

TSH Mineral Insulated Thermocouple Sensor with Standard Head

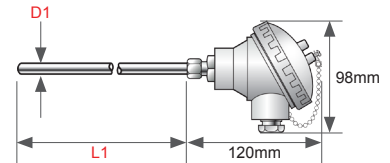
Supplied with a heavy duty IP67 rated die cast alloy terminal head, the TSH range of sensors provide a versatile, robust construction.

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 sensor can also be supplied with a linearised 4~20mA transmitter which can be pre-ranged to suit your requirements. The head has an M20 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 heavy duty die cast alloy head (M20 cable entry)
- Colour coded terminals, IEC 60584.3 (BS EN 60584.3)
- Ex-stock options available







1	Sensor Type		Code
	Mineral Insulated Thermocouple Sensor with Standard Terminal Head		TSH

2	Conductor/Thermocouple Type (IEC 60584.2)		Conductor Temperature Range	Code
	K	Nickel Chromium vs. Nickel Aluminium	0°C to +1100°C	K
	J	Iron vs. Constantan	-50°C to +750°C	J
	T	Copper vs. Constantan	-200°C to +350°C	T
	N	Nicrosil vs. Nisil	0°C to +1200°C	N
	E	Nickel Chromium vs. Constantan	-200°C to +900°C	E


3	Metal Sheath Material	Available in Thermocouple Types	Temperature Range	Code
	321 Stainless Steel	K, J, T, E	0°C to +800°C	321
	310 Stainless Steel	K	0°C to +1100°C	310
	Inconel 600	K, N	0°C to +1100°C	600
	Nicrosil D	K, N	0°C to +1300°C	200
	Incoloy 800	K	0°C to +1100°C	800

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. Contact sales for further information.

5	Sensing Junction		Number of Channels		Code
	Insulated (isolated, ungrounded)			Simplex	I
				Duplex	2I
	Grounded (non-isolated)			Simplex	G
				Duplex	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 Compression Fittings (to suit probe diameter)		Code	
		3.0mm	1/4" BSPT	1/2" BSPT
		4.5mm	CF30CS	CF30ES
		6.0mm	CF45CS	CF45ES
		8.0mm	CF60CS	CF60ES
		CF80CS	CF80ES	

Brass adjustable compression fittings also available. See page 63 for our full range.

8	Optional Head Mounting 4~20mA Transmitter (replaces ceramic terminal block)		Code
	Linearised, Head Mounting 4~20mA Transmitter, 24VDC Power Supply, Non-isolated (pre-ranged to suit your requirements)		TXHU (range) e.g. TXHU (0/200°C)

See page 87 for a full specification of the TXHU transmitter. Isolated version also available.

ATEX versions also available (contact sales)

Order Code (example)	1	2	3	4	5	6	7	8
	TSH	- K	- 310	- 6.0	- I	- 300	- CF60CS	- TXHU (0/200°C)