

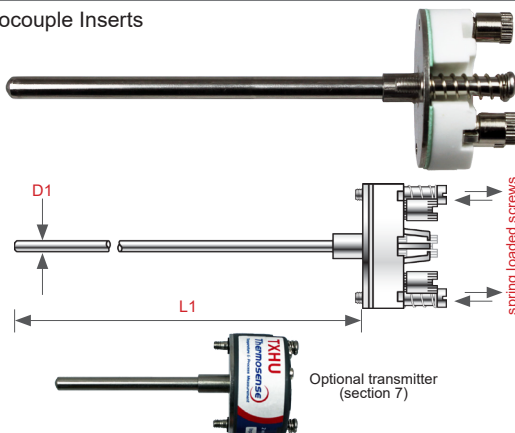
TSL Mineral Insulated Spring Loaded Thermocouple Inserts

The TSL spring loaded, mineral insulated, metal sheathed thermocouple inserts are designed to suit new or existing heavy duty thermowells. Most commonly supplied with a 6.0mm outside probe diameter (3.0mm, 4.5mm and 8.0mm also available).

A ceramic terminal block is supplied as standard and can be connected to a terminal head using the spring loaded screws. An optional 4~20mA transmitter can be supplied instead of the ceramic terminal block, if required.

Spring loading ensures that the sensor tip is kept in contact with the tip of the thermowell, which promotes a faster and more reliable response.

- 3.0mm, 4.5mm, 6.0mm, 8.0mm Ø probe
- Fast, reliable response due to spring loading
- Suits new or existing heavy duty thermowells



1	sensor type			code
	Mineral Insulated Spring Loaded Thermocouple Insert			TSL
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 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, ungrounded)	I	2I
	Grounded (non-isolated)	G	2G
6	probe length (mm) (L1)	code	
	As required to suit your application	e.g. 250	
7	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

RTD version page 37

order code (example) 1 2 3 4 5 6 7
TSL - K - 310 - 4.5 - I - 200 - TXHU (0/200°C)

Commonly used with thermowells, extension piece fittings and terminal heads:

