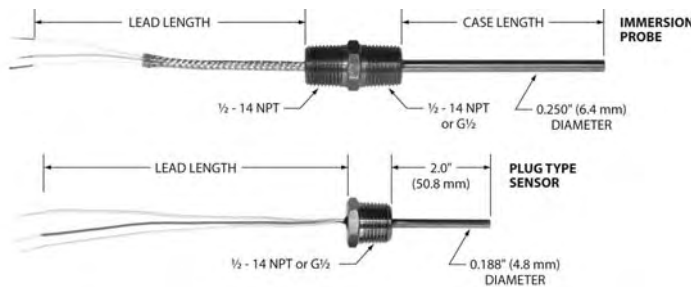


Fast Response Immersion RTDs



Overview

You can mount these probes directly in fluid streams for accurate, reliable sensing. Time constant is just 2 seconds, compared to 10 seconds for an ordinary stainless probe or up to 50 seconds for a thermowell. The result is more accurate monitoring of dynamic processes.

- Stainless steel probes for use to 260°C (500°F)
- Pressure rating 1500 psi (103 bar)
- Quick reaction to changing fluid and gas temperatures
- NPT (U.S.) or metric threads

Specifications

Temperature range: -269 to 260°C (-452 to 500°F).

Case material:

S623, S628: 316 stainless steel.

S634, S639: 304/305 stainless steel.

Case length:

Minimum case length: 1.5" (38.1 mm).

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

Time constant: Typical value in moving water:

S623, S628: 4 seconds.

S634, S639: 2 seconds.

Pressure rating: 1500 psi (103 bar).

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

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

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.

Sensing elements

RTD sensing element		Code
Platinum (0.00392 TCR)	100 Ω ±0.5% at 0°C	PA
Platinum (0.00385 TCR) (Meets EN60751, Class B)	100 Ω ±0.1% at 0°C	PD
Platinum (0.00385 TCR)	100 Ω ±0.5% at 0°C	PE
Platinum (0.00385 TCR) (N/A for model S602)	1000 Ω ±0.1% at 0°C	PF
Copper (0.00427 TCR)	10 Ω ±0.2% at 25°C	CA
Nickel (0.00672 TCR)	120 Ω ±0.5% at 0°C	NA

Specification and order options:

Immersion probes

These probes have welded fittings to mount directly into fluid vessels. Add a connection head for termination of extension leads.

S623	Model number: S623: 1/42 - 14 NPT thread [2] S628: ISO 228/1-G1/42 process thread (1/42 - 14 NPT on leads end)
PF	Sensing element from table
60	Case length: Specify in 0.1" increments (Ex: 60 = 6.0 inches)
Y	Number of leads: Y = 2 leads Z = 3 leads X = 4 leads (PD only)
72	Lead length in inches
A	Covering over leadwires: T = PTFE only S = Stainless steel braid A = Stainless steel armor
S623PF60Y72A = Sample part number	

Plug type sensors

Save space and get accurate readings with this compact, easy-to-install probe.

S634	Model number: S634: 1/42 - 14 NPT thread S639: ISO 228/1-G1/42 thread
NA	Sensing element from table
Y	Number of leads: Y = 2 leads Z = 3 leads X = 4 leads (PD only)
24	Lead length in inches
T	Covering over leadwires: T = PTFE only S = Stainless steel braid
S634NAY24T = Sample part number	

Specifications subject to change