

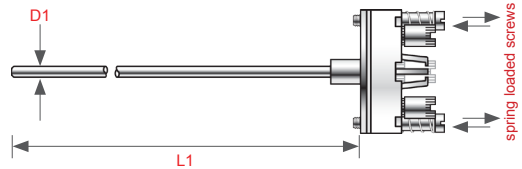
**TSL Spring Loaded Thermocouple Inserts**

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





<b>1</b>	<b>Sensor Type</b>	<b>Code</b>
	Spring Loaded Thermocouple Insert	TSL

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


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

<b>4</b>	<b>Probe Diameter (D1)</b>	<b>Code</b>
	3.0mm	<b>3.0</b>
	4.5mm	<b>4.5</b>
	6.0mm	<b>6.0</b>
	8.0mm	<b>8.0</b>

Imperial sizes also available. Contact sales for further information.

<b>5</b>	<b>Sensing Junction</b>	<b>Number of Channels</b>	<b>Code</b>
Insulated (isolated, ungrounded)		Simplex	<b>I</b>
		Duplex	<b>2I</b>
Grounded (non-isolated)		Simplex	<b>G</b>
		Duplex	<b>2G</b>

<b>6</b>	<b>Probe Length (mm) (L1)</b>	<b>Code</b>
	As required to suit your application	<b>e.g. 250</b>

<b>7</b>	<b>Optional Head Mounting 4~20mA Transmitter (replaces ceramic terminal block)</b>	<b>Code</b>
	Linearised, Head Mounting 4~20mA Transmitter, 24VDC Power Supply, Non-isolated (pre-ranged to suit your requirements)	<b>TXHU (range)</b> 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)

<b>Order Code (example)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
	TSL	- K -	310	- 4.5 -	I -	200	- TXHU (0/200°C)

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

