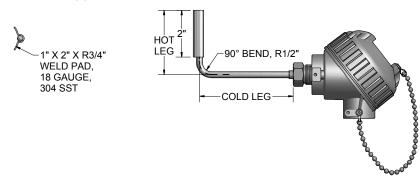


Heat-tracing RTDs are made for use in systems that measure the surface temperature of process pipe that is carrying products whose temperatures must be controlled to prevent freeze-up, or to maintain a viscosity level so that the inner medium will flow. These sensors are constructed with RTD sensing elements inside 316SS sheaths, and with a 3/4" Radius stainless steel mounting pad. Cold legs are available in customer-specified lengths to accommodate pipe insulation thickness.



### ORDER CODES

### Example Order Number:

# RBF185L 48 3 - HT - 0304 - 18RD - 31, I

# 1-0 100 $\Omega$ Platinum RTD Elements $\alpha$ = 0.003 85 °C<sup>-1</sup>

CODE		TOLERANCE <sup>[1]</sup>	TEMP. RANGE
SINGLE	DUPLEX		
R1T185L	R1T285L	Grade B	(-200 to 200) °C
R5T185L	R5T285L	(1/5) Class B	(-30 to 150) °C
RBF185L	RBF285L	Class B	(-50 to 200) °C
RAF185L	RAF285L	Class A	(-30 to 200) °C
RBF185M	RBF185M	Class B	(-50 to 482) °C
R1T185H	R1T285H	Grade B	(-200 to 600) °C
RAT185H	RAT285H	Class A	(-100 to 450) °C

<sup>[1]</sup> 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	
48	1/4	
68	3/8	

### 1-2 Element Connection

CODE	DESCRIPTION	
2	2-wire element	
3	3-wire element	
4 <sup>[1]</sup>	4-wire element	
[1] Not available with 440 Series Transmitter		

### 2-0 Sheath Lengths

CODE	HOT LEG (inches)	COLD LEG (inches)
0304	3	4
0306	3	6
0308	3	8
Consult factory for other hot leg lengths or cold leg lengths.		

### 3-0 Radius Mounting Pads 1" W x 2" L x 18 Ga. 304 SS

CODE	RADIUS (inches)	NPT PIPE SIZE (inches)
18RD	3/4	1 1/2
Mounting pad is flexible enough to be formed around pipe sizes from 1" to 12" NPS pipe.		

### 4-0 Standard Head Terminations

CODE	DESCRIPTION	
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® Field 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	
93	Aluminum explosion-proof/flame-proof head, NEC, IEC, Atex approved	
94	316L stainless steel explosion-proof/flame-proof head, NEC, IEC, Atex approved	

# 4-1 Standard Head Options

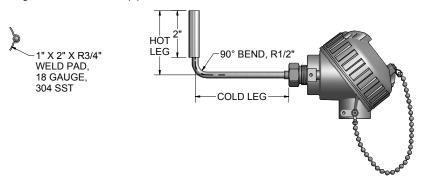
CODE	DESCRIPTION	
CG	Nylon cord grip	
GS	Ground screw	
I	Stainless steel tag	
NB	1/2" NPT nylon conduit reducer bushing	
SB	1/2" NPT conduit reducer bushing	
T-440	4-20 mA head- mounted RTD transmitter (see instrument section)	
T-441	4-20 mA isolated head-mounted transmitter (see instrument section)	
T-442	4-20 mA HART® isolated head-mounted transmitter (see instrument section)	
T82-00	(4 to 20) mA dual input HART® head-mounted transmitter	

HART® is a registered trademark of HART Communication Foundation.



# **Heat-Tracing Thermocouple Assemblies**

Heat-tracing Thermocouples are made for use in systems that measure the surface temperature of process pipe that is carrying products whose temperatures must be controlled to prevent freeze-up, or to maintain a viscosity level so that the inner medium will flow. These sensors are constructed with Thermocouple sensing elements inside 316SS sheaths, and with a 3/4" Radius stainless steel mounting pad. Cold legs are available in customer-specified lengths to accommodate pipe insulation thickness.



## **ORDER CODES**

1-0

1-1

P48

1-2

Example Order Number:

### 1-0 Thermocouple Types

CODE	
SINGLE	DUPLEX
E	EE
J	JJ
K	KK
Т	TT

316 SS Sheath Diameters and Insulation Types

CODE	DIAMETERS (inches)	INSULATION TYPE
48	1/4	MgO
68	3/8	MgO
P48	1/4	Fiberglass
P68	3/8	Fiberglass

### 1-2 Measuring Junction

CODE	DESCRIPTION	
G	Grounded junction	
U	Ungrounded junction	
ELEMENT OPTIONS		
М	Special Limits of Error	

### 2-0 Sheath Lengths

CODE	HOT LEG (inches)	COLD LEG (inches)
0304	3	4
0306	3	6
0308	3	8
Consult factory for other hot leg lengths or cold leg lengths.		

#### **Radius Mounting Pads** 1" W x 2" L x 18 Ga. 304 SS

CODE	RADIUS (inches)	NPT PIPE SIZE (inches)
18RD	3/4	1 1/2
Mounting pad is flexible enough to be formed around pipe sizes from 1" to 12" NPS pipe.		

2-0

0304

### 4-0 Standard Head Terminations

CODE	DESCRIPTION	
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® Field 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	
93	Aluminum explosion-proof/flame-proof head, NEC, IEC, Atex approved	
94	316L stainless steel explosion-proof/flame-proof head, NEC, IEC, Atex approved	

#### Standard **Head Options**

4-0

31

**18RD** 

4-1

	CODE	DESCRIPTION
	CG	Nylon cord grip
	GS	Ground screw
	I	Stainless steel tag
	NB	1/2" NPT nylon conduit reducer bushing
	SB	1/2" NPT conduit reducer bushing
	T-441	4-20 mA isolated head-mounted transmitter (see instrument section)
	T-442	4-20 mA HART® isolated head-mounted transmitter (see instrument section)
	T82-00	(4 to 20) mA dual input HART® head-mounted transmitter

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**GP-14**