

Datasheet

TRP/TRS Mineral Insulated Thermocouple Sensor with Standard Plug/Socket

Commonly used in applications where a robust sensor with a quick, simple connection is required. Available with probe diameters ranging from 3.0mm up to 8.0mm and supplied with a standard round-pinned plug or socket rated -50...+220°C (higher temperature versions also available). 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 sensors can be supplied in lengths to suit your application requirements. The bending radius of the sheath is 10 x probe diameter; this can be reduced to 4 x, if a bending set is used.

- 3.0mm, 4.5mm, 6.0mm or 8.0mm Ø probe
- Accuracy to IEC 60584.2 Class 2 (Class 1 also available)
- Terminated with a standard thermocouple connector (+220°C)
- Colour coded to IEC 60584.3 (BS EN 60584.3)
- Ex-stock options available



(section 7)

Optional compression fitting (section 8)

Note: Type K thermocouple shown for illustrative purposes only

1 sensor type						code	
Mineral Insulated Thermocouple Sensor with Standard Plug						TRP	
Mineral Insulated Thermocouple Sensor with Standard Socket						TRS	
2 conductor/thermocouple type (IEC 60584.1) conductor temperature range						code	
Type K Nickel Chromium vs. Nickel Aluminium 0°C to +1100°C						ĸ	
Type J inon vs. Constantan -30 C to +750 C						J	
Type I Cop	Type I Copper VS. Constantian -200 C to +1200 C						
Type E Nickel Chromium vs. Constantan -200°C to ±900°C						F	
						-	
3 metal sheath material available in thermocouple types maximum temperature						code	
321 Stainless	321 Stainless Steel K, J, T, E				+800°C		
310 Stainless	310 Stainless Steel K +1100°C						
Inconel 600 K, N +1100°C						600	
Nicrosil D K, N +1300°C						200	
Also available: Incolog 800 (+1100°C), 253MA (+1150°C), Allog C276 (+1100°C). Contact sales for further information.							
4 probe diameter (D1)						code	
3.0mm						3.0	
4.5mm						4.5	
6.0mm						6.0	
8.0mm						8.0	
Imperial sizes also available.							
5 sensing junction simplex code						duplex code	
Insulated (isolated, undrounded)						21	
Grounded (non-isolated)						2G	
6 probe length (mm) (L1)						code	
As required to suit your application (stock sensors also available)						e.g. 300	
7 optional thermocouple connector to match sensor termination - supplied loose (full range pages 53-58)						code	
Standard Thermocouple Socket (to match standard thermocouple plug) Available in Thermocouple Types K, J, T, N, E						RSJ	
Standard Thermocouple Plug (to match standard thermocouple socket)						RSP	
Available in Thermocouple Types K, J, T, N, E							
8	optional 316	stainless steel compress	sion fitting		code		
		(to suit probe diameter)		1/8" BSPT	1/4" BSPT	1/2" BSPT	
		3.0mm		CF30AS	CF30CS	CF30ES	
A		4.5mm		CF45AS	CF45CS	CF45ES	
		6.0mm		CF60AS	CF60CS	CF60ES	
		8.0mm			CF80CS	CF80ES	
See page 60 for our full range of compression fittings. order code (example) 1 2 3 4 5 6 7 8 TRP - K - 600 - 6.0 - I - 300 - RSJ - CF60CS							

sales@thermosense.co.uk

🕜 thermosense.co.uk



Copyright © 2022 Thermosense Ltd.