

RTD (PT100) assemblies

Reliable temperature sensing, configured to your application

We supply a broad range of Conax RTD (PT100) assemblies for accurate and reliable temperature measurement in semiconductor equipment and other demanding industrial applications. With hundreds of standard configurations available before customization, RTD (PT100) assemblies can be configured to suit a wide range of temperature, mounting, environmental and installation requirements.



A BROAD RANGE OF STANDARD AND CUSTOM SOLUTIONS

The selection presented on our website and in this datasheet represents only a small selection of commonly used configurations. If you require a different sensor element, sheath, termination, mounting style or lead configuration, contact us with your requirements. We can work with you to identify the most suitable RTD (PT100) assembly for your application.

CONFIGURE YOUR RTD ASSEMBLY

RTD (PT100) assemblies can be specified according to the requirements of your equipment and process, including:

- **Sensor element** selected for the required operating conditions and specifications
- **Sensor tolerance** to meet your accuracy requirements
- **Lead configuration** with the appropriate number of leads
- **Sheath material** and diameter for the operating environment
- **Sheath length** according to the required immersion depth
- **Termination style** to match your electrical and mechanical interface
- **Mounting configuration**, including direct-mount, adjustable and spring-loaded options

CALIBRATION SERVICES

Conax offers RTD calibrations at standard or customer specified temperature intervals. All calibrations are conducted using industry accepted comparison techniques in a modern, environmentally controlled calibration lab to the following specifications:

- Calibration to NIST traceable standards
- Calibration methods and procedures complying with ASTM E220 and E644
- Temperature control methods include highly stable liquid baths, fluidized powder baths or electrically heated tube furnaces

MOUNTING AND TERMINATION OPTIONS

A wide range of terminal heads and mounting configurations is available for different installation requirements.

Direct-mount assemblies attach the sheath directly to the terminal head using a W8 fitting or soft-seal compression fitting. These fittings provide both mechanical mounting and environmental sealing.

Adjustable mounting assemblies allow the sheath immersion depth to be adjusted in the field while providing pressure or vacuum sealing against gases and liquids. Compression fittings are available in different sizes and seal materials to suit a range of environments.

Spring-loaded assemblies maintain positive contact between the sensor tip and the surface being monitored. They are commonly used with thermowell assemblies and can be supplied with various terminal head styles. The T11SL configuration integrates the spring-loaded mechanism directly into the terminal head, allowing the sensor probe to be removed without dismantling the head from the conduit or vessel.

FLEXIBLE LEAD AND CONNECTION OPTIONS

RTD (PT100) assemblies are available with several termination and lead configurations to accommodate different installation requirements.

The **T3 epoxy-filled transition** provides a robust connection between the probe and leadwire. Standard construction uses 24 AWG stranded, silver-plated copper wire with Teflon® insulation and an overall Teflon® jacket. Silicone-impregnated fiberglass insulation is also available.

The **T4 termination** adds a stainless-steel overbraid for increased flexibility and abrasion resistance. The overbraid is embedded in the epoxy-filled transition to provide additional mechanical strength. Standard extension leads are 24 inches, with longer lengths available on request.

For applications requiring convenient connection of customer-supplied extension wiring, **B-Series terminal heads** provide a compact and lightweight solution. The nickel-plated housing offers corrosion resistance, while the ceramic terminal block accommodates wires up to 14 AWG. B-Series heads are available in direct and adjustable mounting configurations.

A LOOK INTO OUR PRODUCT RANGE

We can provide the following RTD (PT100) assemblies and more:



RTD Assemblies - M-style or E-style construction



RTD Assemblies with B-Series Terminal Head



RTD Assemblies with MD Disc Termination



RTD Assemblies with PJFC-Plug/Jack Termination



RTD Assemblies with T3/T4 Leadwire Termination



RTD Assemblies with Terminal Heads & Spring-Loaded Mounting



RTD Assemblies with Terminal Heads & Adjustable Mounting



RTD Assemblies with Terminal Head and Direct Mount



RTD & Thermocouple Assemblies for Hazardous Locations



Miniature Bearing Sensors



Termination - Plug & Jack

Contact us with your requirements. We will happily work with you to find the best configuration!