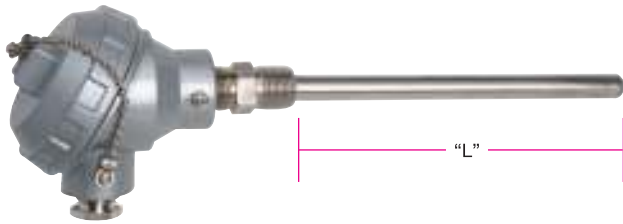


# Temperature Sensing

## Resistance Temperature Sensing



### Style RTD7 — Connection Head with 1/2" NPT Hex Nipple



#### 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.*

#### Two Construction Styles to suit any application

(See Ordering Code Box 10)

- \* *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 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.

Ordering Code: **RTD7** -

#### Element BOX 1

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

#### Sheath Length "L" BOX 6

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

#### Sheath Length "L" 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

#### Connection Head BOX 8

**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.

#### 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)

#### Spring-Loaded Probe BOX 9

**O** = Not Required  
**Y** = Required

#### Sheath O.D. BOX 4

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

#### RTD Construction Type BOX 10

**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)

#### Sheath Material BOX 5

**B** = 304 SS  
**C** = 316 SS  
**A** = Alloy 600  
 (Type "M" Only; See Box 10)

#### Special Requirements BOX 11

**X** = Specify  
**0** = None

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

# Temperature Sensing



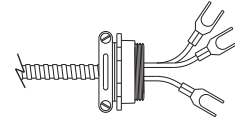
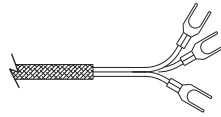
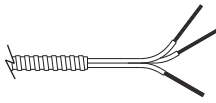
## RTD Termination Styles

### RTD Termination Styles

Style B—Plain Ends

Style S—Spade Lugs

Style C—Spade Lugs with BX connector



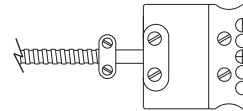
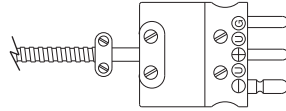
### Optional Termination Styles

Available for the following RTDs:

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

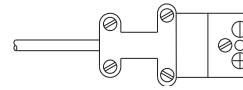
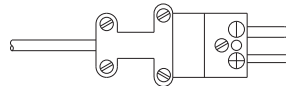
Style P—Standard Plug  
(3-wire shown)

Style J—Standard Jack  
(3-wire shown)



Style D—Miniature Plug  
(2-wire shown)

Style E—Miniature Jack  
(2-wire shown)

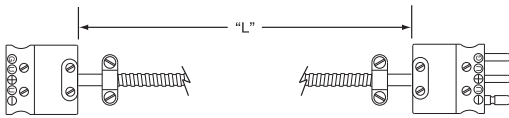


### ECR Style RTD Extension Assemblies

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

Termination 1

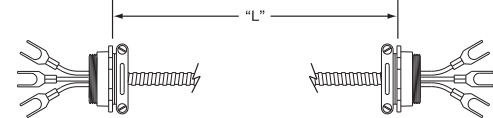
Termination 2



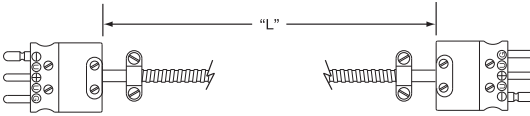
Style RJP—Jack to Plug

Termination 1

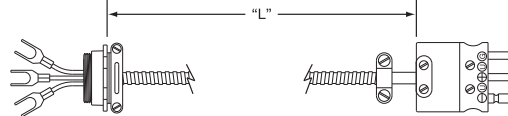
Termination 2



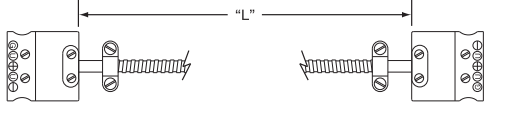
Style RCC—BX Connector to BX Connector



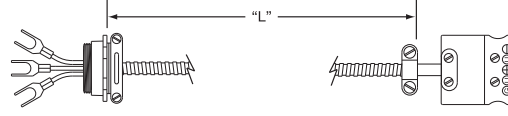
Style RPP—Plug to Plug



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)	<b>S</b>	<b>B</b>	<b>A</b>
Teflon® 392°F (200°C)	<b>T</b>	<b>D</b>	<b>F</b>

#### Special Requirements BOX 6

- X** = Specify
- 0** = None

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