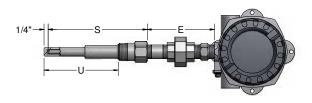Spring-Loaded RTD/Thermowell Assemblies with Explosion-Proof Connection Heads are designed for use with various thermowell types. Complete assemblies can be ordered by selecting the RTD assembly below, the thermowell from the thermowell section of this catalog, and a temperature transmitter from the 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:*

| 1-0 | 1-1 | 1-2 | | 2-0 | | 3-0 | | 4-0 | 4-1 | 4-2 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| RBF185L | 48 | 3 | - | Select Thermowell Part # or Insert 3 Digit Length Code | - | SL | - | 8HN | 93, | T | Select Type and Range from back of section |

## 1-0  100 Ω Platinum RTD
Elements α = 0.003 85 ºC$^{-1}$

| CODE | | TOLERANCE[1] | TEMP. RANGE |
|---|---|---|---|
| *SINGLE* | *DUPLEX* | | |
| R1T185L | R1T285L | Grade B | (-200 to 200) °C |
| R5T185L | R5T285L | (1/5) Class B | (-30 to 150) °C |
| RBF185L | RBF285L | Class B | (-50 to 200) °C |
| RAF185L | RAF285L | Class A | (-30 to 200) °C |
| R1T185H | R1T285H | Grade B | (-200 to 600) °C |
| RAT185H | RAT285H | Class A | (-100 to 450) °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.

## 4-1  Head Terminations

| CODE | DESCRIPTION |
|---|---|
| 74 | Dual conduit DIN form B aluminum explosion-proof/flame-proof head, NEC, IEC, Atex approved |
| 75T142C | (4 to 20) mA HART® field transmitter with aluminum explosion-proof housing |
| 93 | Aluminum explosion-proof/flame-proof head, NEC, IEC, Atex approved |
| 94 | 316L stainless steel explosion-proof/flame-proof head, NEC, IEC, Atex approved |

## 4-2  Options

| SB | 1/2" NPT conduit reducer bushing |
|---|---|
| I | Stainless tag |
| 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® transmitter |
| T82-00 | (4 to 20) mA dual input, isolated HART® head-mounted transmitter |

**See transmitter ordering information in back of section.**

## 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_ | 1/2" NPT pipe nipple (specify "E" length in inches) | 8PN_ | 1/2" NPT pipe nipple (specify "E" length in inches) |
| 6XU_ [1] | 1/2" NPT union/nipple (specify "E" length in inches) | 8XU_ [1] | 1/2" NPT union/nipple (specify "E" length in inches) |

[1] 3 1/2" Minimum length required

## 3-0  Element Options

| CODE | DESCRIPTION |
|---|---|
| SL[1] | Spring-loaded element |
| SC | Self-contained spring-loaded element |
| SN | Self-contained spring-loaded element with Buna-N oil seal 121°C [250°F] 100 PSI Max. |

[1] Not available with option 75T

Pyromation inc.