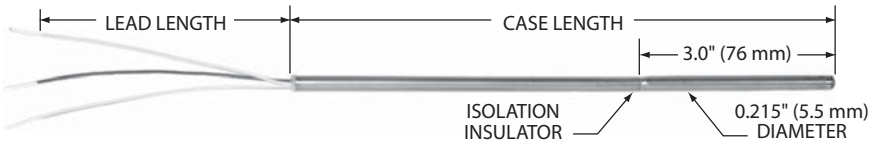
Electrically Isolated RTDs



RTD STAINLESS PROBE

Overview

- Electrically isolated sensing tip for "hot" bearings
- Accurate sensing to 260°C (500°F)
- Copper alloy tip for fast time response and increased tip sensitivity
- ATEX, IECEx and TR CU (EAC) Ex e and Ex ia options available

Specifications

Dielectric strength of isolation insulator: 1000 volts RMS at 60 Hz for 30 seconds, between case sections, 1 mA max. leakage current.

Pressure rating: 30 psi (2.1 bar).

Vibration: Withstands 10 to 2000 Hz at 20 G's minimum per MIL-STD-202, Method 204, Test Condition D.

Shock: Withstands 100 G's minimum sine wave shock of 8 milliseconds duration.

Isolated tip RTDs

RTD sensing element		Model
Platinum (0.00392 TCR)	100 Ω ±0.5% at 0°C	▼S52PA
Platinum (0.00385 TCR) (Meets EN60751, Class B)	100 Ω ±0.1% at 0°C	▼S852PD
Platinum (0.00385 TCR)	100 Ω ±0.5% at 0°C	S882PE
Copper (0.00427 TCR)	10 Ω ±0.2% at 25°C	S52CA
Nickel (0.00672 TCR)	120 Ω ±0.5% at 0°C	S52NA

Temperature Range: -50 to 260°C (-58 to 500°F).

Case: Stainless steel with copper alloy tip.
Minimum case length: 4.0" (101.6 mm).
Maximum case length: 48" (1220 mm), longer on special order.

Leads: 2, 3, or 4 leadwires, AWG 22, stranded copper with PTFE insulation. For 2-lead RTDs add 0.03 Ω per foot of combined case and lead length to element tolerance.

Time constant: 2 seconds typical in moving water.

Insulation resistance: 1000 megohms min. at 500 VDC, leads to case.

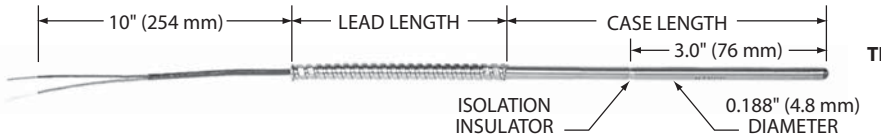
Specification and order options

S52PA	Model number from isolated tip table
240	Case length: Specify in 0.1" increments (Ex: 240 = 24.0 inches) ▼: 120, 180, 240
Z	Number of leads: Y = 2 leads ▼Z = 3 leads (required for copper elements) X = 4 leads (PD only)
36	Lead length in inches ▼: 36, 120
S52PA240Z36 = Sample part number	

▼= STANDARD OPTIONS

Specifications subject to change

Electrically Isolated Thermocouples



THERMOCOUPLE PROBE

Overview

- Electrically isolated sensing tip for "hot" bearings
- Accurate sensing to 260°C (500°F)
- Copper alloy tip for fast time response and increased tip sensitivity
- ATEX, IECEx and TR CU (EAC) Ex e and Ex ia options available

Specifications

Dielectric strength of isolation insulator: 1000 volts RMS at 60 Hz for 30 seconds, between case sections, 1 mA max. leakage current.

Pressure rating: 30 psi (2.1 bar).

Vibration: Withstands 10 to 2000 Hz at 20 G's minimum per MIL-STD-202, Method 204, Test Condition D.

Shock: Withstands 100 G's minimum sine wave shock of 8 milliseconds duration.

Temperature Range: -50 to 260°C (-58 to 500°F).

Case: Stainless steel with copper alloy tip.
Minimum case length: 4.0" (101.6 mm).
Maximum case length: 48" (1220 mm), longer on special order.

Leads: Solid thermocouple wire, AWG 20 (AWG 24 for stainless steel braid option). Specify PTFE insulation or PTFE with stainless steel armor and shrink tubing over all.

Time constant: Typical value in moving water:
Grounded junction: 1.5 seconds.
Ungrounded junction: 7 seconds.

Insulation resistance: 10 megohms min. at 100 VDC, leads to case, ungrounded junctions only.

Specification and order options

TC2198	Model number: TC2198
J	Junction type: E = Chromel-Constantan ▼J = Iron-Constantan ▼K = Chromel-Alumel T = Copper-Constantan
U	Junction grounding: ▼G = Grounded ▼U = Ungrounded
60	Case length: Specify in 0.1" increments (Ex: 60 = 6.0 inches) ▼: 60, 120
T	Covering over leadwires: ▼T = PTFE only ▼A = Stainless steel armor plus shrink tubing S = SS braid over PTFE (5" min. case length)
120	Lead length in inches ▼: 120
TC2198JU60T120 = Sample part number	

▼= STANDARD OPTIONS

Specifications subject to change