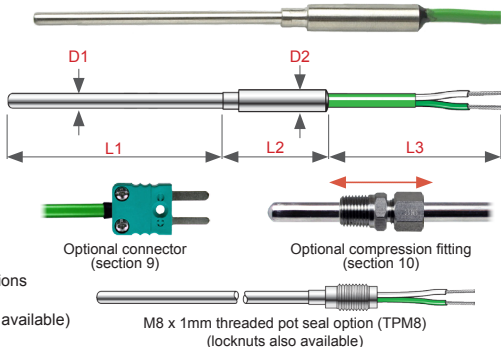


## TPM Mineral Insulated Thermocouple Sensor with Pot Seal

Available with probe diameters ranging from 0.5mm up to 8.0mm and supplied with a crimped stainless steel pot seal. The pot is epoxy resin sealed to prevent moisture ingress (resin rated for continuous use up to +135°C). A high temperature resin is also available for continuous use up to +220°C. Various probe sheath materials are available and the sensors can be used in a wide variety of applications, with temperatures ranging from as low as -100°C and up to +1300°C. The mineral insulated construction enables the sensors to be bent, twisted or flattened without impairing performance. The bending radius of the sheath is 10 x probe diameter; this can be reduced to 4 x, if a bending set is used.

- 0.5, 0.75, 1.0, 1.5, 2.0, 3.0, 4.5, 6.0 and 8.0mm Ø probe options
- Accuracy to IEC 60584.2 Class 2 (Class 1 also available)
- Standard epoxy resin seal rated up to +135°C (+220°C also available)
- Colour coded to IEC 60584.3 (BS EN 60584.3)
- Ex-stock options available



Note: Type K thermocouple shown for illustrative purposes only

1		sensor type		code											
		MI Thermocouple Sensor with Pot Seal		TPM											
		MI Thermocouple Sensor with High Temperature Pot Seal (+220°C)		TPMA											
		MI Thermocouple Sensor with Threaded Pot Seal (0.5, 0.75, 1.0, 1.5, 2.0, 3.0mm Ø probes)		TPM8											
		MI Thermocouple Sensor with High Temperature Threaded Pot Seal (0.5, 0.75, 1.0, 1.5, 2.0, 3.0mm Ø probes)		TPM8A											
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									
		Type N	Nicrosil vs. Nilil	0°C to +1200°C		N									
		Type E	Nickel Chromium vs. Constantan	-200°C to +900°C		E									
3		metal sheath material		available in thermocouple types		maximum temperature		code							
		321 Stainless Steel		K, J, T, E		+800°C		321							
		310 Stainless Steel		K		+1100°C		310							
		Inconel 600		K, N		+1100°C		600							
		Nicrosil D		K, N		+1300°C		200							
		Also available: <b>Incoloy 800</b> (+1100°C), <b>253MA</b> (+1150°C), <b>Alloy C276</b> (+1100°C). Contact sales for further information.													
4		probe Ø (D1)		pot seal Ø (D2) x length (L2)		code		probe Ø (D1)		pot seal Ø (D2) x length (L2)		code			
		0.5mm		6.0mm x 31mm		0.5		2.0mm		6.0mm x 31mm		2.0			
		0.75mm		6.0mm x 31mm		0.75		3.0mm		6.0mm x 31mm		3.0			
		1.0mm		6.0mm x 31mm		1.0		4.5mm		9.5mm x 31mm		4.5			
		1.5mm		6.0mm x 31mm		1.5		6.0mm		9.5mm x 31mm		6.0			
								8.0mm		12.0mm x 31mm		8.0			
* Pot seal dimensions may vary (standard shown). Length includes crimp collar.															
5		sensing junction				simplex code		duplex code							
		Insulated (isolated, ungrounded)				I		2I							
		Grounded (non-isolated)				G		2G							
6		probe length (mm) (L1)				code									
		As required to suit your application (stock sensors also available)				e.g. 300									
7		extension cable length (mm) (L3)		code											
		As required to suit your application		e.g. 500											
8		cable insulation (full range pages 44-51)				code									
		PFA Insulated Tails				PFA7									
		Heat Resistant PVC, 7/0.2mm Ø (+105°C)				CP10									
		PFA, 7/0.2mm Ø (+260°C)				CT45									
		Fibreglass, 7/0.2mm Ø (+400°C)				CG32									
		Fibreglass (St/St Braid), 7/0.2mm Ø (+400°C)				CG39									
9		optional thermocouple connector (full range pages 53-58)				miniature code		standard code							
		Thermocouple Plug (K, J, T, N, E)				FMP		RSP							
		Thermocouple Socket (K, J, T, N, E)				FMJ		RSJ							
10		optional 316 stainless steel compression fitting													
		probe Ø		1/8" BSPT		1/4" BSPT		probe Ø		1/8" BSPT		1/4" BSPT		1/2" BSPT	
		0.5mm		CF05AS		-		3.0mm		CF30AS		CF30CS		CF30ES	
		0.75mm		CF075AS		-		4.5mm		CF45AS		CF45CS		CF45ES	
		1.0mm		CF10AS		-		6.0mm		CF60AS		CF60CS		CF60ES	
		1.5mm		CF15AS		CF15CS		8.0mm		-		CF80CS		CF80ES	
		2.0mm		CF20AS		CF20CS									

See page 60 for our full range of fittings.

order code (example) 1 2 3 4 5 6 7 8 9 10  
TPM - K - 310 - 3.0 - I - 500 - 500 - CP10 - RSP - CF30AS

