Thermosense

Datasheet

TMH Mineral Insulated Thermocouple Sensor with Miniature Head

Supplied with a miniature IP67 rated die cast alloy terminal head, the TMH range of sensors provide a compact yet robust construction.

Available with 3.0mm, 4.5mm, 6.0mm and 8.0mm probe diameters, in lengths to suit your application requirements. 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.

The screw top lid has a robust chain ensuring it remains attached to the head. A ceramic terminal block inside the head makes connections to the extension cable very simple. The head has an M16 x 1.5mm cable entry thread and is supplied with a standard cable gland.

The head is attached to the sensor using a brass compression gland (stainless steel options available on request).

- 3.0mm, 4.5mm, 6.0mm or 8.0mm Ø probe
- Accuracy to IEC 60584.2 Class 1 or Class 2
- · Terminated with IP67 rated miniature die cast alloy head (M16 cable entry)
- Colour coded terminals, IEC 60584.3 (BS EN 60584.3)
- · Ex-stock options available





Note: Type K thermocouple shown for illustrative purposes only

| 1 sensor type | | | | | | code |
|--|------------------------------|--------------------------|-----------------------------------|------------------|-----------|-------------|
| Mineral Insulated Thermocouple Sensor with Miniature Terminal Head | | | | | | ТМН |
| | | | | | | |
| 2 conductor/thermocouple type (IEC 60584.1) | | | conductor temperature range | | | code |
| Type K Nickel Chromium vs. Nickel Aluminium Type J Iron vs. Constantan | | | 0°C to +1100°C -50°C to +750°C | | K | |
| | 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 | | F | |
| 1,700 - | | o. oonotantan | | 200 0 10 000 0 | | _ |
| 3 metal sh | neath material | available in thermocou | ple types | maximum ten | nperature | code |
| 321 Stainless Steel | | K, J, T, E | +800° | | С | 321 |
| 310 Stair | nless Steel | K | | | | 310 |
| Inconel 6 | | K, N | +1100 | | | 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 | | wyska diewater | (D4) | | | o o do |
| | | | | | | code |
| 3.0mm 4.5mm | | | | | | 3.0 4.5 |
| 6.0mm | | | | | | 6.0 |
| 8.0mm | | | | | | 8.0 |
| mperial sizes also available. | | | | | | |
| | | | | | | |
| 5 sensing junction simplex code | | | | | | duplex code |
| Insulated (isolated, ungrounded) | | | | | | 21 |
| Grounded (non-isolated) G | | | | | | 2G |
| 6 probe length (mm) (L1) | | | | | | code |
| As required to suit your application (stock sensors also available) | | | | | | e.g. 250 |
| | | | | | | |
| 7 | optional 316 | stainless steel compress | sion fitting | | code | |
| | | | | 1/8" BSPT | 1/4" BSPT | 1/2" BSPT |
| | | 3.0mm | | CF30AS | CF30CS | CF30ES |
| E | | 4.5mm | | CF45AS | CF45CS | CF45ES |
| HT | | 6.0mm | | CF60AS | CF60CS | CF60ES |
| | | 8.0mm | | - | CF80CS | CF80ES |
| Brass adjustable compression fittings also available. See page 60 for our full range. | | | | | | |
| | | | | | | |
| order code (example) TMH - K - 310 - 6.0 - I - 300 - CF60CS | | | | | | |
| | | | | | | |
| sales@thermosense.co.uk | | | | | | |
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