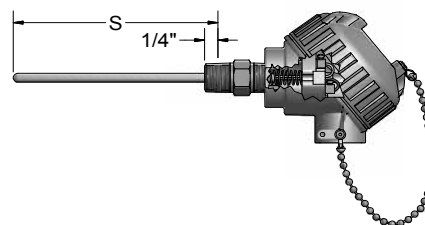
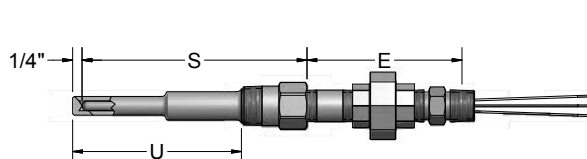


Spring-Loaded RTD/Thermowell Assemblies with General-Purpose Connection Heads are designed for use with various thermowell types. Complete assemblies can be ordered by selecting the RTD assembly below, the thermowell from the thermowell section of this catalog, and a temperature transmitter from the back of this section. Assemblies without a thermowell can be ordered by selecting the sensor assembly from this page and inserting the "S" length in table 2-0. These sensors are supplied with a 316 stainless steel sheath and are available in various tolerances and temperature ranges as noted in the tables below.



### ORDER CODES

**Example Order Number:** **R1T185L** **48** **3** - **SL** - **8HN 31, T**

1-0 1-1 1-2 2-0 3-0 4-0 4-1 4-2

Select Thermowell Part # or Insert 3 Digit Length Code - Select Type and Range from back of section

#### 1-0 100 $\Omega$ Platinum RTD Elements $\alpha = 0.00385\ ^\circ\text{C}^{-1}$

| CODE    |         | TOLERANCE <sup>[1]</sup> | TEMP. RANGE                    |
|---------|---------|--------------------------|--------------------------------|
| SINGLE  | DUPLEX  |                          |                                |
| R1T185L | R1T285L | Grade B                  | (-200 to 200) $^\circ\text{C}$ |
| R5T185L | R5T285L | (1/5) Class B            | (-30 to 150) $^\circ\text{C}$  |
| RBF185L | RBF285L | Class B                  | (-50 to 200) $^\circ\text{C}$  |
| RAF185L | RAF285L | Class A                  | (-30 to 200) $^\circ\text{C}$  |
| R1T185H | R1T285H | Grade B                  | (-200 to 600) $^\circ\text{C}$ |
| RAT185H | RAT285H | Class A                  | (-100 to 450) $^\circ\text{C}$ |

[1] Refer to RTD tolerance information in the General Information section for calculations to determine specific tolerance at temperature.

#### 1-1 Sheath Diameters

| CODE | DIAMETERS (inches) 316 SS |
|------|---------------------------|
| 38   | 3/16                      |
| 48   | 1/4                       |

#### 1-2 Element Connection

| CODE | DESCRIPTION    |
|------|----------------|
| 2    | 2-wire element |
| 3    | 3-wire element |
| 4    | 4-wire element |

#### 2-0

Select thermowell part number from Thermowell Section, or specify 3 digit "S" length in inches if no thermowell is required.

#### 3-0 Element Options

| CODE              | DESCRIPTION   |
|-------------------|---|
| SL <sup>[1]</sup> | Spring-loaded element   |
| SC                | Self-contained spring-loaded element  |
| SN                | Self-contained spring-loaded element with Buna-N oil seal 121 $^\circ\text{C}$ [250 $^\circ\text{F}$ ] 100 PSI Max. |

[1] Not available with option 35T, 36T, or 37T

#### 4-0 Head Mounting Fittings

| CODE                            | DESCRIPTION  | CODE                            | DESCRIPTION  |
|---------------------------------|--|---------------------------------|--|
| STEEL FITTINGS                  |  | 316SS FITTINGS                  |  |
| 6HN                             | 1/2" x 1/2" NPT hex nipple 1" length                 | 8HN                             | 1/2" x 1/2" NPT hex nipple 1" length                 |
| 6PN <sub>-</sub>                | 1/2" NPT pipe nipple (specify "E" length in inches)  | 8PN <sub>-</sub>                | 1/2" NPT pipe nipple (specify "E" length in inches)  |
| 6PU <sub>-</sub> <sup>[1]</sup> | 1/2" NPT union/nipple (specify "E" length in inches) | 8PU <sub>-</sub> <sup>[1]</sup> | 1/2" NPT union/nipple (specify "E" length in inches) |

[1] 4" Minimum length required

#### 4-1 Head and Sheath Terminations

| CODE      | DESCRIPTION   |
|-----------|---|
| 22        | 3" Individual fluoropolymer leads with terminal pins  |
| 31        | Aluminum screw-cover head   |
| 34        | Cast iron screw-cover head  |
| 35T142A   | (4 to 20) mA HART <sup>®</sup> Field Transmitter with aluminum general-purpose housing  |
| 36T71-D10 | (4 to 20) mA isolated programmable transmitter with digital display and general purpose aluminum housing with glass lid                   |
| 36T72-D10 | (4 to 20) mA isolated programmable HART <sup>®</sup> transmitter with digital display and general purpose aluminum housing with glass lid |
| 36T82-D10 | (4 to 20) mA dual input HART <sup>®</sup> transmitter with digital display and general-purpose aluminum housing with glass lid            |
| 49        | Flip-top aluminum head  |
| 63        | White polypropylene screw-cover head  |
| 91        | 316 L stainless steel screw-cover head  |

#### 4-2 Options

|                  |  |
|------------------|--|
| W <sup>[1]</sup> | Epoxy Coating  |
| GS               | Ground screw   |
| I                | Stainless tag  |
| NB               | 1/2" NPT nylon conduit reducer bushing                             |
| SB               | 1/2" NPT conduit reducer bushing                                   |
| T31              | (4 to 20) mA head-mounted RTD transmitter                          |
| T71-00           | (4 to 20) mA isolated programmable transmitter                     |
| T72-00           | (4 to 20) mA isolated programmable HART <sup>®</sup> transmitter   |
| T82-00           | (4 to 20) mA dual input HART <sup>®</sup> head-mounted transmitter |

See transmitter ordering information in back of section.

[1] Available with option 31 only.

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