

Datasheet

IEC Mineral Insulated Thermocouple with Standard Thermocouple Plug

Type 'K' or 'J', either 1.5, 3.0, 4.5 or 6.0mm diameter with insulated hot junction (un-grounded)



(image shows 6.0mm diameter probe)

- Mineral insulated Type 'K' or 'J' Thermocouple
- Type 'K' uses 310 stainless steel sheath, type 'J' uses Stainless steel 321 sheath
- Highly flexible, sheath can be bent/formed to suit many applications and processes
- Choice of 1.5, 3.0, 4.5 or 6.0mm diameters
- Insulated hot junction
- Probe temperature range -40°C up to +1100°C
- Standard plug termination (200°C)
- Conforms to IEC 584 specification

Specifications

| | |
|-----------------------------|--|
| Sensor type: | Type 'K' with Chromium/ Aluminium conductors Type 'J' with Iron / Constantan conductors |
| Construction: | Flexible mineral insulated probe, 310/321 stainless steel sheath & standard plug termination |
| Sheath composition: | 310 stainless steel (25/20 chromium nickel steel) |
| Element/hot junction: | Single element, junction insulated from sheath in order to prevent electrical noise & interference |
| Termination: | Standard round pin plug, colour coded 'green' in accordance IEC 584-3 |
| Reference Tables/Tolerance: | In accordance with IEC 584-1&2 |
| Probe temperature range: | -40°C to +1100°C |
| Plug temperature range: | 200°C |

310 stainless steel: Good corrosion & oxidation resistance to suit a wide range of processes, satisfactorily operates in sulphur bearing atmospheres

Typical applications include brick & cement kilns, glass industry, heat treatment & annealing furnaces, power stations, flues, heat exchangers etc.

| T/C Type | Probe Dia. (mm) | Probe Length (mm) | Sheath | Thermocouple junction | Allied code | RS order Code |
|----------|-----------------|-------------------|--------|-----------------------|-------------|---------------|
| K | 1.5 | 150 | 310SS | Insulated | 70643865 | 397-1501 |
| K | 1.5 | 250 | 310SS | Insulated | 70643866 | 397-1517 |
| K | 1.5 | 500 | 310SS | Insulated | 70653228 | 787-7781 |
| K | 1.5 | 1000 | 310SS | Insulated | 70653231 | 787-7790 |
| K | 3.0 | 150 | 310SS | Insulated | 70643867 | 397-1539 |
| K | 3.0 | 250 | 310SS | Insulated | 70643868 | 397-1545 |
| K | 3.0 | 500 | 310SS | Insulated | 70653232 | 787-7793 |
| K | 3.0 | 1000 | 310SS | Insulated | 70653233 | 787-7797 |
| K | 4.5 | 150 | 310SS | Insulated | | 872-2676 |
| K | 4.5 | 300 | 310SS | Insulated | | 872-2685 |
| K | 4.5 | 500 | 310SS | Insulated | | 872-2688 |
| K | 4.5 | 750 | 310SS | Insulated | | 872-2682 |
| K | 4.5 | 1000 | 310SS | Insulated | | 872-2691 |
| K | 6.0 | 150 | 310SS | Insulated | 70643869 | 397-1551 |
| K | 6.0 | 250 | 310SS | Insulated | 70643870 | 397-1567 |
| K | 6.0 | 500 | 310SS | Insulated | 70653236 | 787-7807 |
| K | 6.0 | 1000 | 310SS | Insulated | 70653234 | 787-7800 |

Type 'J' – 321 stainless steel sheath:

Excellent corrosion resistance, retains good ductile properties to suit a wide range of industrial applications & processes

Typical applications include heat treatment & annealing furnaces, aluminium heat treatment, chemical reactors, plastic/rubber moulding industry, polythene manufacture, coal plants, paper mills, textile industry etc.

| T/C Type | Probe Dia. (mm) | Probe Length (mm) | Sheath | Thermocouple junction | Allied code | RS order code |
|----------|-----------------|-------------------|--------|-----------------------|-------------|---------------|
| J | 4.5 | 150 | 321SS | Insulated | | 872-2694 |
| J | 4.5 | 300 | 321SS | Insulated | | 872-2698 |