

Fixed-sheath RTD assemblies with miniature heads are offered with mounting fittings that are welded or brazed to the sheath for direct immersion into a process. The miniature heads offer a compact design and are ideal for laboratory applications or applications where space is limited. The RTD assemblies are supplied with a 316 stainless steel sheath in several diameters. They are offered in various tolerances and temperature ranges as noted below.



ORDER CODES

Example Order Number: **1-0** **1-1** **1-2** **2-0** **3** **4-0** **4-1**
RBF185L 48 3 - 006(1/2) - 00 - 8HPB 25

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

CODE	TOLERANCE ^[1]
LOW RANGE WIRE WOUND (-200 to 200) °C	
SINGLE	
R1T185L	Grade B
R5T185L	(1/5) Class B
LOW RANGE THIN FILM (-50 to 200) °C	
RBF185L	Class B
RAF185L	Class A
HIGH RANGE WIRE WOUND (-200 to 600) °C	
R1T185H	Grade B

[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	1/8
38	3/16
48	1/4
68	3/8

1-2 Element Connection

CODE	DESCRIPTION
2	2 wire element
3	3 wire element
4	4 wire element

2-0 "X" Dimensions

Insert three digit "X" length in inches.

Sheath lengths over 72" will be shipped in a coiled configuration unless otherwise specified.

3-0 No Fitting

CODE	DESCRIPTION
00	No fitting

3-1 One-Time Adjustable Fittings

CODE	TYPE	NPT SIZE (inches)	PRESSURE-RATED	AVAILABLE SHEATH DIAMETERS (inches)
01A	303 SS	1/8	NO	1/8, 3/16, 1/4
05A	316 SS	1/8	YES	1/8, 3/16, 1/4
05B	316 SS	1/4	YES	1/8, 3/16, 1/4, 3/8
05C	316 SS	1/2	YES	1/8, 1/4, 3/8
15A	Brass	1/8	NO	1/8, 3/16, 1/4
15B	Brass	1/4	NO	3/16, 1/4, 3/8
15C	Brass	1/2	NO	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, 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 °C [400 °F] max.

3-3 Fixed Bushings

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

[1] 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
9HNB	1/4" x 1/4" stainless steel hex nipple
8HPB	1/4" stainless steel hex bushing (no process threads)
8CFB	1/4" NPT 316 stainless steel compression fitting (no process threads)
22CFB	1/4" NPT brass compression fitting (no process threads)

4-1 Miniature Head Terminations

CODE	DESCRIPTION
17	Miniature plastic head (3/8" NPT conduit opening)
25	Miniature nickel-plated head