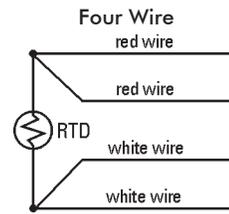
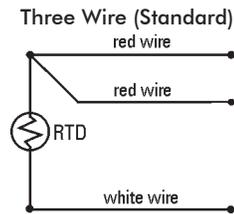
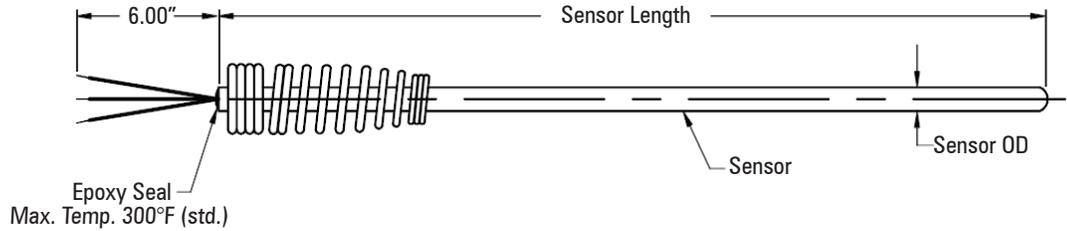


Industrial RTDs

All RTDs are 100% tested to insure that the accuracy and the continuity of the product have not been affected by the manufacturing process. The standard sheath material on all RTDs specified in this section is 316SS. Other sheath materials and coatings are available. Specify using model 1150 on page A-28. Elements are either thin film or wire wound, depending on the style RTD selected. Thin film elements are used in all constructions unless otherwise specified. Each RTD is supplied with a heavy duty spring.

Standard RTD Specifications:

- Element Material:** Platinum
- Element Type:** 100 ohms @ 0°C, .00385 DIN Curve
- RTD Type:** Three wire (Color code: red, red, white)
- Wire Gauge:** 22 Gauge



Accuracy tolerances for platinum resistance elements are defined by DIN EN 60751 (ITS 90) as follows:

- Class B:** $\Delta t = \pm (0.3 + 0.005 | t |)$
- Class A:** $\Delta t = \pm (0.15 + 0.002 | t |)$
- 1700:** $\Delta t = \pm 0.1(0.3 + 0.005 | t |)$

Class	Temperature Range	
	C°	F°
Class B	-70° to +500°	-94° to +932°
Class A	-50° to +300°	-58° to +572°
1700	0° to +150°	+32° to +302°

Design Types:

The following design types provide environmental and accuracy solutions to virtually any process RTD application. Accuracy options offer the user more choices for tighter process control. Class B accuracy has long been the work horse of the industrial RTD temperature loop and is a good fit for most process needs. Slightly better than Class B is Class A accuracy which has long filled the void for the most demanding accuracy needs. With the 1700 Smart Sensors now has surpassed the Class A specifications for those applications where process accuracy must be measured in hundredth's of a degree. Optional NIST certification for 1700 products can be supplied and the accuracy statement is the finished product profile not just the accuracy of the element. The stability and accuracy of this product may eliminate costly and cumbersome sensor matching.

Design Types:

- PO** - This design uses nickel clad copper lead wire insulated with Teflon®. Maximum upper temperature rating of 500°F (260°C).
- PH** - Our high temperature version can be used up to 900°F (482°C), and uses fiberglass leads.
- PM** - Heavy duty applications is where this style should be specified. It is suited for temperatures up to 900°F (482°C). Mineral insulated cable is used for this type of RTD. Can be used in cryogenic applications at temperatures down to minus 200° F.
- RN** - 120 Ohm nickel @ 0°C (Edison #7) Color code: red, red, black. (DIN 43760)
- 1700** - Higher accuracy (available in 1/4" Single 4 wire & Dual 4 wire only). Maximum temperature rating of 302°F (150° C).

To order: Indicate the code letter or value for each specification criteria below.

Type	OD	Elements	Length ¹	Sheath Material	Options
PO	18 = 1/8"	S = Single	(Inches)	R = 316SS	TW = 2 Wire
PH	316 = 3/16"	D = Dual			FW = 4 Wire
PM	14 = 1/4"				GA = Class A
RN	38 = 3/8"				HV = High Vibration (PM)
1700	14 = 1/4" only				CR = Cryogenic (PM)

Note:

1. Length determined by assembly when used in well or protection tube. To determine the length for replacement RTD's use the following formula:
 U Length of well + T Length + A Length + 0.50" = Sensor Length (See pages A-8 – A-23 for description of U, T & A lengths)