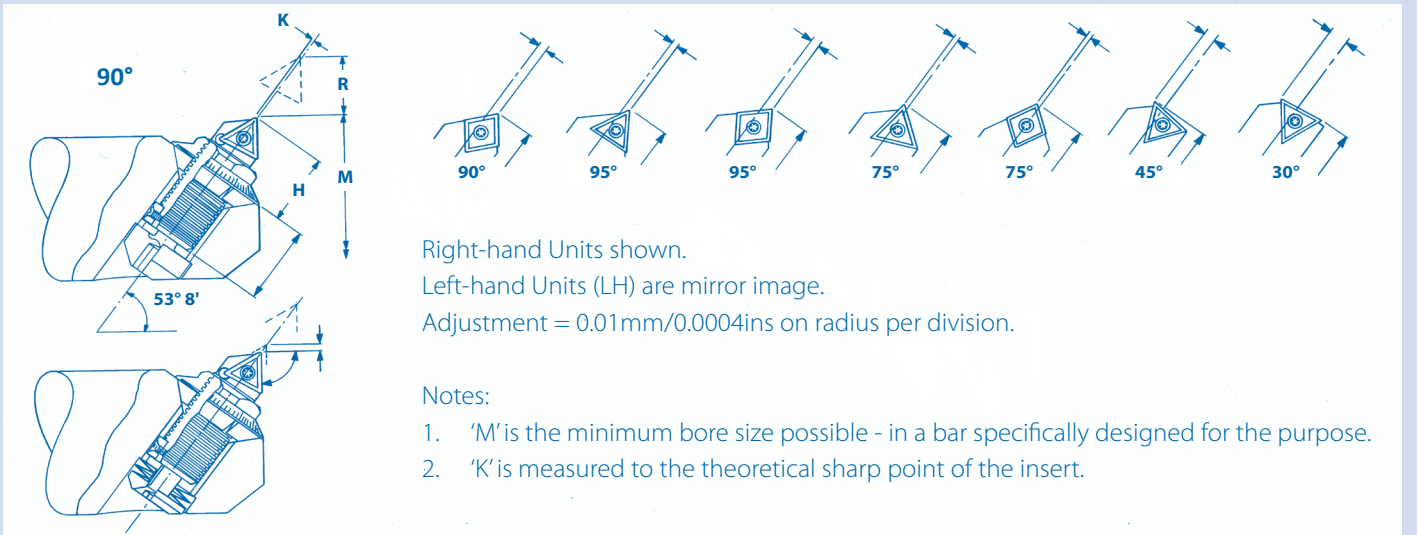
Notes:

- '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.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number								
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch										
90°	41.0	1.614	0.4	0.016	10.7	0.421	16.95	0.667	2.3	0.09	TC__ 1102 (04)	R5A2								
	36.0	1.417			5.6	0.220						R5A2-LH								
													40.5	1.575	R5B2					
	35.4	1.394			10.7	0.421	15.9	0.626	1.2	0.047	CC__ 0602 (04)					R5B2-LH				
	41.0	1.614			5.6	0.220						R5A2C								
													36.0	1.417	10.7	0.421	16.95	0.667	2.3	0.09
	40.5	1.595			5.6	0.220	15.6	0.614	1.2	0.047	CC__ 0602 (04)									
41.0												1.614	10.7	0.421						
95°	36.0	1.417										16.55	0.625	1.3	0.051	TC__ 1102 (04)	R5A295			
	40.5	1.595			15.6	0.614	1.2	0.047	CC__ 0602 (04)	R5B295										
	41.0	1.614								R5A295C										
75°	41.0	1.614			0.4	0.016	10.7	0.421	16.55	0.625	1.3	0.051	TC__ 1102 (04)	R5A2L						
	36.0	1.417												5.6	0.220	16.55	0.625	1.3	0.051	R5B2L
36.0	1.417	5.6	0.220	16.55			0.625	1.3	0.051	R5A245										
											43.0	1.693		10.7	0.421	17.0	0.669	-1.6	-0.063	R5A245-LH
38.0	1.496																			
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5B245-LH								
36.2	1.425													5.6	0.220	16.30	0.641	-1.6	-0.063	R5A230
		41.4	1.630																	
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425																			5.6
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30
36.2	1.425			5.6			0.220	16.30	0.641	-1.6	-0.063	R5B230								
		41.4	1.630										10.7	0.421	16.30	0.641	-1.6	-0.063	R5A230	
36.2	1.425				5.6	0.220														16.30
		41.4	1.630	10.7			0.421	16.30	0.641	-1.6	-0.063	R5A230								
36.2	1.425												5.6	0.220	16.30	0.641	-1.6	-0.063	R5B230	
		41.4	1.630		10.7	0.421														16.30

'R' Units - Angular Mounted - Size 7 Units (R for roughing/semi-finishing)

Technical Specification



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

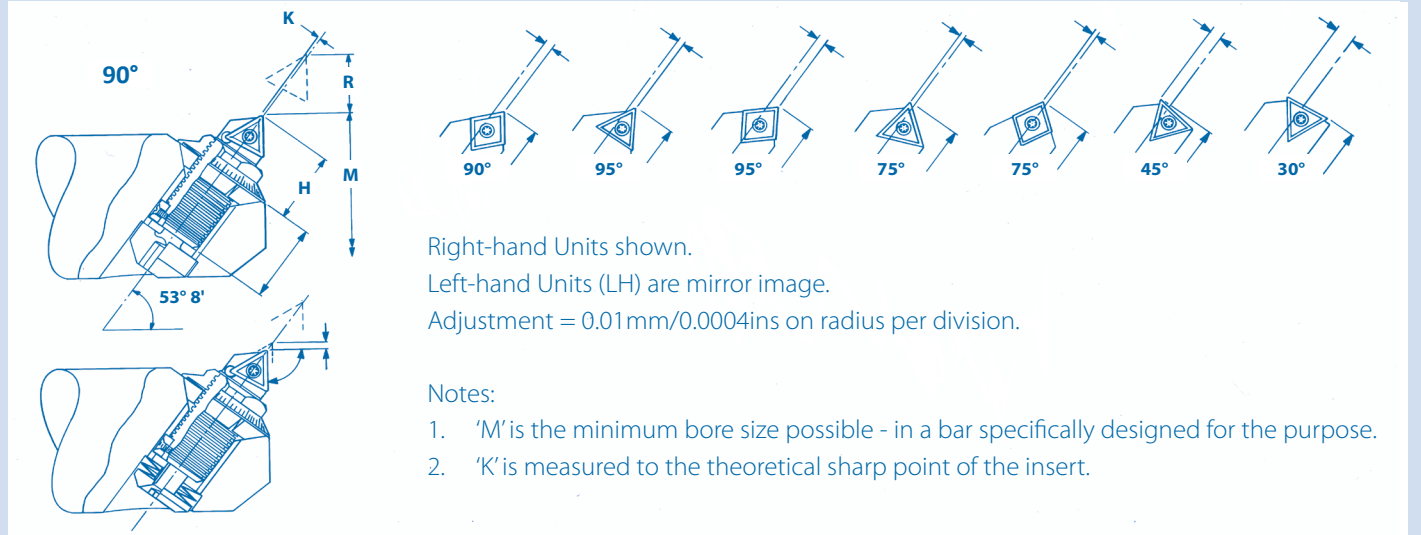
Notes:

- '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.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	58.0	2.283	0.6	0.024	12.8	0.504	25.55	1.006	-0.40	-0.016	TC__16T3 (08)	R7A2
	53.0	2.087			8.0	0.315						R7A2-LH
	59.5	2.343			12.8	0.504	26.57	1.046	-1.58	-0.062	CC__09T3 (04)	R7B2
	51.5	2.027			8.0	0.315						R7B2-LH
												R7A2C
												R7A2C-LH
95°	58.0	2.283	0.6	0.024	12.8	0.504	25.55	1.006	-0.26	-0.010	TC__16T3 (08)	R7A295
	59.5	2.343					26.57	1.046	-1.60	-0.063	CC__09T3 (04)	R7A295C
75°	58.0	2.283	0.6	0.024	12.8	0.504	23.40	0.921	-3.20	-0.126	TC__16T3 (08)	R7A2L
					8.0	0.315						R7A2L-LH
	53.0	2.087										R7B2L
45°	63.5	2.460	0.6	0.024	12.8	0.504	25.50	1.004	-6.50	-0.256	TC__16T3 (08)	R7A245
	57.4	2.260			8.0	0.315						R7B245

'R' Units - Angular Mounted - Size 10 Units (R for roughing/semi-finishing)

Technical Specification



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

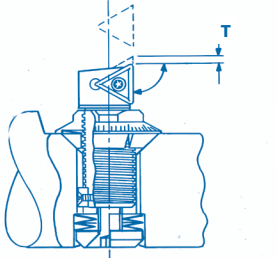
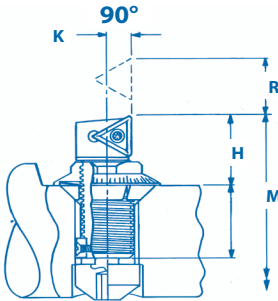
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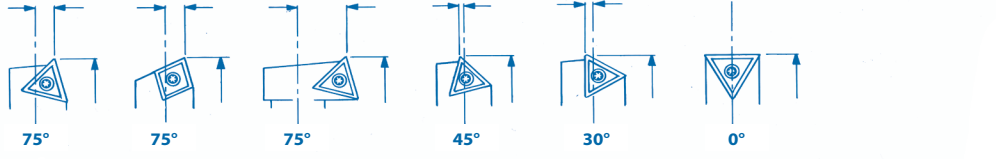
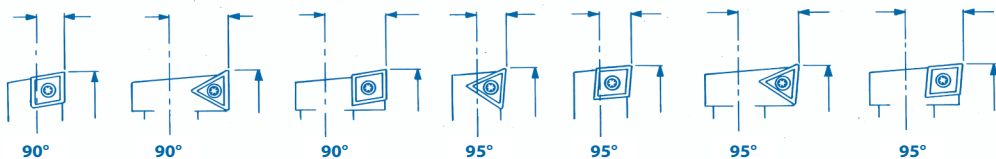
- 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
- 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	79.0	3.110	0.7	0.027	23.0	0.906	31.7	1.248	-0.4	-0.016	TC__16T3 (08)	R10A2
	69.0	2.717			12.8	0.504						R10A2-LH
	79.0	3.110			23.0	0.906	31.7	1.248	-0.26	-0.01	CC__1204 (04)	R10B2
	69.0	2.717			12.8	0.504						R10B2-LH
95°	79.0	3.110			23.0	0.906	31.1	1.224	-0.9	-0.035	TC__16T3 (08)	R10A295
	69.0	2.717			12.8	0.504						R10B295
75°	79.0	3.110			23.0	0.906	31.8	1.252	-3.2	-0.126		R10A2L
	69.0	2.717			12.8	0.504						R10A2L-LH
45°	81.0	3.189			23.0	0.906						R10B2L
												R10B2L-LH
												R10A245

'R' Units - Square Mounted - Size 2 Units (R for roughing/semi-finishing)

Technical Specification





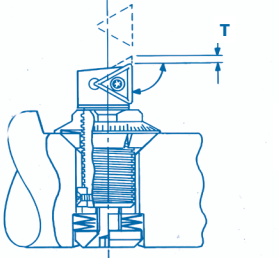
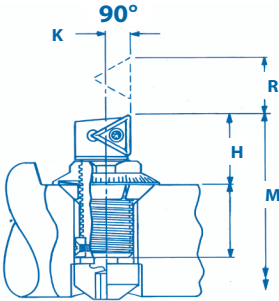
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01 mm/0.0004ins on radius per division.

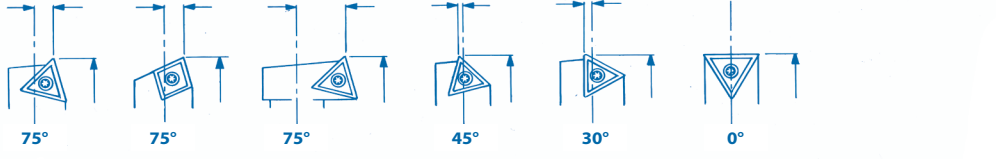
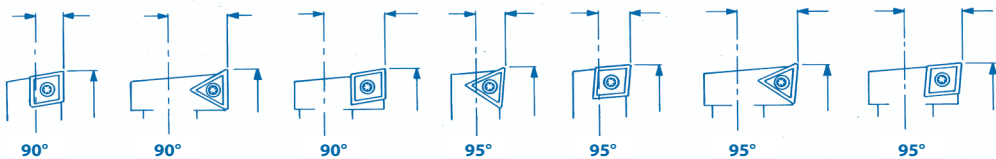
Notes:
1. 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
2. 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	24.3	0.957	0.25	0.010	5.5	0.216	9.40	0.370	2.00	0.078	TC__ 06T1 (02)	R2A5
	24.3	0.957										R2A5-LH
	21.1	0.831			2.5	0.098						R2B5
	21.1	0.831										R2B5-LH
	24.3	0.957			5.5	0.216			7.50	0.295		R2F5
	21.1	0.831										R2F5S
75°	24.3	0.957			5.5	0.216			2.00	0.078		R2A5L
	24.3	0.957										R2A5L-LH
	21.1	0.831			2.5	0.098						R2B5L
	21.1	0.831										R2B5L-LH
45°	25.2	0.992			5.5	0.216	10.00	0.393	-0.80	-0.031		R2A245
	22.0	0.886										2.5
0°	25.0	0.984			5.5	0.216	9.50	0.374				R2A90
	21.5	0.846							2.5	0.098		R2B90

'R' Units - Square Mounted - Size 3 Units (R for roughing/semi-finishing)

Technical Specification





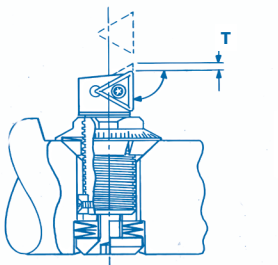
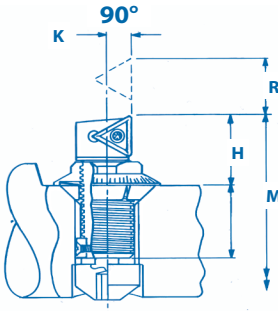
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01 mm/0.0004ins on radius per division.

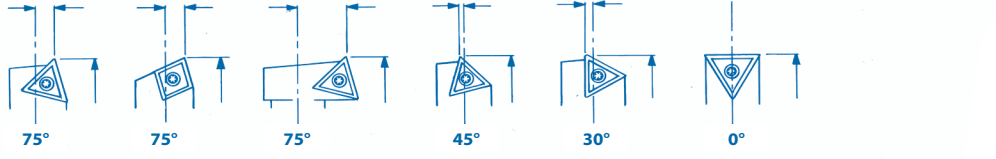
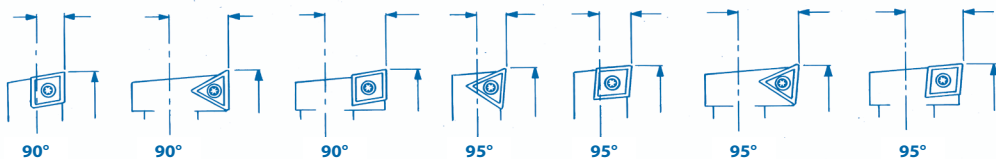
Notes:
1. 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
2. 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				
90°	32.5	1.280	0.35	0.014	9.1	0.359	12.30	0.484	3.00	0.118	TC__0902 (04)	R3A5		
	28.5	1.122			5.0	0.197						R3A5-LH		
	31.4	1.236			9.1	0.359	11.10	0.437	4.00	0.158		CC__0602 (04)	R3B5	
	27.7	1.090			5.0	0.197							R3B5-LH	
	34.0	1.279			9.1	0.359	12.90	0.508	9.40	0.370	TC__0902 (04)		R3A5C	
	30.0	1.181			5.0	0.197							R3A5C-LH	
	75°	32.5			1.279	9.1	0.359	12.30	0.484	2.00		0.079	TC__0902 (04)	R3B5C
		28.5			1.122	5.0	0.197							R3B5C-LH
45°		34.7			1.367	9.1	0.358	14.50	0.571	-0.80	-0.310	R3A5L		
	30.7	0.827			5.0	0.197	R3A5L-LH							
0°	34.0	1.338			9.1	0.358	14.00	0.551			R3B5L			
	30.0	1.181			5.0	0.197					R3B5L-LH			
														R3A545
														R3B545
														R3A90
														R3B90

'R' Units - Square Mounted - Size 5 Units (R for roughing/semi-finishing)

Technical Specification





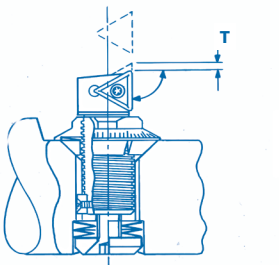
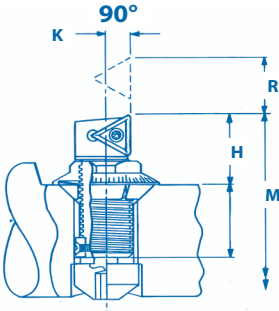
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01 mm/0.0004ins on radius per division.

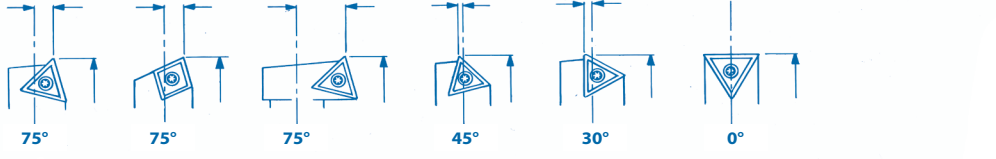
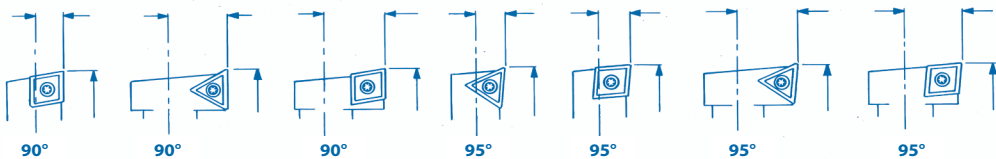
Notes:
1. 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
2. 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number			
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch					
90°	48.5	1.909	0.5	0.020	13.4	0.528	16.10	0.634	5.40	0.213	TC __ 1102 (04)	R5A5			
	42.5	1.673			7.0	0.276						R5A5-LH			
	49.4	1.965			13.4	0.528	15.90	0.628				CC __ 0602 (04)	R5B5		
	43.0	1.693			7.0	0.276							R5B5-LH		
	48.5	1.906			13.4	0.528	16.10	0.634	15.00	0.591	TC __ 1102 (04)	R5A5C			
	42.5	1.673			7.0	0.276						R5A5C-LH			
	49.4	1.965			13.4	0.528						15.90	0.628	CC __ 0602 (04)	R5B5C
					7.0	0.276									R5B5C-LH
95°					13.4	0.528	16.10	0.634			TC __ 1102 (04)	R5F5			
75°	48.5	1.910			7.0	0.276	16.10	0.634				R5F5-LH			
	42.5	1.673										R5F5S			
	49.6											R5F5C			
45°	49.6	1.953			13.4	0.528	16.10	0.634	-1.60	-0.063	TC __ 1102 (04)	R5F5C-LH			
	43.2	1.819			7.0	0.275						R5F595			
	49.5	1.949			13.4	0.528						R5A5L			
0°	43.1	1.697			7.0	0.276									
											R5B5L				
													R5B5L-LH		
														R5A545	
														R5A545-LH	
														R5B545	
														R5A90	
														R5B90	

'R' Units - Square Mounted - Size 7 Units (R for roughing/semi-finishing)

Technical Specification





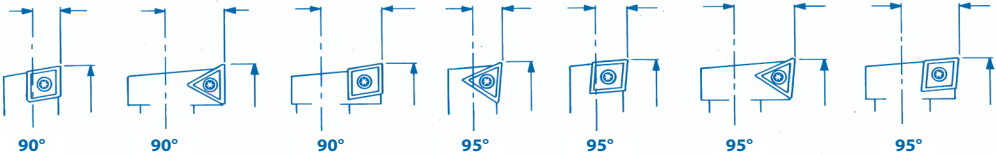
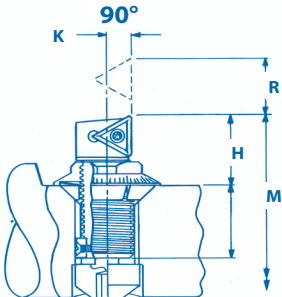
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01 mm/0.0004ins on radius per division.

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

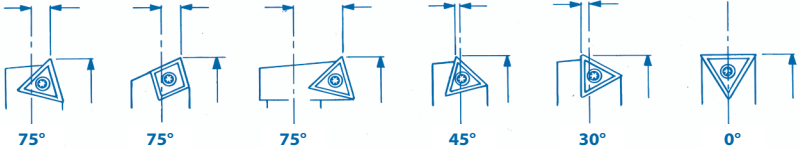
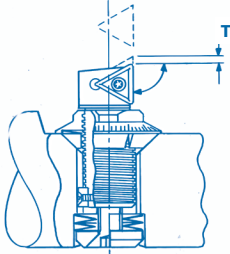
Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	70.5	2.775	0.75	0.030	16.0	0.630	25.50	1.004	8.35	0.329	TC__16T3 (08)	R7A5
	64.0	2.520			10.0	0.394						R7A5-LH
	70.5	2.775			16.0	0.630						R7B5
	64.0	2.520			10.0	0.394	25.40	1.000	6.35	0.250	CC__09T3 (04)	R7B5-LH
					16.0	0.630						R7A5C
					10.0	0.394						R7B5C
95°	70.5	2.775			16.0	0.630	25.50	1.004	20.00	0.787	TC__16T3 (08)	R7F5
												R7F5-LH
												R7F5C
75°	70.5	2.775			16.0	0.630	25.50	1.004	15.80	0.622	TC__16T3 (08)	R7F5C-LH
	64.0	2.520			10.0	0.394						R7A595
	70.5	2.775			16.0	0.630						R7A5L
45°	70.8	2.787			16.0	0.630	25.50	1.004	-1.60	-0.063	TC__16T3 (08)	R7A5L-LH
	64.4	2.535			10.0	0.394						R7B5L
					16.0	0.630						R7B5L-LH
30°	70.5	2.775			16.0	0.630	25.50	1.004	-1.60	-0.063	TC__16T3 (08)	R7F5L
					16.0	0.630						R7A545
					10.0	0.394						R7B545
0°	66.0	2.600			16.0	0.630	23.00	0.920			TC__16T3 (08)	R7A530
	59.5	2.342			10.0	0.394						R7A90

'R' Units - Square Mounted - Size 10 Units (R for roughing/semi-finishing)

Technical Specification



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

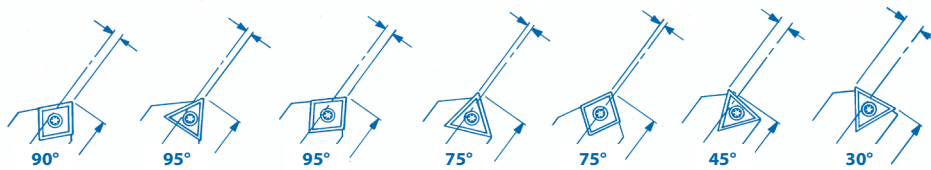
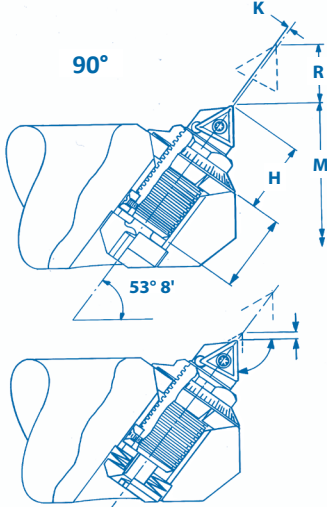


- Notes:
- 1. 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
 - 2. 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			
90°	96.0	3.780	0.87	0.034	28.7	1.130	31.80	1.252	9.50	0.374	TC__ 16T3 (08)	R10A5	
	83.5	3.287			16.0	0.630						R10A5-LH	
	96.0	3.780			28.7	1.130	31.75	1.250				CC__ 1204 (04)	R10B5
	83.5	3.287			16.0	0.630							R10B5-LH
							31.80	1.252	25.40	1.000	TC__ 16T3 (08)	R10F5	
												CC__ 1204 (04)	R10F5-LH
95°	96.0	3.780			28.7	1.130	31.75	1.250	9.54	0.376	TC__ 16T3 (08)		R10A595C
									25.52	1.005		R10F595	
									25.44	1.002		CC__ 1204 (04)	R10F595C
													R10F595C-LH
75°	83.5	3.287			16.0	0.630	31.80	1.252	4.80	0.189	TC__ 16T3 (08)	R10A5L	
												96.0	3.780
	97.0	3.819	28.7	1.130	31.80	1.252	-1.60	-0.063	R10B5L				
84.0	3.307	16.0	0.630	R10B5L-LH									
45°	93.0	3.660	28.7	1.130	28.60	1.126			R10F5L				
	80.5	3.170	16.0	0.630					R10A545				
0°											R10A545-LH		
											R10B545		
											R10A90		
											R10B90		

'TR' Units - Angular Mounted - Size 2 Units (TR for fine-finishing)

Technical Specification



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

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

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				
90°	23.60	0.930	0.2	0.008	4.5	0.177	9.4	0.370	1.35	0.053	TC__ 06T1 (02)	TR2A2		
														TR2A2-LH
	20.90	0.823			2.0	0.079								TR2B2
												TR2B2-LH		
	18.57	0.731			0.75	0.029			TR2B2S					
									TR2B2S-LH					
23.60	0.929	2.0			0.079	12.6	0.496						TR2B3	
75°	25.70	1.011			4.5	0.177	10.0	0.394	-1.50	-0.059				TR2A2L
														TR2A2L-LH
	23.10	0.909			2.0	0.079								TR2B2L
														TR2B2L-LH
45°	25.30	0.995			4.5	0.177			-1.60	-0.063				TR2A245
	22.80	0.897	2.0	0.079							TR2B245			

'TR' Units - Angular Mounted - Size 3 Units (TR 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.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	30.8	1.212	0.28	0.011	7.3	0.290	13.45	0.529	0.8	0.031	TC__ 0902 (04)	TR3A2
	27.6	1.087			4.0	0.157	11.25	0.443	1.32	0.051		TR3B2
	25.6	1.008									TR3B1	
	29.2	1.149			7.3	0.290	11.10	0.437	0.2	0.008	CC__ 0602 (04)	TR3B1-LH
	26.1	1.027			4.0	0.157						
26.25	1.033	1.5	0.059						TR3B2C			
75°	30.7	1.209	7.3	0.290	13.55	0.533	1.1	0.036	TC__ 0902 (04)	TR3B2C-LH		
	27.5	1.083	4.0	0.157							TR3B2L	
	26.25	1.033	1.5	0.059	10.47	0.412	-0.33	-0.840		CC__ 0602 (04)	TR3B2L-LH	
45°	32.9	1.295	7.3	0.287	14.50	0.571	-1.6	-0.063	TC__ 0902 (04)	TR3B2LSC		
	29.6	1.165	4.0	0.157							TR3A245-LH	
30°	32.2	1.268	7.3	0.287								TR3B245
												TR3A230

'TR' Units - Angular Mounted - Size 5 Units (TR 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.

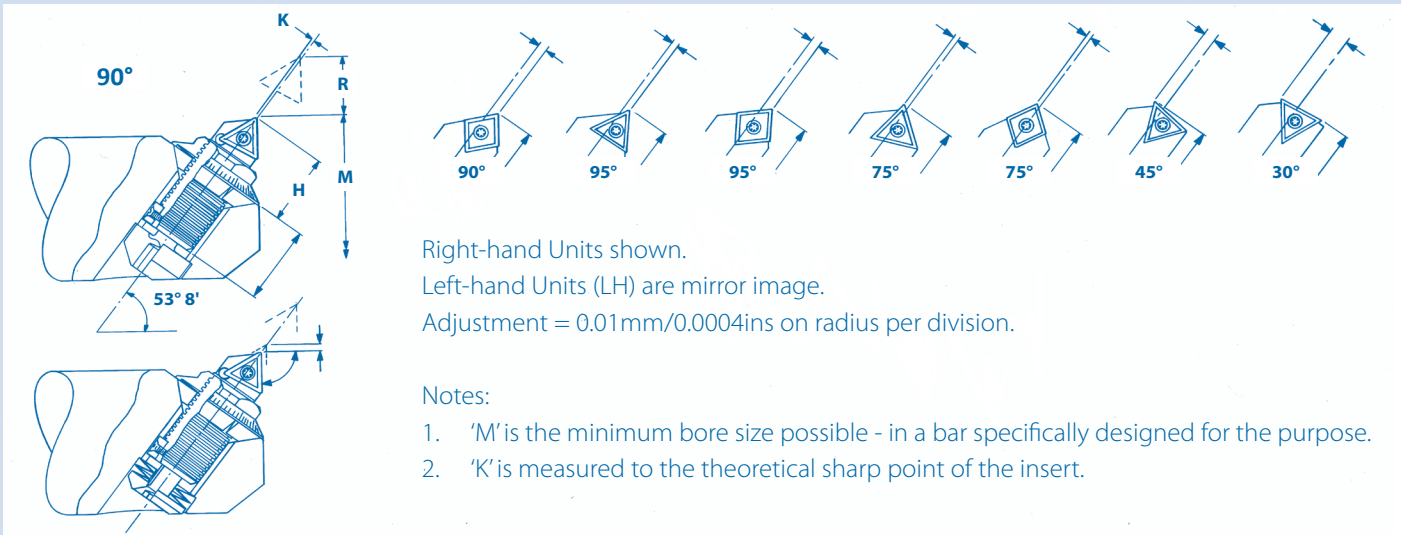
Notes:

- '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.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number				
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch						
90°	41.5	1.634	0.4	0.016	10.7	0.421	16.95	0.667	2.3	0.090	TC__ 1102 (04)	TR5A2				
														TR5A2-LH		
	36.5	1.437			5.6	0.220						TR5B2				
												TR5B2-LH				
	41.0	1.614			10.7	0.421	15.90	0.626	1.2	0.047	CC__ 0602 (04)	TR5A2C				
																TR5A2C-LH
	35.9	1.413			5.6	0.220										TR5B2C
													TR5B2C-LH			
95°	41.5	1.634					10.7	0.421	16.95	0.667	2.3	0.090	TC__ 1102 (04)	TR5A295		
	36.5	1.437			5.6	0.220										TR5B295
	41.0	1.614			10.7	0.421	15.60	0.614	1.2	0.047	CC__ 0602 (04)	TR5A295C				
75°	41.5	1.634					10.7	0.421	16.55	0.625	1.3	0.051	TC__ 1102 (04)	TR5A2L		
	36.5	1.437			5.6	0.220										TR5B2L
												TR5B2L-LH				
45°	43.5	1.712			10.7	0.421	17.00	0.669	-1.6	-0.063	TR5A245					
	38.5	1.516	5.6	0.220										TR5A245-LH		
											TR5B245					
											TR5B245-LH					
30°	42.0	1.654			10.7	0.421	16.30	0.641	-1.6	-0.063	TR5A230					
	36.8	1.449	5.6	0.220									TR5B230			

'TR' Units - Angular Mounted - Size 7 Units (TR for fine-finishing)

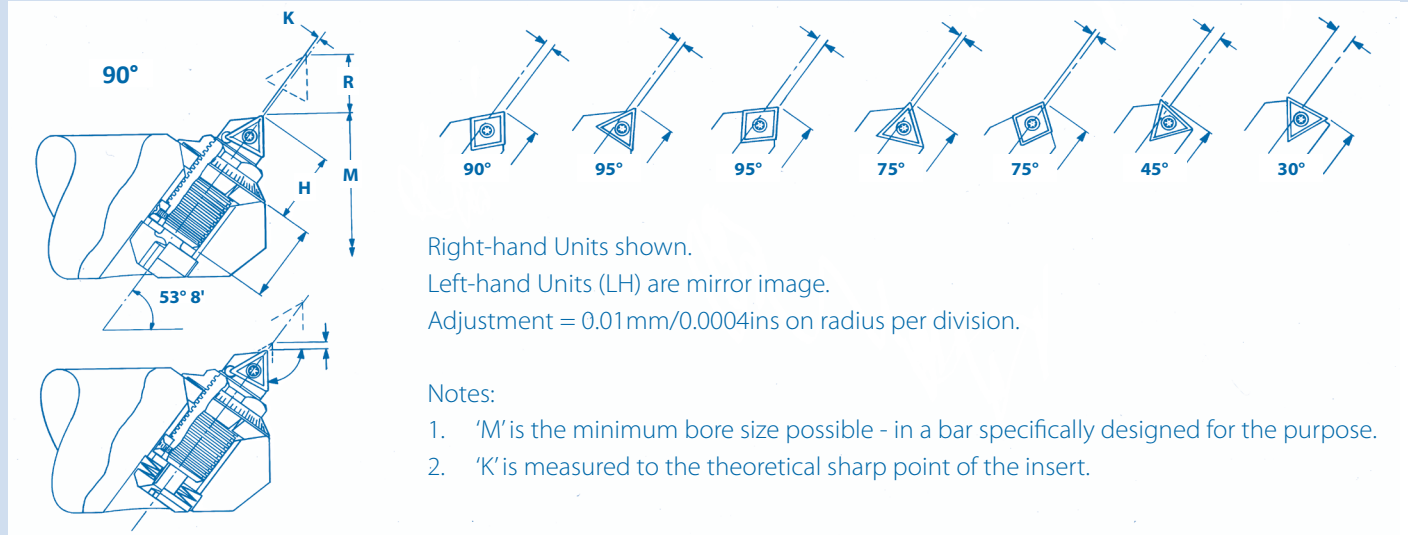
Technical Specification



Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch			
90°	61.5	2.421	0.6	0.024	12.8	0.504	25.55	1.006	-0.40	-0.016	TC__16T3 (08)	TR7A2	
	57.0	2.244			8.0	0.315						TR7A2-LH	
							TR7B2						
	61.0	2.401			12.8	0.504	26.57	1.046	-1.58	-0.062	CC__09T3(04)	TR7B2-LH	
	55.9	2.201			8.0	0.315						TR7A2C	
	95°	59.5			2.343	12.8	0.504	25.55	1.006	-0.26	-0.010	TC__16T3 (08)	TR7A2C-LH
		61.0			2.401			26.57	1.046	-1.60	-0.063	CC__09T3 (04)	TR7B2C
		75°			61.5	2.421	12.8	0.504	23.40	0.921	-3.20	-0.126	TC__16T3 (08)
57.0					2.244	8.0	0.315	TR7A2L					
	45°	63.9						2.516	12.8	0.504	25.50	1.004	
58.8		2.315			8.0	0.315	TR7B2L						
													TR7A245
													TR7B245

'TR' Units - Angular Mounted - Size 10 Units (TR for fine-finishing)

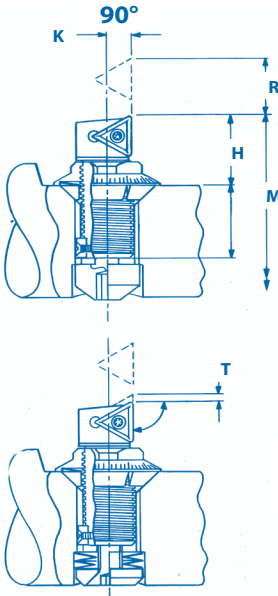
Technical Specification

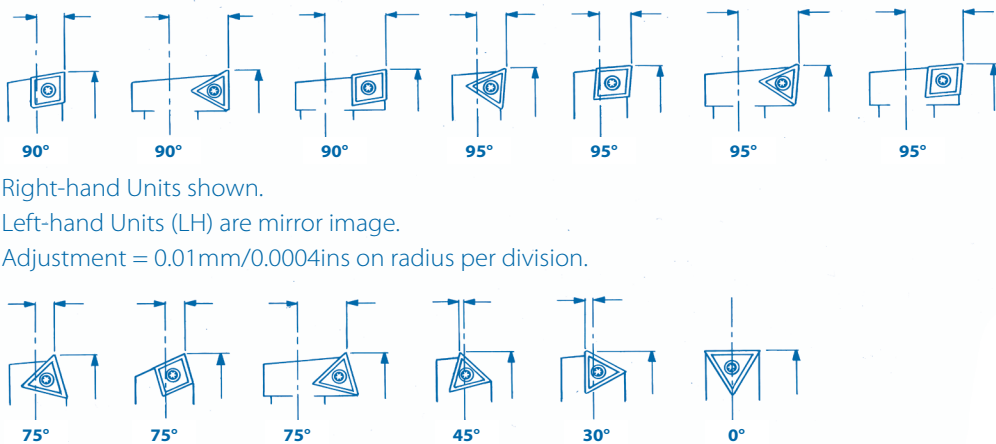


Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	81.5	3.209	0.7	0.027	23.0	0.906	31.70	1.248	-0.40	-0.016	TC__ 16T3 (08)	TR10A2
	71.5	2.815			12.8	0.504						TR10B2
												TR10B2-LH
	81.5	3.209			23.0	0.906	31.24	1.230	0.79	0.031	CC__ 1204 (04)	TR10A2C
95°	81.5	3.209			23.0	0.906	31.70	1.248	-0.26	-0.010	TC__ 16T3 (08)	TR10A295
	71.5	2.815			12.8	0.504						TR10B295
75°	81.5	3.209			23.0	0.906	31.10	1.224	-0.90	-0.035		TR10A2L
	71.5	2.815			12.8	0.504						TR10B2L
												TR10B2L-LH
45°	84.0	3.307	23.0	0.906	31.80	1.252	-3.20	-0.126		TR10A245		

'TR' Units - Square Mounted - Size 2 Units (TR for fine-finishing)

Technical Specification





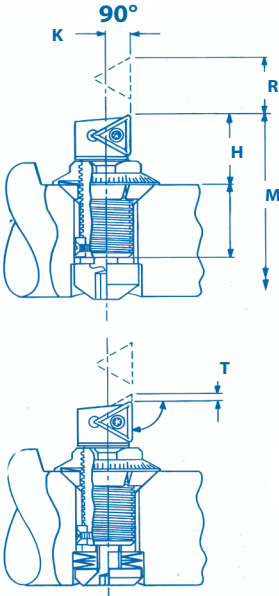
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01 mm/0.0004ins on radius per division.

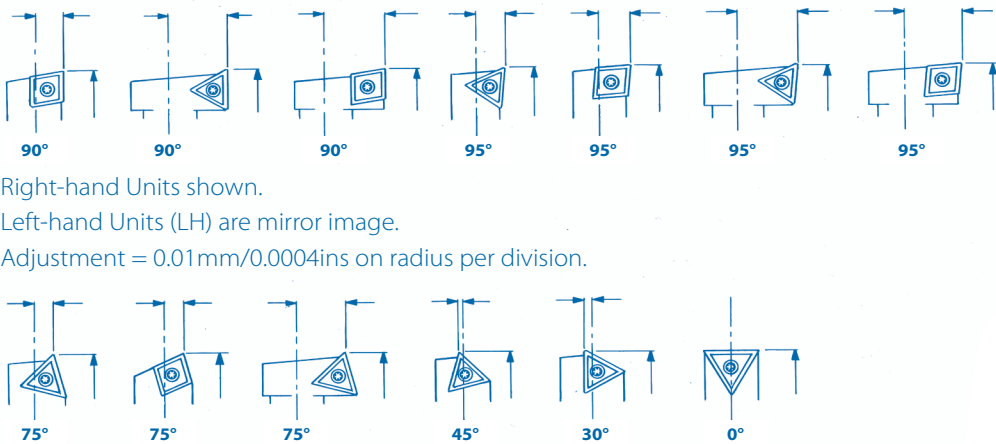
Notes:
1. 'M' is the minimum bore size possible - in a bar specifically designed for the purpose.
2. 'K' is measured to the theoretical sharp point of the insert.

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				
90°	27.60	1.087	0.25	0.010	5.5	0.216	9.40	0.370	2.0	0.078	TC__06T1 (02)	TR2A5		
														TR2A5-LH
	24.40	0.961			2.5	0.098								TR2B5
														TR2B5-LH
	27.60	1.087			5.5	0.216			7.5	0.295		TR2F5		
	24.40	0.961			2.5	0.098						TR2F5S		
75°	27.60	1.087			5.5	0.216	9.40	0.370	2.0	0.078		TR2A5L		
														TR2A5L-LH
	24.40	0.961			2.5	0.098								TR2B5L
														TR2B5L-LH
45°	28.40	1.118			5.5	0.216	10.00	0.393	-0.8	-0.031		TR2A245		
	25.20	0.992			2.5	0.098						TR2B245		
0°	28.00	1.102			5.5	0.216	9.50	0.374				TR2A90		
	25.00	0.984			2.5	0.098						TR2B90		

'TR' Units - Square Mounted - Size 3 Units (TR for fine-finishing)

Technical Specification





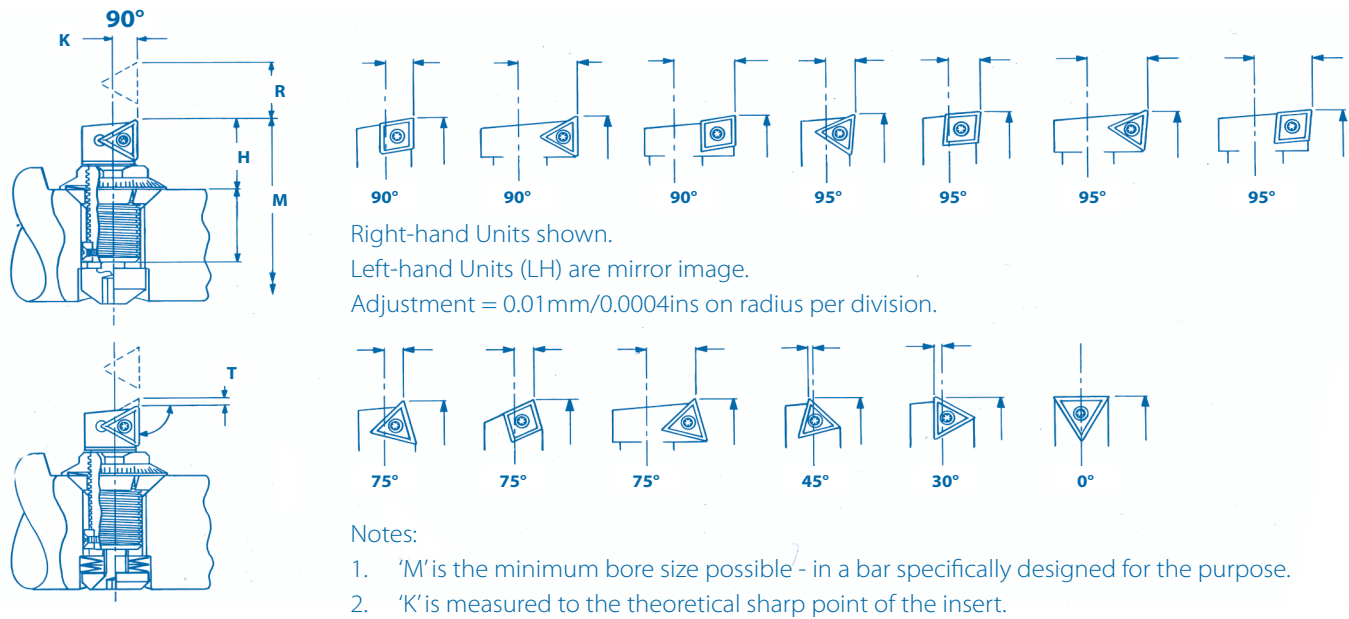
Right-hand Units shown.
Left-hand Units (LH) are mirror image.
Adjustment = 0.01 mm/0.0004ins on radius per division.

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

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	35.1	1.382	0.35	0.014	9.1	0.359	12.3	0.484	3.0	0.118	TC__ 0902 (04)	TR3A5
												TR3A5-LH
	31.1	1.224			5.0	0.197						TR3B5
												TR3B5-LH
	34.0	1.338			9.1	0.359	11.1	0.437	4.0	0.158	CC__ 0602 (04)	TR3A5C
												TR3A5C-LH
	30.0	1.181			5.0	0.197						TR3B5C
	36.5	1.437			9.1	0.359						TR3B5C-LH
	32.5	1.279			5.0	0.197	12.9	0.508	9.4	0.370	TC__ 0902 (04)	TR3F5
												TR3F5S
						TR3F5S-LH						
75°	35.1	1.381			9.1	0.359						12.3
							TR3A5L-LH					
	31.1	1.224			5.0	0.197	TR3B5L					
							TR3B5L-LH					
45°	37.2	1.465			9.1	0.358	14.5	0.571	-0.8	-0.310		TR3A545
	33.2	1.307			5.0	0.197						TR3B545
0°	36.5	1.437			9.1	0.358	14.0	0.551				TR3A90
	32.5	1.279	5.0	0.197	TR3B90							

'TR' Units - Square Mounted - Size 5 Units (TR for fine-finishing)

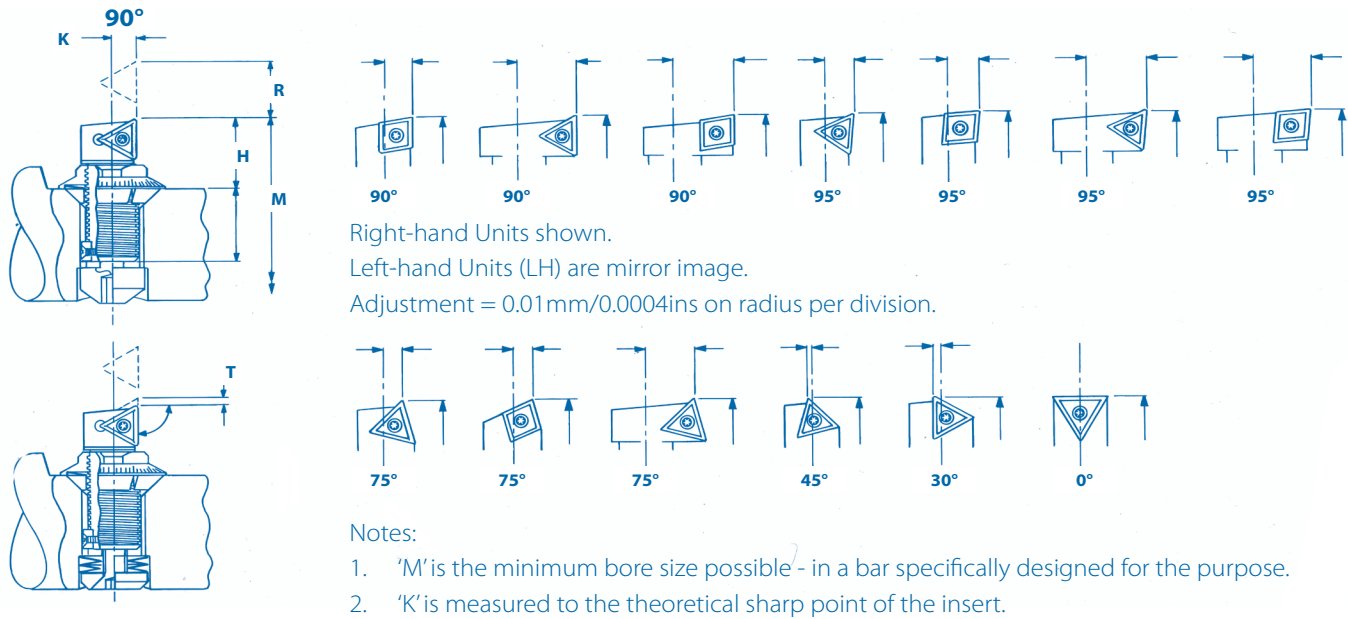
Technical Specification



Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	48.0	1.890	0.50	0.020	13.4	0.528	16.1	0.634	5.4	0.213	TC__ 1102 (04)	TR5A5
	41.5	1.634			7.0	0.276						TR5A5-LH
	49.4	1.965			13.4	0.528	15.9	0.628			CC__ 0602 (04)	TR5B5
	43.0	1.693			7.0	0.276						TR5B5-LH
	48.0	1.890			13.4	0.528	16.1	0.634	15.0	0.591	TC__ 1102 (04)	TR5A5C
	41.5	1.634			7.0	0.276						TR5A5C-LH
	49.4	1.965			13.4	0.528	15.9	0.626			CC__ 0602 (04)	TR5B5C
												TR5F5
95°	48.0	1.890			13.4	0.528	16.1	0.634	3.2	0.126	TC__ 1102 (04)	TR5F5-LH
75°	48.0	1.890			13.4	0.528						TR5F5S
	41.5	1.634			7.0	0.275						TR5F5C
45°	48.8	1.921			13.4	0.528						TR5F5C-LH
	42.4	1.661			7.0	0.275						TR5F595
0°	48.7	1.917			13.4	0.528						TR5A5L
	42.3	1.665			7.0	0.275						TR5A5L-LH
												TR5B5L
												TR5B5L-LH
												TR5A545
												TR5A545-LH
												TR5B545
												TR5A90
												TR5B90

'TR' Units - Square Mounted - Size 7 Units (TR for fine-finishing)

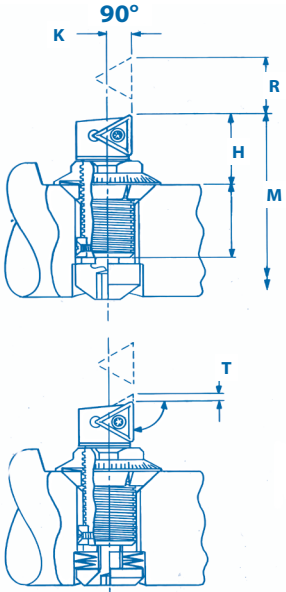
Technical Specification

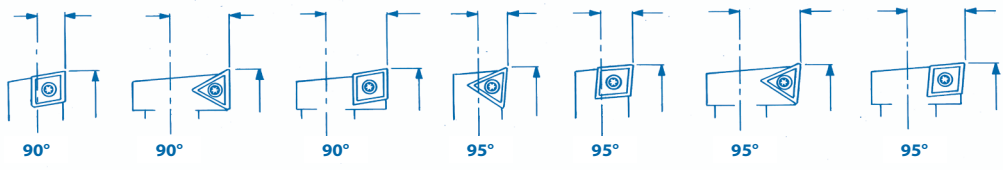


Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
90°	70.5	2.775	0.75	0.030	16.0	0.630	25.5	1.004	8.35	0.329	TC__ 16T3 (08)	TR7A5
	64.0	2.250			10.0	0.394						TR7A5-LH
					16.0	0.630	25.4	1.000	6.35	0.250	CC__ 09T3 (04)	TR7B5
					10.0	0.394						TR7B5-LH
	70.5	2.775			16.0	0.630	25.5	1.004	20.00	0.787	TC__ 16T3 (08)	TR7A5C
												TR7B5C
							25.4	1.000			CC__ 09T3 (04)	TR7F5
												TR7F5-LH
95°	70.5	2.775			16.0	0.630	25.5	1.004	8.47	0.333	TC__ 16T3 (08)	TR7A595
75°	64.0	2.520			10.0	0.394						TR7A5L
	70.5	2.775			16.0	0.630						TR7A5L-LH
45°	69.2	2.724			16.0	0.630						TR7B5L
	62.8	2.472			100	0.393						TR7B5L-LH
30°	70.5	2.775			16.0	0.630	23.0	0.920	15.80	0.622		TR7F5L
0°	66.0	2.600			16.0	0.630						TR7A545
	59.5	2.342			100	0.394						TR7B545
												TR7A530
												TR7A590
												TR7A590

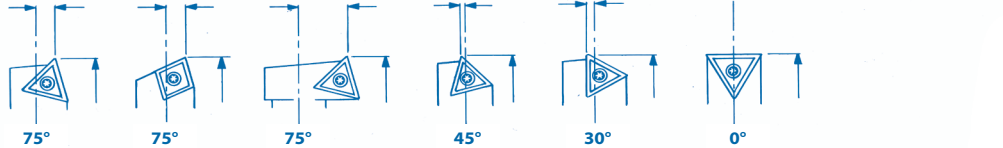
'TR' Units - Square Mounted - Size 10 Units (TR for fine-finishing)

Technical Specification





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



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

Approach Angle	Min Bore Possible		T Top Adj		R Total Radial Adjustment		H Min Height		K Tool Point Offset		Insert & Datum Rad	Part Number						
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch								
90°	96.0	3.780	0.87	0.034	28.7	1.130	31.80	1.252	9.5	0.374	TC__ 16T3 (08)	TR10A5						
	83.5	3.287			16.0	0.630						TR10A5-LH						
	96.0	3.780			28.7	1.130	31.75	1.250				CC__ 1204 (04)	TR10B5					
	83.5	2.87			16.0	0.630							TR10B5-LH					
	96.0	3.780			28.7	1.130	31.80	1.252	25.4	1.000	TC__ 16T3 (08)	TR10A5C						
													CC__ 1204 (04)	TR10B5C-LH				
95°	96.0	3.780					31.75	1.250	9.54	0.376	CC__ 1204 (04)	TR10F5						
												25.52	1.005	TC__ 16T3 (08)	TR10F5-LH			
															25.44	1.002	CC__ 1204 (04)	TR10F5C
75°	96.0	3.780			31.80	1.252	4.8	0.189	TC__ 16T3 (08)	TR10A595C								
	83.5	3.287								16.0	0.630	TR10A5L-LH						
	96.0	3.780								28.7	1.130		20.35	0.801	TR10B5L			
															TR10B5L-LH			
45°	95.0	3.740			31.80	1.252	-1.6	-0.063		TR10F5L								
	84.0	3.307								16.0	0.630	TR10A545						
0°	80.5	3.170	28.7	1.130	28.60	1.126				TR10A545-LH								
			16.0	0.630						TR10B545								
											TR10A90							
											TR10B90							

