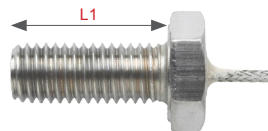


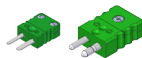
## TB Bolt Thermocouple Sensor

Commonly used for surface or vessel measurement. The bolt sensor is generally screwed into the surface which normally increases the speed of response and sensitivity of the measurement. Supplied with a stranded 7/0.2mm diameter, fibreglass insulated, stainless steel wire-braided cable at any length to suit your application. Suitable for use up to +250°C.



M8, M10, M12 bolt thread options available

- Thermocouple types K, J, T
- Suitable for use up to +250°C
- Commonly used for surface or vessel measurement



Optional connector (section 7)

1	sensor type		code
	Bolt Thermocouple Sensor		TB
2	conductor/thermocouple type (IEC 60584.1)	conductor temperature range	code
	Type K Nickel Chromium vs. Nickel Aluminium	0°C to +1100°C	K
	Type J Iron vs. Constantan	-50°C to +750°C	J
	Type T Copper vs. Constantan	-200°C to +350°C	T
3	bolt thread		code
	M8 x 1mm		M8
	M10 x 1mm		M10
	M12 x 1mm		M12
4	bolt length (mm) (L1)		code
	As required to suit your application (standard length = 25mm)		e.g. 25
5	sensing junction		simplex code
	Insulated (isolated, ungrounded)		I
	Grounded (non-isolated)		G
6	cable length (mm)		code
	As required to suit your application		e.g. 2000
7	optional thermocouple connector (supplied attached to cable)		code
	Miniature Thermocouple Plug (K, J, T)		FMP
	Standard Thermocouple Plug (K, J, T)		RSP

See pages 53-58 for our full range of Thermocouple connectors.

order code (example)	1	2	3	4	5	6	7
	TB	- K -	M10	- 25 -	I	- 2000 -	FMP

## TR Washer/Ring Thermocouple Sensor

Commonly used for surface or pipe measurement. Very easy to install and use: simply position the sensor under a bolt or rivet. Supplied with a stranded 7/0.2mm diameter, fibreglass insulated, stainless steel wire-braided cable at any length to suit your application. Nickel plated copper eyelet material, as standard. The sensing junction is grounded for fast response. Suitable for use up to +400°C.



M3.5, M6, M8, M10, M12 washer sizes available

- Easy to install
- Thermocouple types K, J, T
- Suitable for use up to +400°C
- Grounded (non-isolated) sensing junction
- Commonly used for surface or pipe measurement



Optional connector (section 5)

1	sensor type		code	
	Washer/Ring Thermocouple Sensor		TR	
2	conductor/thermocouple type (IEC 60584.1)	conductor temperature range	code	
	Type K Nickel Chromium vs. Nickel Aluminium	0°C to +1100°C	K	
	Type J Iron vs. Constantan	-50°C to +750°C	J	
	Type T Copper vs. Constantan	-200°C to +350°C	T	
3	washer size (D1)	code	washer size (D1)	code
	M3.5	M3.5	M10	M10
	M6	M6	M12	M12
	M8	M8		
4	cable length (mm)		code	
	As required to suit your application		e.g. 2000	
5	optional thermocouple connector (supplied attached to cable)		code	
	Miniature Thermocouple Plug (K, J, T)		FMP	
	Standard Thermocouple Plug (K, J, T)		RSP	

See pages 53-58 for our full range of Thermocouple connectors.

order code (example)	1	2	3	4	5
	TR	- K -	M8	- 2000 -	RSP

