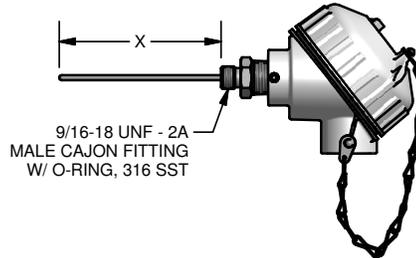


The types listed below are RTD temperature sensor assemblies designed to meet the stringent requirements of ultra-high temperature (UHT) pasteurization systems. In the UHT process the products are pasteurized at a higher temperature, typically 138° C for a shorter period of time - usually 2-3 seconds. The RTD sensor assemblies are available in a variety of accuracies, wire configurations, and termination options. They are also available with a variety of (4-20) mA transmitter options. All wetted parts are supplied with a surface finish that meets or exceeds 32µin Ra. Surface finishes of 15µin Ra or better are available upon request. These assemblies are supplied with a 9/16" -18 UNF-2A process connection and Viton O-ring on the face of the fitting. These RTD assemblies are designed to be used with a weld-in style thermowell as noted on the following page.



### ORDER CODES

**Example Order Number:** 1-1 1-2 1-3 - 2 - 00 - 3 **RAF185L 28 3 - 04 - 00 - 8VCC63**

#### 1-1 Pt100 ( $\alpha = 0.00385 \text{ } ^\circ\text{C}^{-1}$ ) RTD Assemblies

CODE		TOLERANCE	TEMPERATURE RANGE
SINGLE	DUPLEX (3/16" OD ONLY)		
R1T185L	R1T285L	Grade B	(-200 to 200°C)
R3T185L	R3T285L	Class AA	(-200 to 200°C)
R5T185L	R5T285L	(1/5) Class B	(-200 to 200°C)
RBF185L	RBF285L	Class B	(-50 to 200°C)
RAF185L	RAF285L	Class A	(-50 to 200°C)
R1T185H	R1T285H	Grade B	(-200 to 600°C)
RAT185H	RAT285H	Class A	(-200 to 600°C)

#### 1-2 Sheath

CODE	DIAMETER (inches)	MATERIAL
28	1/8"	316 Stainless Steel
38	3/16"	316 Stainless Steel

#### 1-3 Element Connection

CODE	DESCRIPTION
2	2 wires
3	3 wires
4	4 wires

#### 2 Sheath Length

Specify 2 digit hot leg in inches

#### 3 Head Mounting Fitting and Termination

CODE	DESCRIPTION
8VCC22(XX)	9/16" - 18UNF-2A X 1/2" NPT with 3" individual leads and terminal pins (or specified lead length)
8VCB22(XX)	9/16" - 18UNF-2A X 1/4" NPT with 3" individual leads and terminal pins (or specified lead length)
8VCC31	9/16" - 18UNF-2A process connection with Aluminum screw-cover head (NEMA 4X, IP66)
8VCC63	9/16" - 18UNF-2A process connection with White Polypropylene screw-cover head (NEMA 4X)
8VCC91	9/16" - 18UNF-2A process connection with 316L stainless steel screw-cover head (NEMA 4X, IP66)
8VCB17 <sup>[1]</sup>	9/16" - 18UNF-2A process connection with Miniature Plastic head (3/8" NPT conduit opening)
8VC45 <sup>[2]</sup>	9/16" - 18UNF-2A X M12

#### Head Options

W <sup>[3]</sup>	Epoxy Coating
I	Stainless Steel Tag
SB	Steel conduit reducer bushing
NB	Nylon 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
T-450 <sup>[2]</sup>	(4 to 20) mA integral RTD transmitter

See Transmitter ordering info in the transmitter section.

[1] Only available with single element

[2] Only available in single element, 4 wire construction

[3] Only available with option 31

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