# Temperature Sensing

## Resistance Temperature Sensing

**Style RTD1 — Straight Probes**

- **Tube and Wire Construction**
  - (see Box 9)
  - Lead Length
  - “L”

- **Mineral Insulated Construction**
  - (see Box 9)
  - Lead Length
  - 1-1/4” Ref.
  - “L”

## Design Features

- *Platinum Resistance Element*
- Optional Installation
- Compression Fitting
  - See Box 12

## Two Construction Styles to Suit Any Application

(See Ordering Code Box 9)

- **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:

<table>
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<tr>
<th>Box 1</th>
<th>RTD1</th>
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#### Element

- **Box 1**
  - S = 100Ω Single
  - D = 100Ω Dual
  - L = 1000Ω Single
  - TCR = .00385 ohm/ohm/°C

#### Element Class

- **Box 2**
  - A = ±0.06% at 0°C, Optional
  - B = ±0.12% at 0°C, Standard

#### Number of Leads

- **Box 3**
  - 2 = 2-wire circuit
  - 3 = 3-wire circuit
  - 4 = 4-wire circuit
  - 0.125 O.D. 4-wire circuit not available

#### Sheath O.D.

- **Box 4**
  - F = 0.125” (Single Element Only)
  - G = 0.188”
  - H = 0.250”
  - X = Other (Specify)

#### Sheath Material

- **Box 5**
  - B = 304 SS
  - C = 316 SS
  - A = Alloy 600
    - (Type “M” only; See Box 9)

#### Sheath Length “L”

- **Box 6**
  - Whole inches 01 to 99
  - For lengths over 99 in. consult TEMPCO.

#### Lead Wire Length

- **Box 8**
  - In inches 001 to 999
  - 12” (012) Standard

#### RTD Construction Type

- **Box 9**
  - T = Tube and Wire Construction
  - M = MgO Insulated Construction with strain relief spring
    - (Type “M” not available for “K” or “L” from Element Box 1)

#### Lead Wire Construction

- **Box 10**
  - Fiberglass 900°F (482°C)
  - Teflon® 392°F (200°C)
  - w/ SS Overbraid® or SS Flex Armor®
  - *Flex Armor options, overbraid options and .125” O.D. and dual constructions may require transitions.*

#### Lead Wire Termination

- **Box 11**
  - P = Standard Male Plug 350°F (177°C)
  - J = Standard Female Jack
  - K = Std. Plug with Mating Jack
  - D = Mini Male Plug 350°F (177°C)
  - E = Mini Female Jack
  - X = Other (Specify)
    - Plugs and Jacks for 2- and 3-Wire Only
  - F = Mini Plug & Mating Jack
  - B = Std.—2-1/2 in. Split Leads
  - S = Leads with Spade Lugs
  - C = 2-1/2 in. Split Leads with BX Connector and Spade Lugs

#### Optional Compression Fitting

- **Box 12**
  - 1 = 1/8” NPT SS
  - 2 = 1/4” NPT SS
  - 3 = 1/2” NPT SS
  - 0 = None Required

#### 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”

#### Special Requirements

- **Box 13**
  - X = Specify
  - 0 = None

⚠️ **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov.

*View Product Inventory @ www.tempco.com*