

# Industrial Pt100 RTD's

## CA 2001 Resistance thermometer

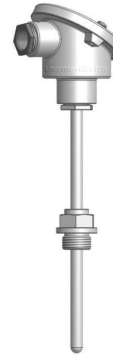


Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard, optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C. Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Welded process connection 1/2"BSP. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din standard measuring insert. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type

## CA 2003 Resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Welded process connection 1/2"BSP Head extension 50mm standard. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din insert. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type

## CA 2004 Fast response resistance thermometer

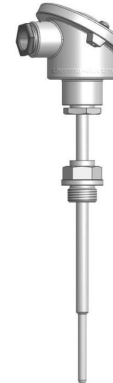


Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C Max 60bar and media velocities of up to 8m/sec (air) or 0.9m/sec (water). Closed-end 9mm 316SS acid-proof protection tube with 6mm tip. Welded process connection 1/2"BSP. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Fixed insert, optional 3mm replaceable. Can be delivered with head mounted transmitter.

Ordering code

Type

## CA 2005 Fast response resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media. Temperature range: -200°C to 600°C. Max 60bar and media velocities of up to 8m/sec (air) or 0.9m/sec (water). Closed-end 9mm 316SS acid-proof protection tube with 6mm tip. Welded process connection 1/2"BSP. Head extension 50mm standard. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Fixed insert, optional 3mm replaceable. Can be delivered with head mounted transmitter.

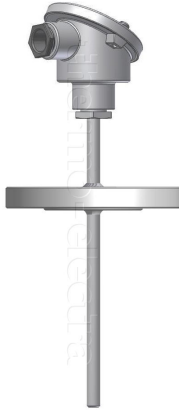
Ordering code

Type



# Industrial Pt100 RTD's

## CA 2006 Resistance thermometer flanged to ANSI or DIN



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C. Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm, 11mm, 12mm or 14mm 316SS acid-proof protection tube. Process connection by a welded flange to ANSI or to DIN. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm DIN standard measuring insert. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type

## CA 2007 Air temperature resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous media, e.g. air, steam, gas. Temperature range: -200°C to 600°C Max 1bar and media velocities of up to 10m/sec. Perforated 9mm, 316SS acid-proof protection tube. Welded male process connection 1/2"BSP. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din standard measuring insert. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type

## CA 2008 Air temperature resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous media, e.g. air, steam, gas. Temperature range: -200°C to 600°C Max 1bar and media velocities of up to 10m/sec Perforated-end 9mm 316SS Welded 1/2"BSP process connection, head extension 50mm. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din standard measuring insert. Single or duplex. Optional head mounted transmitter. Insertion length as required.

Ordering code

Type

## CA 2009 Fast response air resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard, optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous media, e.g. air, steam, gas. Temperature range: -200°C to 600°C. Max 1bar and media velocities of up to 1m/sec. Protection tube 9mm 316SS acid-proof with perforated 6mm tip. Welded male process connection 1/2"BSP. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Fixed insert. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type



# Industrial Pt100 RTD's

## CA 2012 Industrial resistance thermometer integrated transmitter



Head mounted 4-20mA transmitter integrated. Precision wire-wound Pt100 detector Accuracy to IEC 751 class B standard, optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil with current output. Temperature range: -200°C to 600°C. Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Welded male process connection 1/2"BSP. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Insertion length as required.

### Ordering code

Type

## CA 2016 General purpose resistance thermometer

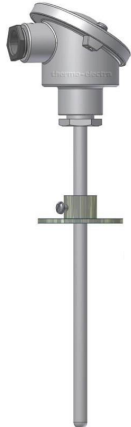


Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard, optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Compression gland or an adjustable sliding flange optional. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din standard measuring insert. Can be delivered with head mounted transmitter. Insertion length as required.

### Ordering code

Type

## CA 2017 Flanged resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard, optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C. Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Process connection by an adjustable sliding flange. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din standard measuring insert. Can be delivered with head mounted transmitter. Insertion length as required.

### Ordering code

Type

## CA 2018 Industrial resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C. Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Process connection by 1/2"BSP compression gland with metal or Teflon ferrule. Aluminium connectionhead DIN B. Cable gland M20x1.5mm. Replaceable 6mm Din standard measuring insert. Can be delivered with head mounted transmitter.

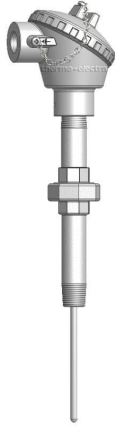
### Ordering code

Type



# Industrial Pt100 RTD's

## CA 2021 Heavy duty resistance element for thermowells



Designed to measure temperatures into thermowells and pockets at places with high vibrations and harsh environments. Temperature sensor range: -200°C to 550°C. Thermowell connection by a 1/2"NPT nipple union nipple. Aluminium connection head CE with threaded cover and chain. Stainless steel connection head optional. Cable entry M20x1.5mm. Replaceable 6mm springloaded insert. Sensor Pt100 2, 3 or 4 wire system. Accuracy to IEC 751 class A, B or better. Single or duplex. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type

## CA 2022 Industrial resistance thermometer



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments with gaseous or liquid media, e.g. air, steam, gas, water or oil. Temperature range: -200°C to 600°C Max 60bar and media velocities of up to 25m/sec (air) or 3m/sec (water). Closed-end 9mm 316SS acid-proof protection tube. Welded male process connection 1/2"NPT. Aluminium connectionhead DIN B. Cable gland M20x1.5mm included. Replaceable 6mm Din standard measuring insert. Can be delivered with head mounted transmitter. Insertion length as required.

Ordering code

Type

## MI 2025 springloaded replacement resistance thermometer insert



Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Temperature range: -200°C to 600°C. Diameter 6.0mm, optional diameter 3mm, 3.2mm, 4.5mm, 6.4mm and 8mm. Mineral insulated, 316SS sheathed insert to DIN 43762. Suits any B-type connection head with 33mm fixing. Sensor wires are soldered or laser-welded to the terminals on the DIN standard ceramic terminal block. Material of terminals is nickel-plated brass. Max. connection wire diameter 3mm. Detector is isolated from the sheath. High vibration detector or Chip type version possible.

Ordering code

Type

## MI 2026 resistance thermometer insert for 4-20mA transmitter



Mineral insulated replacement measuring insert suits DIN-B type headmount transmitter. Transmitter can be fitted directly on the probe. Standard 60mm PTFE insulated connection wires. Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Temperature range: -200°C to 600°C Diameter 6.0mm (3mm, 3.2mm, 4.5mm, 6.4mm and 8mm optional). Can be delivered with any brand head mounted transmitter. Standard Head Mounted Transmitters see separate chapter to select or specify your standardized brand and model.

Ordering code

Type



# Industrial Pt100 RTD's

## MI 2027 Springloaded resistance thermometer insert

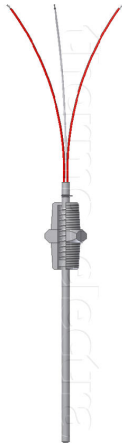


Mineral insulated, 316SS sheathed insert with 125mm central spring design. Designed for NPT mounted Nipple Unions Nipple and Thermowells connections. Ensures positive contact with the thermowell bottom. Precision wire-wound Pt100 detector single or duplex. Connected in a 2, 3 or 4 wire system. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Temperature range: -200°C to 600°C Diameter 6.0mm ( 3mm,3.2mm, 4.5mm, 6.4mm and 8mm optional ). Suits any B-type connection head with 33mm pitch. Max. connection wire diameter 3mm. Detector is isolated from the sheath.

Ordering code

Type

## MI 2039 Springloaded resistance thermometer



Rigidly mounted vibrationproof Pt100 RTD replacement probe. SS316 hex nipple. Springloaded 25mm of travel. 1/2"NPT mounting thread on both sides. Pt100 Measuring system connected in a 2, 3 or 4 wire system. Temperature range: -200°C to 600°C. Single or duplex. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Diameter 6.0mm (3mm, 4.5mm, 6.4mm and 8mm optional) Mineral insulated, 316SS sheathed Detector is isolated from the sheath. PTFE Insulated flexible connection wires 150mm.

Ordering code

Type

## MI 2038 Fixed insertion resistance thermometer



Rigidly mounted vibrationproof Pt100 replacement probe. SS316 hex nipple with 1/2" NPT mounting thread on both sides. Seal welded to the probe. Pt100 connected in a 2, 3 or 4 wire system. Temperature range: -200°C to 600°C. Single or duplex. Accuracy to IEC 751 class B standard optional class A, 1/3DIN or 1/10DIN. Diameter 6.0mm (3mm, 4.5mm, 6.4mm and 8mm optional) Mineral insulated, 316SS sheathed. Detector is isolated from the sheath. PTFE insulated flexible connection wires 150mm.

Ordering code

Type

## BE 2084 Clamp resistance thermometer



Surface block Pt100 probe for clamp mounting on tubes. Temperature range: -200°C to 250°C Accuracy to DIN IEC 60751 class B. Optional accuracy class A Single or duplex sensor. Surface contact area 8mm x 30mm. Nickel plated brass contact block with adjustable stainless steel clamp, permanently attached. Clamp diameter to specify. Cable: Armoured PTFE insulated wires, glassfibre jacket with stainless steel overall braiding for mechanical protection. Maximum cable temperature 240°C.

Ordering code

Type



# Industrial Pt100 RTD's

## RV 2095 Wall mounted resistance thermometer



Wall mounted Pt100 sensor for air temperatures indoor and outdoor. Pt100 sensor connected in a 3 or optional 4 wire system. Single or Duplex. Precision wire-wound platinum detector Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments such as storage rooms and freezers. Temperature range: -50°C to 120°C Ingress protection IP65 Perforated 15mm 316SS acid-proof protection tube. Coated aluminium wallmounted connectionbox with cable gland. Can be delivered with head mounted transmitter.

Ordering code

Type

## RV 2096 Outdoor wall mounting resistance thermometer



Wall mounted Pt100 sensor for outdoor temperature measurement. Special canopy cap protects influence by direct sunlight. Pt100 sensor connected in a 2, 3 or 4 wire system. Precision wire-wound platinum detector. Single or duplex. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Designed to measure temperatures in industrial environments. Weather proof IP65. Temperature range: -50°C to 120°C Perforated 15mm 316SS acid-proof protection tube. Coated aluminium wallmounted connectionbox with cable gland. Can be delivered with head mounted transmitter.

Ordering code

Type

## RV 2097 Indoor resistance thermometer



Wall mounted Pt100 sensor for measuring air temperatures indoor. Representative wall box. Precision wire-wound platinum detector. Pt100 sensor connected in a 3 or optional 4 wire system. Single or duplex. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Temperature range: -10°C to 50°C Optional 4-20mA two-wire transmitter.

Ordering code

Type

## RV 2098 Wall mounted transmitter



Wall mounted Pt100 sensor for measuring air temperatures indoor. Representative wall box. Precision wire-wound platinum detector. Pt100 sensor connected in a 3 or optional 4 wire system. Single or duplex. Accuracy to IEC 751 class B standard Optional class A, 1/3DIN or 1/10DIN. Temperature range: -10°C to 50°C Including 4-20mA two-wire transmitter.

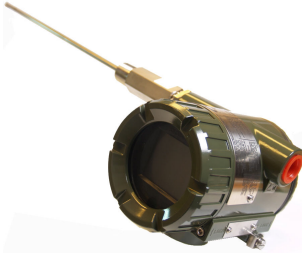
Ordering code

Type



# Industrial Pt100 RTD's

## Industrial Temperature Assemblies with Temperature Transmitters



Thermo-Electra offers complete temperature assemblies, consisting of a thermocouple or Pt100 RTD sensor, temperature transmitter hockey puck or with integrated display and thermowell for oil and gas production, as well as petrochemical, power generation and process industries. Our sensors and high pressure resistant thermowells in combination with the Yokogawa YTA50 / YTA70 and YTA110 / YTA310 / YTA320 temperature transmitter are used worldwide in several projects. Hazardous certification for the combination is available. Thermo-Electra industrial temperature sensors can also be combined with the transmitter brand you have standardized.

Ordering code

Type

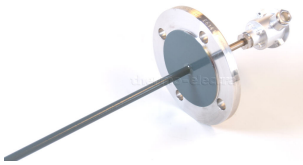
IECEX-ATEX

Ordering code

Type

MITx

## Cladding, coating and sleeves



Corrosion resistant sleeves: Thermowell sleeve from Tantalum ( Tantalium ) or Titanium fit over a standard stainless steel thermowell and provides an economical way to protect against corrosion of highly corrosive chemical solutions and agents. Corrosion resistant coating: PTFE/PFA/PVDF Teflon®/Kynar® or Halar® coating give very good corrosive resistance to almost all chemicals. Very good heat resistant and also has cryogenic stability. Used for Food and Beverage, Pharmaceutical, Acid, Caustic and Electroplating applications. Abrasion resistant overlay: Deloro Stellite® or Eutalloy® as an welded overlay result in an excellent wear resistant thermowell.

Ordering code

Type

Option

