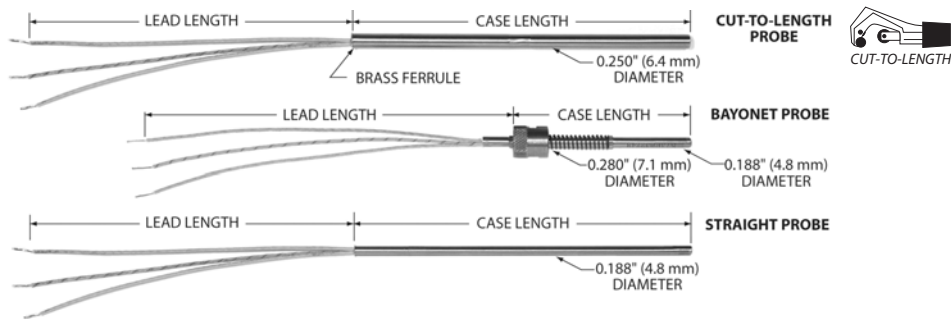


# 550°C RTD Probes



## Overview

Install these probes in steam lines, exhaust gases, or wherever you need precise readings of elevated temperatures. RTD probes feature high temperature ceramic elements, assembled into stainless steel cases in a configuration that provides long-term reliable service.

Models S80 and S81 can be shortened by the user. You can stock standard lengths and cut them to the size required with an ordinary tubing cutter.

Bayonet-style probes have a lockcap and spring for spring-loaded installation. See page 4-9 for more information on bayonet fittings.

- 0.250" diameter cut-to-length RTDs
- 0.188" diameter straight and bayonet RTDs

## Specifications

### Temperature range:

-100 to 550°C (-148 to 1022°F).

Leadwires: 500°C (932°F) max.

**Case:** 316 stainless steel.

Minimum case length:

0.250" diameter: S80, S81: 4.0" (101.6 mm).

0.188" diameter: S71, S72: 2.0" (50.8 mm)

S73, S74: 3.0" (76.2 mm).

Maximum case length: 48" (1220 mm), longer on special order.

**Pressure rating:** 1500 psi (103 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.

**Leads:** 2 or 3 leadwires, AWG 22, stranded copper with mica/glass insulation. For 2-lead RTDs add 0.04 Ω per foot of combined case and lead length to element tolerance.

**Time constant:** 10 seconds typical in moving water.

**Insulation resistance:** 10 megohms min. at 100 VDC, leads to case.

### Model numbers:

**Straight probe: Ø 0.188" (4.8 mm)**

Element		Model
Platinum (0.00391 TCR)	100 Ω ±0.1% at 0°C	S71PB
Platinum (0.00385 TCR)*	100 Ω ±0.1% at 0°C	S72PD

**Bayonet probe: Ø 0.188" (4.8 mm)**

Element		Model
Platinum (0.00391 TCR)	100 Ω ±0.1% at 0°C	S73PB
Platinum (0.00385 TCR)*	100 Ω ±0.1% at 0°C	S74PD

**Cut-to-length: Ø 0.250" (6.4 mm)**

Element		Model
Platinum (0.00391 TCR)	100 Ω ±0.1% at 0°C	S80PB
Platinum (0.00385 TCR)*	100 Ω ±0.1% at 0°C	S81PD

\*Meets EN60751, Class B

## Specification and order options

S74PD	Model number from table
145	Case length: Specify in 0.1" increments (Ex: 145 = 14.5 inches)
Z	Number of leads: Y = 2 leads Z = 3 leads
6	Lead length in inches
S74PD145Z6 = Sample part number	

Specifications subject to change