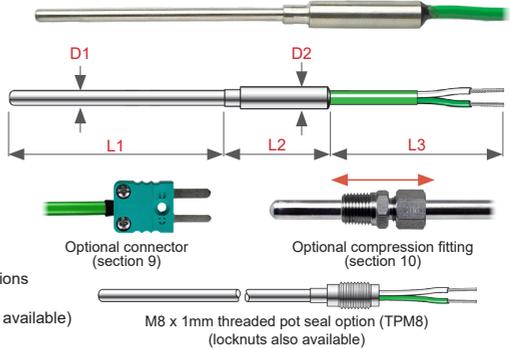


TPM Mineral Insulated Thermocouple Sensor with Pot Seal

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. Nisil	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: Incoloy 800 (+1100°C), 253MA (+1150°C), Alloy C276 (+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		1/2" BSPT					
		0.5mm		CF05AS		-		3.0mm					
		0.75mm		CF075AS		-		4.5mm					
		1.0mm		CF10AS		-		6.0mm					
		1.5mm		CF15AS		CF15CS		8.0mm					
		2.0mm		CF20AS		CF20CS		-					
								3.0mm					
								4.5mm					
								6.0mm					
								8.0mm					
								-					
								CF30CS					
								CF45CS					
								CF60CS					
								CF80CS					
								CF30ES					
								CF45ES					
								CF60ES					
								CF80ES					

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