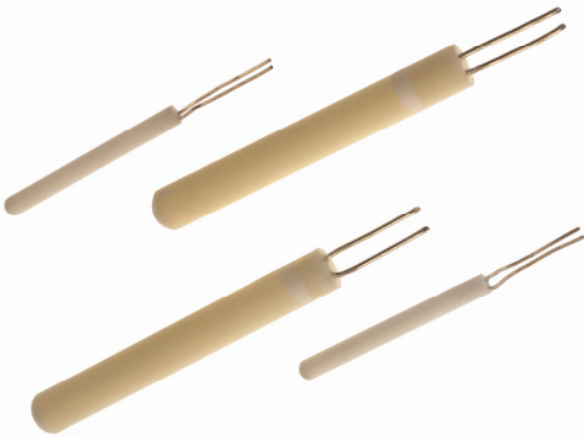


Datasheet

Platinum Resistance Pt100 Wire-Wound Detector Elements

Pt100 platinum resistance thermometer elements in a choice of sizes – single & dual element



What is the difference between a RTD and PRT sensor?

Nothing. RTD means resistance thermometer detector (the sensing element) and PRT means Platinum resistance thermometer (the whole assembly) i.e. a PRT uses a RTD.

- Pt100 elements to IEC 60751 Class A or B
- 100Ω Ohms @ 0°C
- Single or dual element
- Platinum coil wire-wound construction sealed inside a high purity alumina ceramic body
- Optimum performance & stability
- Temperature range -200°C to +650°C

Specifications:

| | |
|--------------------------------------|---|
| Sensor type: | Pt100 (100 Ohms @ 0°C) |
| Construction: | Wire-Wound, 10mm tails |
| Temperature range: | -200°C to +650°C |
| Ice point resistance: | 100Ω |
| Fundamental interval (0°C to 100°C): | 38.5Ω (nominal) |
| Self-heating: | 0.02 to 0.3°C/mW |
| Thermal response: | <0.4s (secs. to 63% of final value – in water @ 1m/s) |
| Measuring current: | 1mA |
| Tolerance Class: | In accordance with IEC 60751 W0.15 (Class A) -100°C to +450°C W0.3 (Class B) -196°C to +660°C |

Single element:

| Resistance | Tolerance Class | Diameter ('D') | Length ('L') | Allied code | RS order code |
|------------|-----------------|----------------|--------------|-------------|-----------------|
| Pt100 | Class B | 1.5mm | 8mm | 70646153 | 611-7851 |
| Pt100 | Class A | 1.5mm | 8mm | 70646155 | 611-7873 |
| Pt100 | Class B | 0.9mm | 15mm | | 174-1654 |
| Pt100 | Class A | 0.9mm | 15mm | | 174-1656 |
| Pt100 | Class B | 1.5mm | 15mm | 70646154 | 611-7867 |
| Pt100 | Class A | 1.5mm | 15mm | 70646151 | 611-7839 |
| Pt100 | Class B | 1.5mm | 25mm | | 174-1655 |
| Pt100 | Class A | 1.5mm | 25mm | | 174-1657 |
| Pt100 | Class B | 2.8mm | 15mm | 70646150 | 611-7823 |
| Pt100 | Class A | 2.8mm | 15mm | 70646152 | 611-7845 |
| Pt100 | Class B | 2.8mm | 25mm | 70646147 | 611-7794 |
| Pt100 | Class A | 2.8mm | 25mm | 70646149 | 611-7817 |

Dual element:

| | | | | | |
|------------|---------|-------|------|----------|-----------------|
| Pt100 (x2) | Class A | 1.5mm | 15mm | 70643873 | 397-1595 |
| Pt100 (x2) | Class B | 1.5mm | 15mm | | 174-1658 |
| Pt100 (x2) | Class A | 2.8mm | 15mm | | 174-1660 |
| Pt100 (x2) | Class B | 2.8mm | 25mm | | 174-1659 |
| Pt100 (x2) | Class A | 2.8mm | 25mm | | 174-1661 |

