

**TSFB Mineral Insulated Thermocouple Sensor with Standard Head and Process Connection**

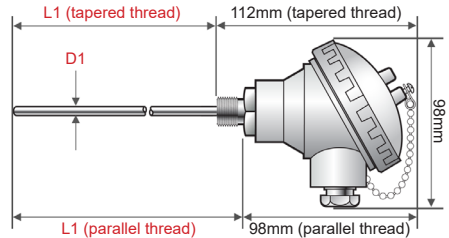
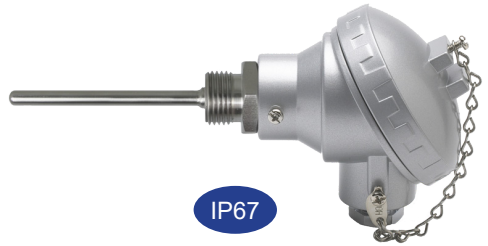
Supplied with a heavy-duty IP67 rated die cast alloy terminal head, the TSFB range of sensors provide a versatile, robust construction.

Supplied with a 6.0mm or 8.0mm diameter probe, 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 (below thread).

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 fixed process connection, positioned directly below the terminal head to allow mounting into the application.

- 6.0mm or 8.0mm Ø 316 stainless steel probe
- 1/4", 1/2" or 3/4" process connection (tapered or parallel)
- 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



Optional transmitter (section 8)

1	sensor type		code
	Mineral Insulated Thermocouple Sensor with Standard Terminal Head and Process Connection		TSFB
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
3	metal sheath material	available in thermocouple types	maximum temperature
	310 Stainless Steel	K	+1100°C
	321 Stainless Steel	K, J, T, E	+800°C
	Inconel 600	K, N	+1100°C
	Nicrosil D	N	+1300°C
4	process connection (item)	code	process connection (item)
	1/4" BSPP	W	1/4" BSPT
	1/2" BSPP	Y	1/2" BSPT
	3/4" BSPP	Z	3/4" BSPT

NPT options also available

5	probe diameter (316 stainless steel) (D1)	code	6	sensing junction	code
	6.0mm	6.0		Insulated (isolated, ungrounded), Simplex	I
	8.0mm	8.0			

7	probe length (mm) (L1)	code
	As required to suit your application	e.g. 250

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) Example: TXHU (0/200°C)

See page 83 for a full specification of the TXHU transmitter. Isolated version also available.

ATEX versions also available

order code (example)	1	2	3	4	5	6	7	8
	TSFB	- K	- 310	- Y	- 6.0	- I	- 250	- TXHU (0/200°C)