General-purpose CIP sanitary-connected RTD temperature sensors are used in food, dairy, beverage, pharmaceutical, and chemical processing applications where sensor corrosion and product contamination are critical factors. The sanitary caps listed are those most commonly used in such processes. Sanitary caps are welded to the sheath and to a heavier support tube, all made of stainless steel, and then ground and polished to a finish that exceeds the No. 4 minimum finish required by the **3-A Sanitary Standard 74 -** . Assemblies are supplied with a surface finish that meets or exceeds 32µin R_a. Surface finishes of 15µin R_a or better are available upon request. The process contact surfaces are free of pits, crevices, and pockets thus preventing corrosion and bacteria growth. The 3-wire constructed sensor assembly consists of a high-accuracy platinum element sealed inside a 316 stainless steel sheath, and is provided with a white FDA compliant polypropylene connection head. The complete assembly provides excellent washdown protection. It is recommended that once customer connections are made, the connecting terminals be further protected by applying a coating of moisture-proof sealant over the connections.

74-

Ø1/4", 316 SST

X — 3"
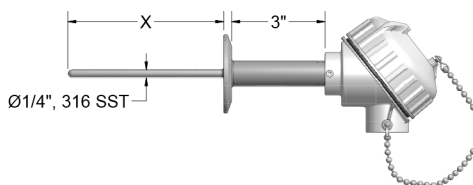
Maximum temperature limit: 200 ºC [392 ºF]

ORDER CODES

Example Order Number:

	1-0	1-1	1-2		2	3	4
	R5T185L48	3	- 04	- CIP -	2	- 5	- 63, T

1-0 Pt100 (α = 0.003 85 ºC⁻¹) RTD Assemblies

CODE	TOLERANCE[1]
SINGLE	
RAF185L48	Class A
R1T185L48	Grade B
R3T185L48	Class AA
R5T185L48	(1/5) Class B
DUPLEX	
RAF285L48	Class A
R1T285L48	Grade B
R3T285L48	Class AA
R5T285L48	(1/5) Class B

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

Thermocouple Assemblies

For CIP thermocouple assemblies use T/C types J, K, T, or E and options G for grounded junction or U for ungrounded junction as per example.
EXAMPLE: TP48G-04 - CIP - 2 - 5 - 63

1-1 Element Connection

CODE	DESCRIPTION
3	3-Wire Element
4 [1]	4-Wire Element
[1] Not Available in Duplex	

1-2 Immersion Length "X"

Specify "X" length in inches using 2 digits,
plus any fractional length desired
Examples: 04 = 4", 05(1/2) = 5.5"

2 Sanitary Cap Size

CODE	TUBE O.D. (inches)	CODE	TUBE O.D. (inches)
1	1(1/2)	4	3
2	2	5	4
3	2 (1/2)	Z	Other (specify)

4 Terminations

CODE	DESCRIPTION
91	316L stainless steel screw-cover head
63	White polypropylene screw-cover head
31,W	Aluminum screw-cover head with white epoxy coating
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® Field Transmitter with general-purpose dual cavity aluminum housing
22 (06)	6" individual fluoropolymer leads with terminal pins
02	1/2" O.D., 2 1/4" long extension leadwire transition (requires table 4 & 5 selections from RTD section)
Head Options	
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
I	Stainless steel tags
HS	Wire seal security screws

3 Sanitary Cap Style

CODE	DESCRIPTION
2	16A cap - Bevel Seat with13-H Nut[1] 304SS
5	16 AMP cap - Tri-Clamp® 316SS
7	16AI-14I cap[2] 304SS
8	Other (describe)
[1] Must be manually cleaned	[2] Not 3-A authorized

Tri-Clamp® is a registered trademark of Alfa Laval, Inc.
HART® is a registered trademark of HART Communication Foundation.