

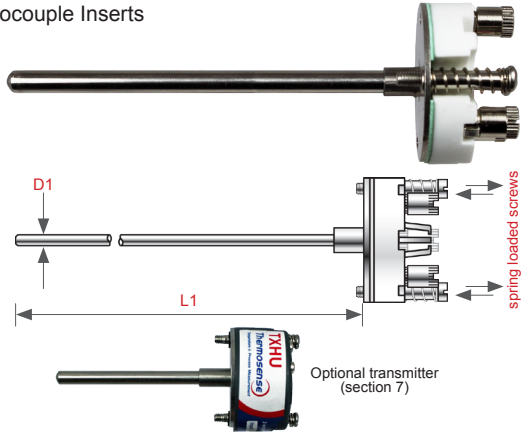
TSL Mineral Insulated Spring Loaded Thermocouple Inserts

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:

