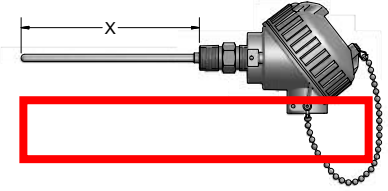
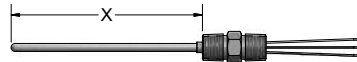
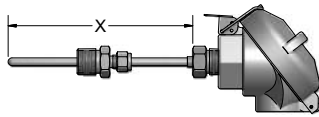


SENSORS WITH CONNECTION HEADS

Configuration Code GP01 Fixed-Sheath RTD Assemblies with General-Purpose Connection Heads

Fixed-Sheath RTD Assemblies with General-Purpose Connection Heads are provided with head mounting fittings that are welded or brazed to the sheath for direct immersion into a process. To order an assembly with an optional 4 to 20 mA transmitter, select the assembly below and the transmitter from the back of this section. The RTD assemblies are supplied with a 316 stainless steel sheath in several diameters. They are available in various tolerances and temperature ranges as noted below.



ORDER CODES

Example Order Number: **RBF185L** **48** **3** - **006(1/2)** - **00** - **8HN** **31**, **SB**, **T** - Select Type and Range from back of section

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

| CODE | | TOLERANCE ^[1] | 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 |
|-------------------|---------------------------|
| 28 ^[1] | 1/8 |
| 38 | 3/16 |
| 48 | 1/4 |
| 68 | 3/8 |

[1] Not available in duplex

1-2 Element Connection

| CODE | DESCRIPTION |
|------------------|-----------------------|
| 2 | 2-wire element |
| 3 | 3-wire element |
| 4 ^[1] | 4-wire element |

[1] Not available in duplex or with 440 Series Transmitter

2-0 "X" Dimensions

Insert three digit "X" length in inches.

003

3-0 No Fitting

CODE 00

3-1 One-Time Adjustable Fittings

| CODE | TYPE | NPT SIZE (inches) | AVAILABLE SHEATH DIAMETERS (inches) |
|------|-------------|-------------------|-------------------------------------|
| 01A | 303 SS | 1/8 | 1/8, 3/16, 1/4 |
| 05A | 316 SS | 1/8 | 1/8, 3/16, 1/4 |
| 05B | 316 SS | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 05C | 316 SS | 1/2 | 1/8, 3/16, 1/4, 3/8 |
| 15A | Brass | 1/8 | 1/8, 3/16, 1/4 |
| 15B | Brass | 1/4 | 3/16, 1/4, 3/8 |
| 15C | Brass | 1/2 | 1/4, 3/8 |
| 14 | Brass/Steel | Flange | 1/8, 3/16, 1/4, 3/8 |

3-2 Re-Adjustable Compression Fittings

| CODE | TYPE | NPT SIZE (inches) | AVAILABLE SHEATH DIAMETERS (inches) |
|------------|-------------------------------|-------------------|-------------------------------------|
| 10A | 303 SS | 1/8 | 1/8, 3/16 |
| 10B | 303 SS | 1/4 | 1/4, 3/8 |
| 10C | 303 SS | 1/2 | 1/4, 3/8 |
| 12A | 316 SS | 1/8 | 1/8, 3/16, 1/4 |
| 12B | 316 SS | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 12C | 316 SS | 1/2 | 1/8, 3/16, 1/4, 3/8 |
| 11A | Brass | 1/8 | 1/8, 3/16, 1/4 |
| 11B | Brass | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 11C | Brass | 1/2 | 1/4, 3/8 |
| 19C | Spring-loaded SS well fitting | 1/2 | 3/16, 1/4 |

FEP gland standard 204 $^\circ\text{C}$ [400 $^\circ\text{F}$] max.

3-3 Fixed Bushings^[1]

| CODE | MOUNTING THREAD NPT (inches) | AVAILABLE SHEATH DIAMETERS (inches) |
|----------------------|------------------------------|-------------------------------------|
| 316 SS | | |
| 8A __ ^[2] | 1/8 | 1/8, 3/16, 1/4 |
| 8B __ ^[2] | 1/4 | 1/8, 3/16, 1/4, 3/8 |
| 8C __ ^[2] | 1/2 | 1/8, 3/16, 1/4, 3/8 |
| 8D __ ^[2] | 3/4 | 1/8, 3/16, 1/4, 3/8 |

[1] Requires Table 4, Option 9HP Selection

[2] When ordering fixed bushings, specify order code above plus insert length "U", as measured from hot tip to bottom of threaded bushing. EXAMPLE: order code 8A06 is 1/8" NPT, 316 SS bushing located 6" from hot tip.

4-0 Head Mounting Fittings

| CODE | DESCRIPTION |
|------------|---|
| 6HN | 1/2" x 1/2" NPT steel hex nipple 1" "E" length |
| 8HN | 1/2" x 1/2" NPT stainless steel hex nipple 1" "E" length |
| 9HP | 1/2" NPT stainless steel bushing (no process threads) |
| 8RNDC | 3/4" x 1/2" NPT stainless steel hex nipple |

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 |
| 35T-642A | (4 to 20) mA HART [®] Field Transmitter with aluminum general-purpose housing |
| 36T82-D10 | (4 to 20) mA dual input HART [®] transmitter with digital display and general-purpose aluminum housing with glass lid |
| 37T-662A | (4 to 20) mA HART [®] dual cavity field temperature transmitter with general-purpose aluminum housing |
| 49 | Flip-top aluminum head |
| 63 | White polypropylene screw-cover head |
| 91 | 316 L stainless steel screw-cover head |

4-2 Options

| CODE | DESCRIPTION |
|------------------|--|
| W ^[1] | Epoxy Coating |
| GS | Ground screw |
| I | Stainless tag |
| NB | 1/2" NPT nylon conduit reducer bushing |
| SB | 1/2" NPT conduit reducer bushing |
| T-440 | (4 to 20) mA head-mounted RTD transmitter |
| T-441 | (4 to 20) mA isolated head-mounted transmitter |
| T-442 | (4 to 20) mA isolated HART [®] head-mounted transmitter |
| T82-00 | (4 to 20) mA dual input HART [®] head-mounted transmitter |

See transmitter ordering information in back of section.

[1] Available with option 31 only.

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