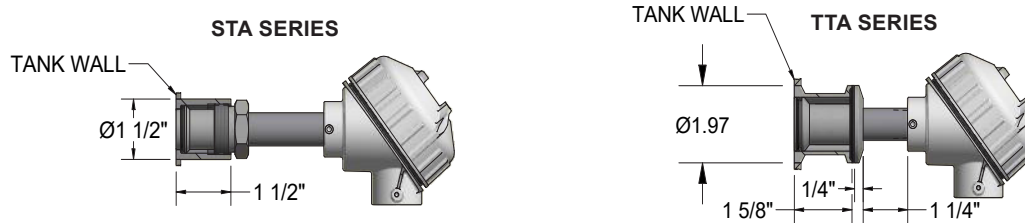The non-intrusive tank sensors listed on this page are designed to mount flush with the interior tank wall for maximum product contact. This allows the wiping or mixing blades to properly mix the product within the tank without damaging the temperature sensor. The temperature sensors are manufactured of highly polished stainless steel and use various mounting methods for simple installation. These sensors are supplied standard with a 100 Ω, Platinum RTD sensing element. These RTD assemblies are constructed of 316 stainless steel and all wetted parts 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. These RTD assemblies have an operation temperature of (-50 to 200) ºC [-58 to 400] ºF. See back of section for complete dimensions and installation instructions.

STA SERIES

TANK WALL

Ø1 1/2"

1 1/2"

TTA SERIES

TANK WALL

Ø1.97

1 5/8"   1/4"   1 1/4"

ORDER CODES

Example Order Number: | 1-0 | 1-1 | 1-2 | 1-3 |
RAF185L | **3** | - | **DTA** | - | **63**

1-0   100 Ω Platinum RTD Elements

CODE		TOLERANCE[1]	TEMPERATURE COEFICIENT
Single	Duplex		
RBF185L	RBF285L	Class B	$\alpha = 0.003\,85$ ºC^{-1}
RAF185L	RAF285L	Class A	$\alpha = 0.003\,85$ ºC^{-1}

[1] Tolerance is based on initial element accuracy and can not be guaranteed in flush mount applications.

1-1   Element Connection

CODE	DESCRIPTION
3	3-Wire Element
4 [1]	4-Wire Element

[1] Not Available in Duplex

1-2   Assembly Types and Options

SINGLE-WALL RTD SENSOR	
CODE	DESCRIPTION
STA	Complete assembly, includes sensor, mounting adaptor, and O-ring
STS	Replacement sensor, includes sensor and O-ring
DUAL-WALL RTD SENSOR	
CODE	DESCRIPTION
DTA	Complete assembly, includes sensor, mounting adaptor, and O-ring
DTS	Replacement sensor, includes sensor and O-ring
TRI-CLAMP® RTD SENSOR	
CODE	DESCRIPTION
TTA	Complete assembly, includes sensor, mounting adaptor, clamp, gasket and O-ring
TTS	Replacement sensor, includes sensor and O-ring
CAN STYLE RTD SENSOR	
CODE	DESCRIPTION
FCA	Complete assembly, includes sensor, backing nut, mounting adaptor, and FEP gasket
FCS	Replacement sensor, includes sensor and FEP gasket

1-3   Head Terminations and Options

CODE	DESCRIPTION
63	White polypropylene screw-cover head
31,W	Aluminum screw-cover head with white epoxy coating
91	316 Stainless steel 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® Field Transmitter with general-purpose aluminum housing

Optional Temperature Transmitters and Head Options

CODE	DESCRIPTION
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 identification tag
SB	1/2" NPT conduit reducer bushing
NB	1/2" NPT nylon conduit reducer bushing

Replacement Parts

CODE	DESCRIPTION
13445	Single-wall tank mounting adaptor (STA assembly)
13446	Dual-wall tank mounting adaptor (DTA assembly)
13538	Silicon O-ring for STA and DTA assemblies
13470	Tank mounting adaptor for Tri-Clamp® assembly
13542	Silicon O-ring for TTA Tri-Clamp® assembly
13439	1 1/2" clamp for TTA Tri-Clamp® assembly
13440	EDPM gasket for TTA Tri-Clamp® assembly
13447	Tank mounting adaptor for FCA Can style assembly
13449	Backing nut for FCA Can style assembly
13448	FEP gasket for FCA Can style assembly

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

Pyromation Inc.