

PR-14-Series

RTD Probe with Miniature Aluminum Protection Head

Our PR-14 series RTD probe with miniature aluminum protection head and screw-on cap with chain includes PT100 Ω platinum RTD element or PT1000 RTD element, 1/2" NPT mounting threads and sheath of 316 stainless steel. When properly sized, these can go directly into a thermowell. All probes include a screw terminal block for easy connection of insulated copper extension wire. Using our probe configurator, replacement probes (without head assembly) are available as well as a "spring-loaded" option which allows for the probe to bottom out in a thermowell for quicker and more accurate response. These are ideal for use in vessels, tanks and similar structures where temperature measurements are needed.



Features

- Class A accuracy, conforming to IEC 60751
- Low temperature range: -50 to 250°C (-58 to 482°F)
- High temperature range: -50 to 450°C (-58 to 842°F)
- Extreme temperature range: -200 to 600°C (-328 to 1112°F)
- Standard probe lengths of 2, 3, 4, 6, 9, 12, 18, and 24"
- Resistance value: PT100 Ω or PT1000 Ω
- Miniature Aluminum Protection head with cap
- Choice of PT100 and PT1000 Ω element
- IP67 Ingress Protection

Specifications

| Model | PR-14L (Low) | PR-14H (High) | PR-14E (Extreme) |
|------------------------------|--|--|--|
| Process Temperature Range | -50 to 250°C (-58 to 482°F) | -50 to 450°C (-58 to 842°F) | -200 to 600°C (-328 to 1112°F) |
| Accuracy | Class A | Class A from -50 to 300°C (-58 to 572°F); or else Class B | Class A from -100 to 450°C (-148 to 842°F); or else Class B |
| Nominal Resistance and Curve | 100 Ω and 1000 Ω at 0°C standard; TCR = 0.00385 $\Omega/\Omega/^\circ\text{C}$ standard | | |
| Process Connection | 1/2" NPT | 1/2" NPT | 1/2" NPT |
| Dimensions | Diameters: 1/8, 3/16 and 1/4 inch. Standard probe length of 2, 3, 4, 6, 12, 18 and 24 inch. Other lengths may be built using our configurator. | | |
| Ingress Protection | IP67 | IP67 | IP67 |
| Response time T90 (s) | 1/8" 2.4 sec 3/16" 2.8 sec 1/4" 3.25 sec | 1/8" 2.8 sec 3/16" 4.11 sec 1/4" 5.41 sec | 1/8" 9 sec 3/16" 9.8 sec 1/4" 10.6 sec |
| Vibration | IEC 60068-2-6; 5 to 2000 Hz sweep rate, one active per minute; number of sweep cycles 10 and acceleration 5g (15 probes tested together) Duration: 1 day | | |
| Shock | IEC 60068-2-27; 50g/11ms (15 probes tested together) Duration: 1 day | | |