

RTD R18

Spring Loaded RTD Probe
w/Hex Nipple



Features

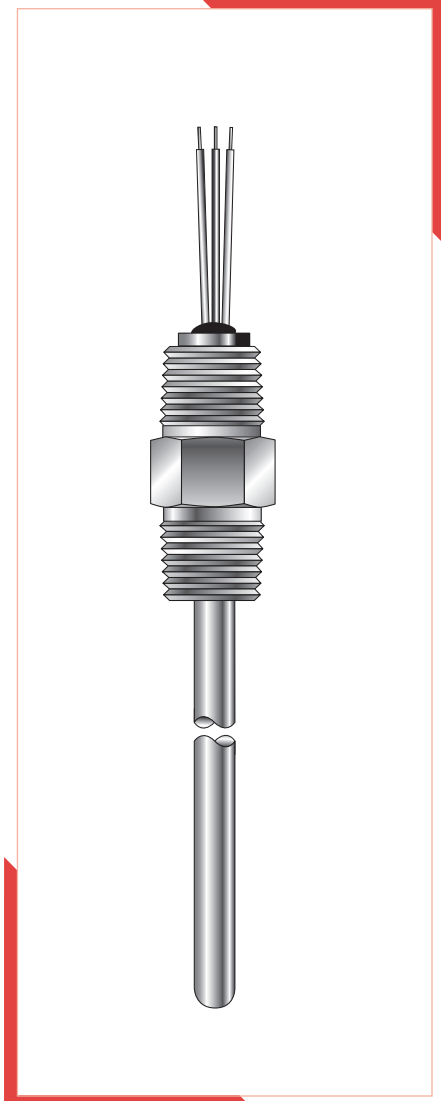
- Spring loaded RTD probe ready to assemble in thermowells
- SS316 or Inconel 600 sheath
- 1/2" x 1/2" NPT Hex fitting, available O-Ring sealing
- All parts stainless steel
- RTD replacable from top of fitting

Description

This spring loaded RTD probe is compact, low cost and ideal for both OEM and custom applications. Many wire choices are available for custom configurations. A adjustable stainless steel integral spring insures positive spring loading for thermowell mounting. RTD can be replaced without removal of fitting or assembly.

Specifications (for all models)

Temperature range :	Probes available -50 to 200°C (-58 to 392 °F)
Sheath Material :	316 stainless steel or Inconel 600
Finish (standard) :	32 micro-inches max.
Pressure rating :	500 psi (34.5 bar). (tube only)
RTD Element :	Pt 100 Ohm @ 0°C, $\alpha=0.00385$ IEC 751 & DIN 43760 standard
Lead wires :	Stranded 22 AWG std.
Self-heating :	50 mW/°C typical in moving water.
Insulation resistance :	Single element probes: 100 mega-ohms min. @ 500 VDC, leads to case Dual element probes : 100 mega-ohms min. at 100 VDC, between element and leads to case
O-Ring seal :	Viton O-Ring seal max. temperature 200°C
Transision :	Sheath to wire transision max. temperature 130°C



Stocked items

Intempco stocks the most commonly used R18 style RTD probes with the following features :

- Teflon insulated leads, stranded 22 AWG silver plated copper, terminating in stripped ends, 6" long
- 3-wire configuration, Code S3
- Element Pt 100 Ohm @ 0 °C, $\alpha=0.00385$, Class B
- Temperature range of -50/200 Deg. C
- 1/4" diameter SS316 sheath
- Probe lengths available are 2.5", 4", 6", 7.5", 9", 10.5", 12", 13.5"
- Hex fitting 1/2" x 1/2" NPT (style R18A)

Ordering Information (Order using Intempco inventory number)

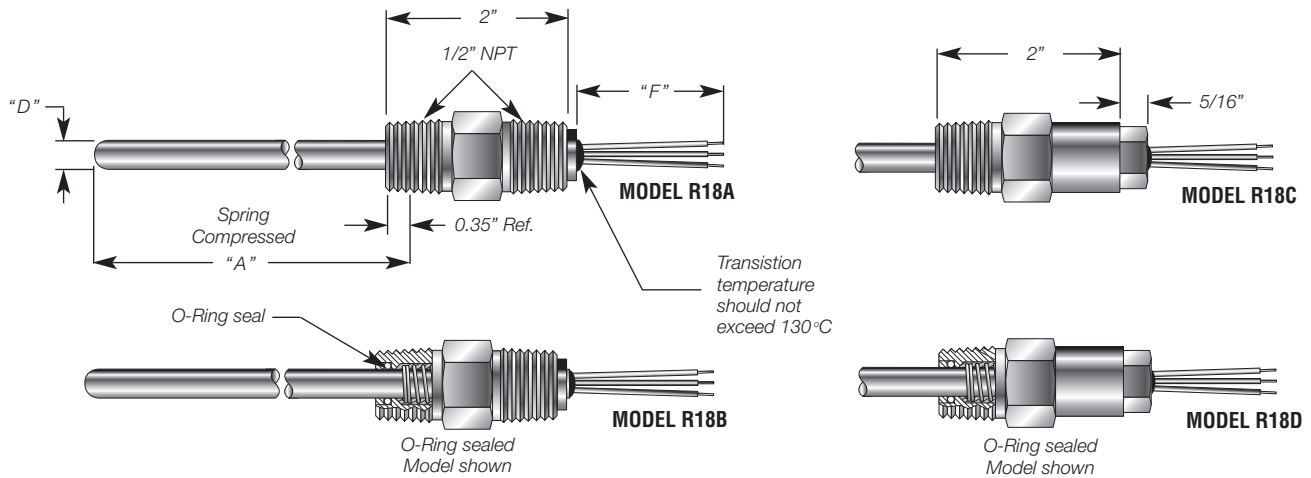
Inventory Number	Description
R18A-L-4-TN-006-A*	Probe 1/4" diameter, specify probe length "A"

*Probe length A :

Select ->	2.5 for 2.5 inch	9 for 9 inch
	4 for 4 inch	10.5 for 10.5 inch
	6 for 6 inch	12 for 12. inch
	7.5 for 7.5 inch	13.5 for 13.5. inch

RTD R18

Spring Loaded RTD Probe
w/Hex Nipple



Custom Builder

MODEL 1 2 3 4 5 6 7 8 9 10 11 12

R18 _ - _ - _ - _ - _ - _ - _ - _ - _ - _ - _ - _

BOX1 CODE	Temperature Range
L	Low temperature -50 to 200°C (-58/392°F)
M	Medium temperature -50 to 400°C (-58/752°F)
H	High temperature -200 to 600°C (-328/1112°F)

BOX2 CODE	Element Type
P	100Ω @ 0°C, α = 0.00385 DIN EN 60751
T	1000Ω @ 0°C, α = 0.00385 DIN EN 60751

Other elements available. Consult factory.

BOX3 CODE	Element Tolerance
1	±0.12% (±0.3°C) @ 0°C, Class B
2	±0.06% (±0.15°C) @ 0°C, Class A
3	±0.04% (±0.1°C) @ 0°C, Class AA

Other tolerances available. Consult factory.

BOX4 CODE	RTD Circuit Type
S2	Single, 2 wire
S3	Single, 3 wire
S4	Single, 4 wire
D2	Dual, 2 wire
D3	Dual, 3 wire
D4	Dual, 4 wire

Note : 1. Dual RTD's require 0.187 O.D. min.
2. S3 industry standard circuit
3. S4, D4 circuits most accurate

BOX5 CODE	Probe Diameter "D"
3	3/16" Diameter
4	1/4" Diameter
M06	6 mm Diameter

BOX6 CODE	Probe Material
S	316 Stainless Steel
I	600 Inconel

BOX7 CODE	Fitting Type & Material
12S	1/2" NPT, 303 Stainless Steel

BOX8 CODE	Lead Wire Insulation "F"		
	Each Cond.	Overall Jacket	Temp. Range
TF	Teflon	Teflon	200°C (392°F)
TN	Teflon	None	260°C (500°F)
TM	Teflon	Alum. Mylar Drain Wire Teflon	200°C (392°F)
GL	Glass	Glass	482°C (900°F)

Note : 1. For SS armor over extension cable, add "A" to code E.g.: **TFA**
3. For SS overbraid over extension cable, add "S" to code E.g.: **TFS**

BOX9 CODE	Extension Cable Length "F"
---	In Inches Ex.: 060 = 60" long

Note : Extension wires 12" long and less are single stranded leads, 22 AWG

BOX10 CODE	Terminal Type
00	Bare leads, stripped
CL	Bare leads, Closed Lugs for #6 screws

BOX11 CODE	Probe Length "A"
---	In 0.1" increments Ex.: 065 = 6.5" long

BOX12 CODE	Options
N	None
C1	CoC @ 0°C RvsT table
C2	CoC @ 0°C & 100°C RvsT table

Other options available. See Accessories and Option Codes section, www.intempco.com or consult factory.