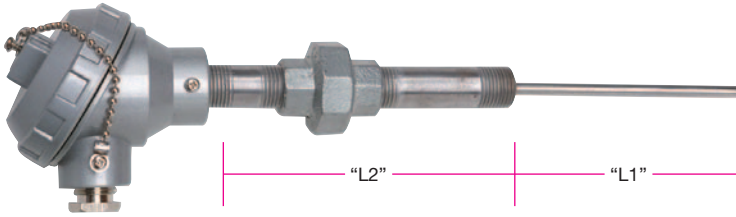


# Temperature Sensing

## Resistance Temperature Sensing



### Style RTD9 — Connection Head with 1/2" NPT Nipple, Union, Nipple



#### Two Construction Styles to Suit Any Application

(See Ordering Code Box 11)

- \* Standard Industry Tube and Wire construction with fiberglass 900°F (482°C) or Teflon® 392°F (200°C) lead wires
- \* Mineral Insulated construction rated up to 1200°F (650°C). This construction type allows forming and bending the sheath to meet design requirements.

#### Ordering Code:

RTD9 -

#### Design Features

- \* Platinum Resistance Element.
- \* Tempco's connection heads are gasketed to seal against moisture, dust and corrosive or hostile atmospheres.
- \* Screw covers are attached to body with a plated chain.
- \* Covers have lugs for tightening or loosening with a screwdriver or wrench.
- \* Available in single or duplex.
- \* Tempco's connection heads are available in die cast aluminum, bakelite and cast iron in a variety of sizes from miniature for confined areas, to the large universal head designed for heavy process and industrial applications. See sensor accessories on pages 14-98 through 14-100 for complete information.
- \* Nipple-Union-Nipple is galvanized.

#### Ordering Information

RTDs are offered with the options listed in the worksheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

#### Element BOX 1

S = 100Ω Single    K = 1000Ω Single  
D = 100Ω Dual    L = 1000Ω Dual  
TCR = .00385 ohm/ohm/°C

#### Sheath Length "L1" BOX 6

Whole inches  
01 to 99  
For lengths over 99 in. consult TEMPCO.

#### Sheath Length "L1" BOX 7

Fractional inches  
0 = 0"    3 = 3/8"    6 = 3/4"  
1 = 1/8"    4 = 1/2"    7 = 7/8"  
2 = 1/4"    5 = 5/8"

#### Element Class BOX 2

A = ±0.06% at 0°C, Optional  
B = ±0.12% at 0°C, Standard

#### "L2" Dimension (in.) BOX 8

Nipple, Union, Nipple in whole inches  
Standard Lengths S1 = 3-1/2", S2 = 6-1/2", S3 = 12-1/2"

#### Number of Leads BOX 3

2 = 2-wire circuit  
3 = 3-wire circuit  
4 = 4-wire circuit (Dual circuit not available)  
0.125" O.D. (Dual circuit not available)

#### Connection Head BOX 9

A = Standard Size Aluminum    S = Stainless Steel  
B = Medium Size Aluminum    F = Standard Bakelite  
C = Miniature Aluminum    P = Polypropylene  
H = Standard Cast Iron  
Note: Conduit connection for A, F, H & S is 1/2" (3/4" available);  
for B & C is 3/8"; and for P is 3/4" NPT.  
For overall dimensions see pages 14-98 through 14-100.

#### Sheath O.D. BOX 4

F = 0.125"  
G = 0.188"  
H = 0.250"

#### Spring-Loaded Terminal Block BOX 10

O = Not Required  
Y = Required

#### Sheath Material BOX 5

B = 304 SS  
C = 316 SS  
A = Alloy 600  
(Type "M" Only; See Box 11)

#### RTD Construction Type BOX 11

Standard Industry Construction  
S = Fiberglass insulated 900°F (450°C)  
T = Teflon® Insulated 392°F (200°C)  
Mineral Insulated Construction  
M = MgO Insulated 1200°F (650°C)  
(Type "M" not available for "K"  
or "L" from Element Box 1)

#### Special Requirements BOX 12

X = Specify  
0 = None

**WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## RTD Termination Styles

### RTD Termination Styles

Style B—Plain Ends

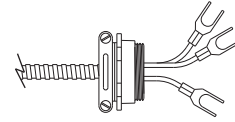
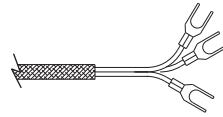
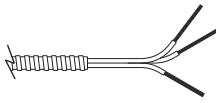
Style S—Spade Lugs

Style C—Spade Lugs with BX connector

#### Optional Termination Styles

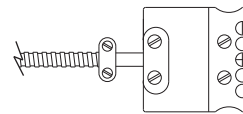
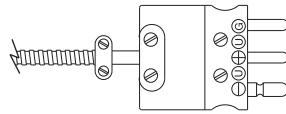
Available for the following RTDs:

Style	Page
RTD1	14-50
RTD4	14-53
RTD5	14-54
RTP	14-61 through 14-63



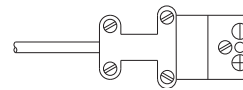
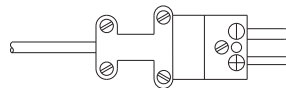
Style P—Standard Plug  
(3-wire shown)

Style J—Standard Jack  
(3-wire shown)



Style D—Miniature Plug  
(2-wire shown)

Style E—Miniature Jack  
(2-wire shown)

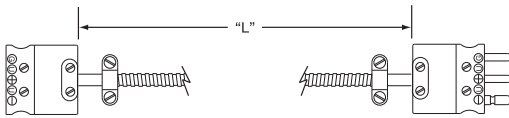


### ECR Style RTD Extension Assemblies

(3-wire circuits shown, 2-wire circuits also available)

Termination 1

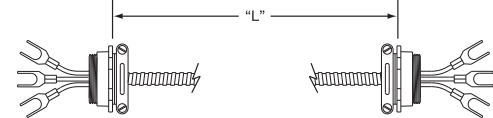
Termination 2



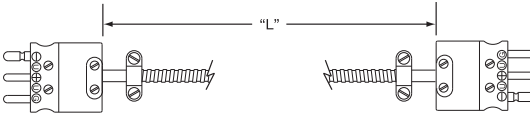
Style RJP—Jack to Plug

Termination 1

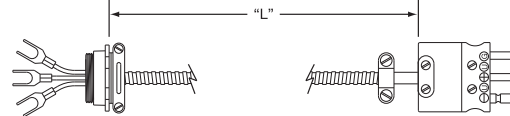
Termination 2



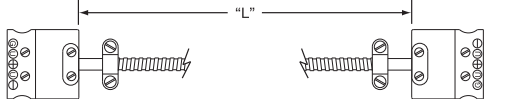
Style RCC—BX Connector to BX Connector



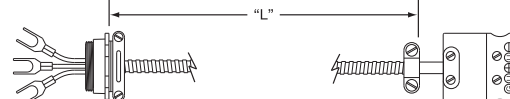
Style RPP—Plug to Plug



Style RCP—BX Connector to Plug



Style RJJ—Jack to Jack



Style RCJ—BX Connector to Jack

Ordering Code: **ECR** -

#### Number of Leads BOX 1

- 2 = 2-wire circuit
- 3 = 3-wire circuit
- 4 = 4-wire circuit\*

\*Plugs and Jacks not available

#### "L" Dimension BOX 4

Whole inches  
001 to 999

#### Termination (Specify for Both Ends) BOXES 2 & 3

- B = 2-1/2 in. Split Leads
- S = Spade Lugs
- C = Spade Lugs with BX Conn.
- P\* = Standard Plug
- J\* = Standard Jack
- D\* = Miniature Plug
- E\* = Miniature Jack
- X = Other (Specify)

\*Plugs and Jacks for 2- and 3-Wire Only

#### Lead Insulation BOX 5

	Standard	w/ SS Overbraid	w/ SS Armor Cable
Fiberglass 900°F (482°C)	S	B	A
Teflon® 392°F (200°C)	T	D	F

#### Special Requirements BOX 6

- X = Specify
- 0 = None

**⚠ WARNING:** Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).