

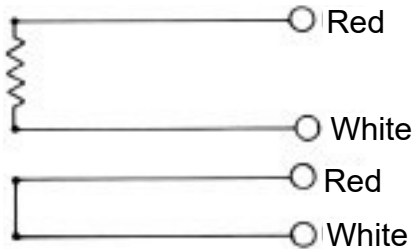
RESISTANCE TEMPERATURE DETECTORS (RTDs)

Lead Wire Configurations



2-Wire RTD

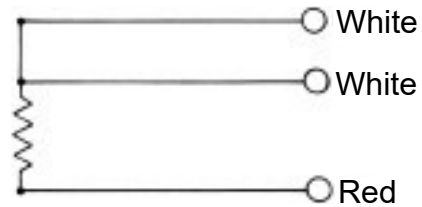
Provides one connection to each end of the sensor. This configuration is suitable when the resistance of the lead wire can be considered an additive constant in the circuit and when changes in lead resistance, due to ambient temperature changes may be ignored.



4-Wire RTD Compensated

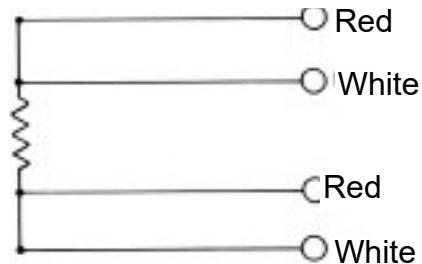
Similar to 2-wire configuration except that a separate pair of wires is provided as a loop to compensate for lead resistance and ambient temperature changes in lead resistance.

Note: Above color coding may change due to various wire requirements.



3-Wire RTD Compensated

This is the most commonly used configuration. It provides one connection to one end of the sensor and two to the other end. When connected to an instrument designed to accept a three wire input, compensation is achieved for lead resistance and temperature change in lead resistance.



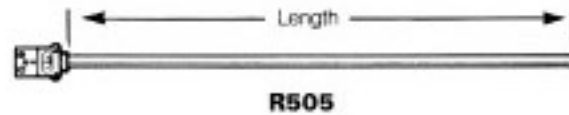
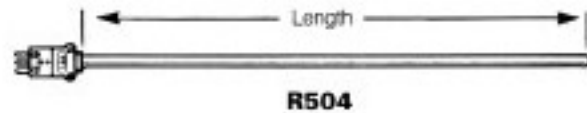
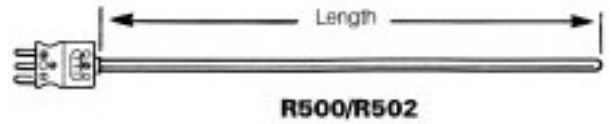
4-Wire RTD Connected

Provides connections to each end of the sensor. Used for measurements requiring highest precision.

RTDS - CONNECTOR-TYPE

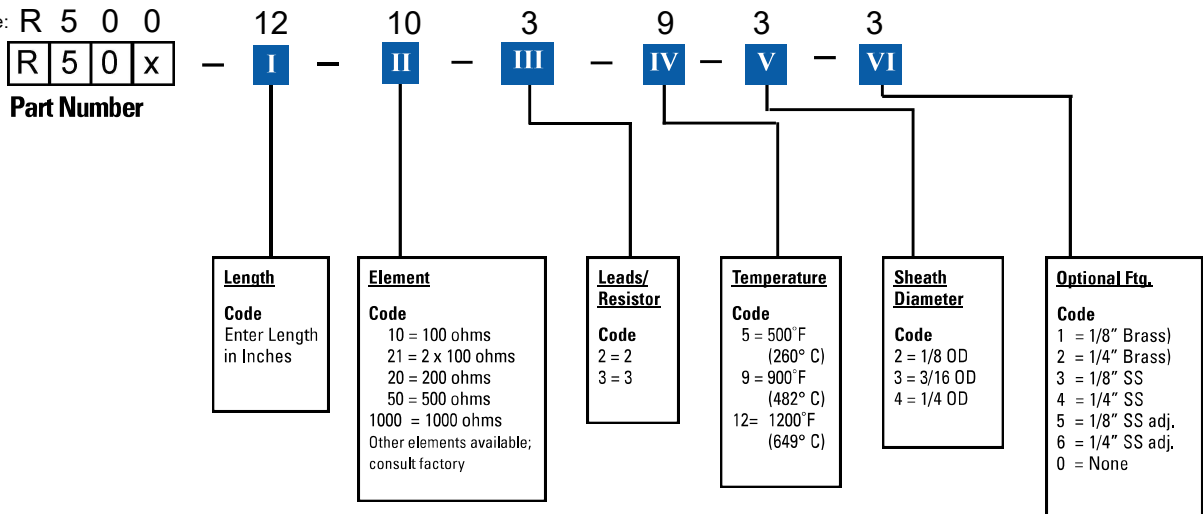
RTD Assemblies

Part No.	Style
R500	350°F (177°C) max. Standard Male Connector.
R501	350°F (177°C) max. Standard Female Connector.
R502	1000°F (538°C) max. Standard Male Connector.
R503	1000°F (538°C) max. Standard Female Connector.
R504	350°F (177°C) max. Miniature Male Connector, available in 1/8 and 3/16 sheath diameter only.
R505	350°F (177°C) max. Miniature Female Connector, available in 1/8 and 3/16 sheath diameter only.



Ordering Information

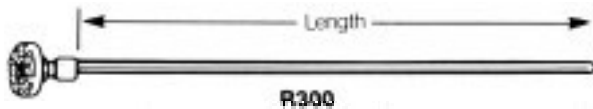
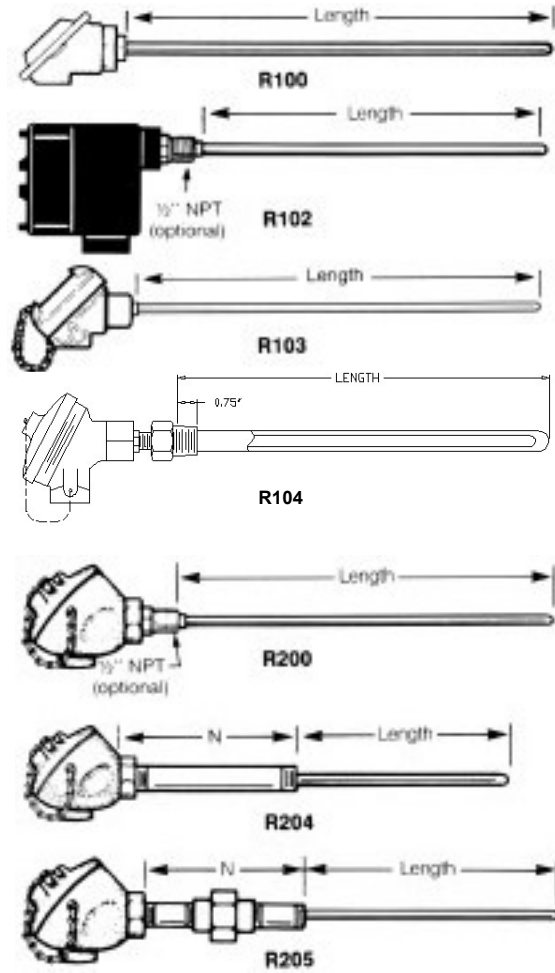
Part Number Example: R 5 0 0



RTDs - HEAD-TYPE

RTD ASSEMBLIES

Part No.	Style
R100	Gen. Purpose Cast Aluminum Head (4 wires max.)
R102	Hazardous Location Cast Aluminum Head.
R103	Screw Cover Thermoplastic Head.
R104	Screw Cover Cast Iron Head.
R200	Screw Cover Cast Aluminum Head.
R202	Screw Cover Cast Aluminum Head with 1/2" NPT SS spring loaded oil and vapor seal.
R204	Screw Cover Cast Aluminum Head with 1/2" NPT nipple spring loaded.
R205	Screw Cover Cast Aluminum Head with 1/2" NPT nipples and union, spring loaded.
R300	300°F (149°C) max. Open Head (4 wires max.)
R400	Bayonet Cover Mini-Head (4 wires max.)



Ordering Information

Part Number Example:

R 1 0 3

8

21

3

5

4

7S

R | **x** | **0** | **x**
Part Number

Length
Code
Enter Length in Inches

"N" Length*
Code
Enter Length in Inches.
Enter "N" dimension in Part Numbers R204 and R205 only.

Element
Code
10 = 100 ohms
21 = 2 x 100 ohms
20 = 200 ohms
50 = 500 ohms
1000 = 1000 ohms
Other elements available; consult factory

Leads/Resistor
Code
2 = 2
3 = 3
4 = 4

Temperature
Code
5 = 500°F (260°C)
9 = 900°F (482°C)
12 = 1200°F (649°C)

Sheath Diameter
Code
2 = 1/8 OD
3 = 3/16 OD
4 = 1/4 OD

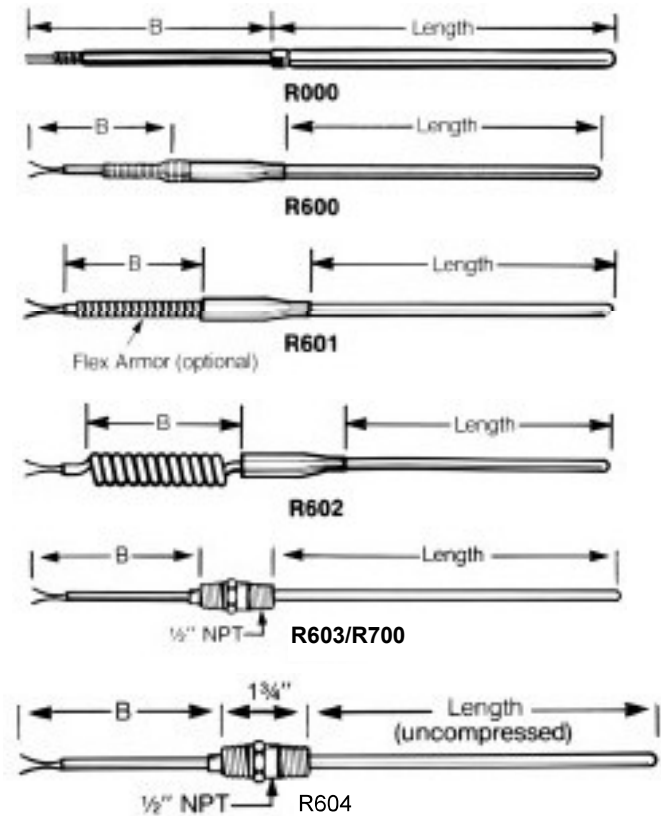
Optional Ftg.
Code
1 = 1/8" Brass
2 = 1/4" Brass
3 = 1/8" SS
4 = 1/4" SS
5 = 1/8" SS adj.
6 = 1/4" SS adj.
7C* = 1/2 x 1/2 CS
7S* = 1/2 x 1/2 SS
7SL* = 1/2 x 1/2 SS Spring loaded
0 = None

*Only available on R100, R102, R103, R104 and R200 in 1/4" and 3/16" diameter.

RTDs - LEAD WIRE-TYPE

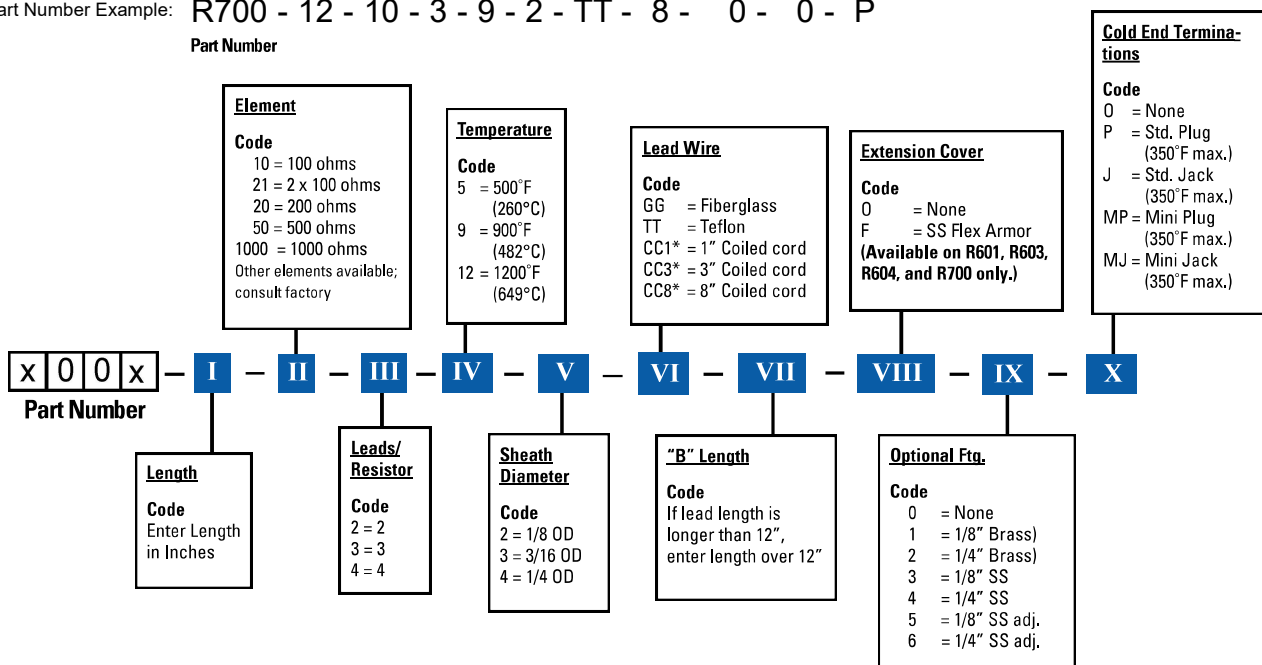
RTD ASSEMBLIES

Part No.	Style
R000	Tube assembly with lead wires
R600	Transition to lead wires with strain relief spring.
R601	Transition to lead wires w/o strain relief spring.
R602	Transition to polyurethane coiled cord. (3 wire only) Omit "B" length and extension cover blocks.
R603	1/2" NPT x 1/2" NPT stainless steel ftg. with lead wires.
R604	1/2" NPT x 1/2" NPT spring loaded SS ftg. with lead wires (1/4 & 3/16 dia. only).
R700	1/2" NPT x 1/2" NPT carbon steel fitting with lead wires.



Ordering Information

Part Number Example: **I** **II** **III** **IV** **V** **VI** **VII** **VIII** **IX** **X**
 Part Number: R700 - 12 - 10 - 3 - 9 - 2 - TT - 8 - 0 - 0 - P



*Available on **R602** only (Expands to approximately 5' per coiled foot).