HT2 Heat Trace RTD Sensor

Class I, Division 2, Groups A, B, C, D; Class I, Zone 2, Group IIC (Note 2); T6…T1

Overview

Description:

The HT2 Heat Trace RTD is a surface mount temperature sensor designed for use in hazardous locations. The HT2 is a customizable product that is model number configured and made to order.

The HT2 consists of an RTD sensor probe designed to be attached to the outer diameter of a pipe using common attachment bands or strapping. The connection head (enclosure) is provided with a terminal block or internal transmitter.

Features:

- Simple design accepted across heat trace industry
- Certified for use in Class 1 Division 2 in Canada and USA

Application:

- Hazardous location heat trace temperature measurement
- Surface mount industrial temperature measurement
- Process control
- Outdoor / indoor use

Specifications

Accuracy RTD	Tolerance per IEC 60751 (DIN EN 60751)
T-Code	T6...T1
Electrical rating	30 Vdc, 1.0 A max
Ambient temperature	-50°C to +50°C (-58°F to +122°F)
Process temperature	-50°C to +450°C (-58°F to +842°F)
CSA Certificate of Compliance	1526478

Note:
1. Specifications will depend on model code variants, and the values shown are the full rated model ranges.
2. Class I, Zone 2, Group IIC is US only.

HT2 - T1 - T2 - T3 - T4

HT2	Heat Trace RTD Sensor

T1	Connection Head	Color	Material	Conduit Connection	Terminal Block	Type Rating
2ALT	**Standard style**	**Blue**	**Aluminum epoxy coated**	**1x 3/4" NPT**	**Bakelite**	**Type 4X**
1ALT	**Standard style**	**Blue**	**Aluminum epoxy coated**	**1x 1/2" NPT**	**Bakelite**	**Type 4X**
2ALTC	**Standard style**	**Blue**	**Aluminum epoxy coated**	**1x 3/4" NPT**	**Ceramic**	**Type 4X**
2AL	Standard style	Grey	Aluminum	1x 3/4" NPT	Bakelite	Type 4
2SS	Standard style	Steel	Stainless steel	1x 3/4" NPT	Bakelite	Type 4X
Note	Refer to page 3 for additional options, details and other styles					

T2	Sensor Type
3	3-wire RTD 100Ω Pt. 385 Class A (Class A tolerance ≤+300°C(+572°F), Class B tolerance typically applies >+300°C(+572°F))
4	4-wire RTD 100Ω Pt. 385 Class A (Class A tolerance ≤+300°C(+572°F), Class B tolerance typically applies >+300°C(+572°F))
Other	Consult factory

T3	Sensor Height "X" Length (inches)[3]	CSA Process Temperature Rating[3]
4	4 inches	-50°C to +230°C (-58°F to +446°F), T3C
6	6 inches	-50°C to +230°C (-58°F to +446°F), T3C
8	8 inches	-50°C to +450°C (-58°F to +842°F), T2
"inches"	Specify custom height in inches	Consult factory

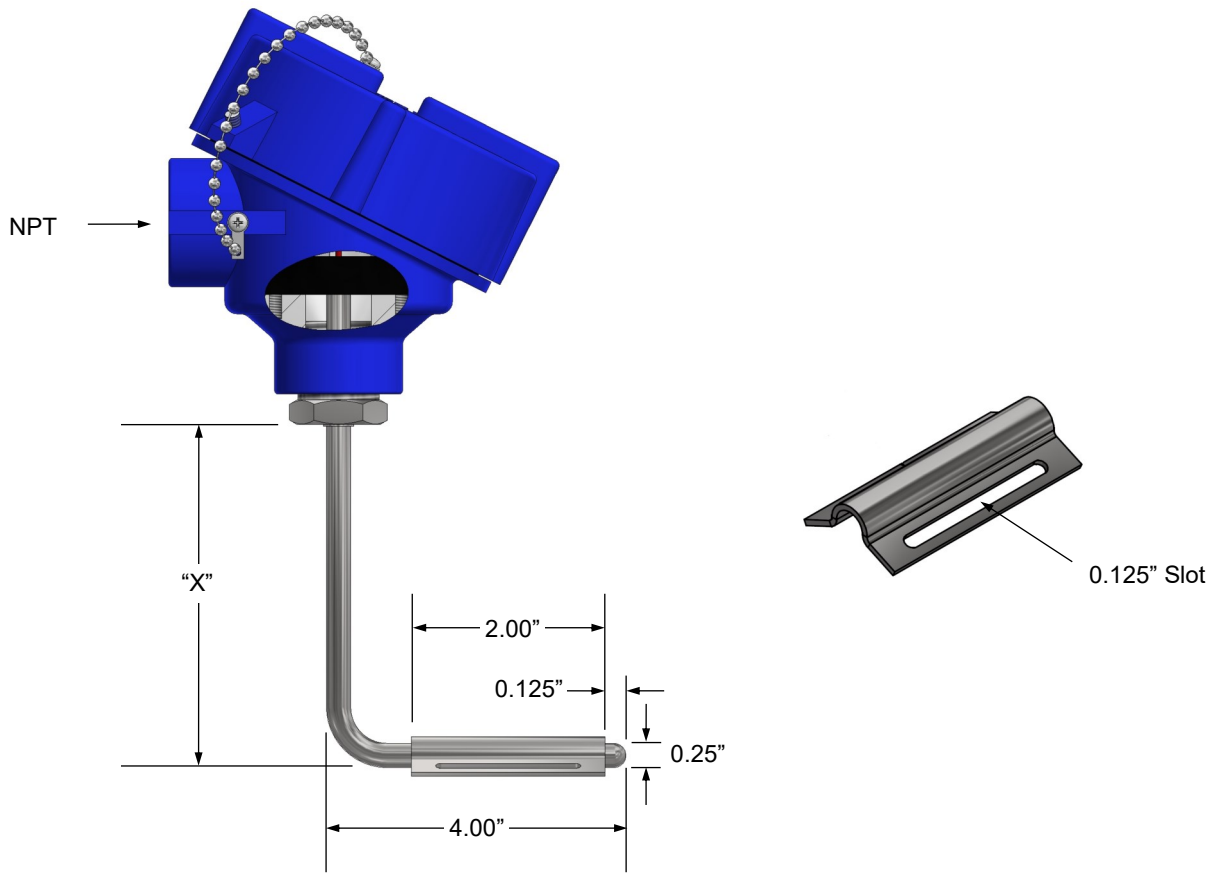| T4	Sensor Probe Construction	
LT	**Low temperature (-50 to +260ºC) (-58°F to +500°F)**	Temperature values are for the temperature sensor probe construction only. The CSA process and ambient temperature assembly ratings are dependant on connection head (T1) and sensor height "X" length (T3)[3].
HT	High temperature (-50 to +482ºC) (-58°F to +899°F)	
ET	Extreme temperature (-50 to +850°C) (-58°F to +1562°F)	
VT	Vibration construction (-50 to +482ºC) (-58°F to +899°F)	
CT	Cryogenic temperature (-200 to +260°C) (-328°F to +500°F)	

Sensor Probe Sheath and Clamp material
Standard default material is 316/316L stainless steel. Other alloys are available on request.

NOTES:
1. Part number example: HT2-2ALT-3-7-LT
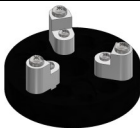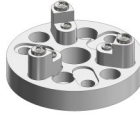2. Attachment bands are not supplied and available on request
3. The sensor temperature rating is based on the height "X" not directly in contact with the process at its maximum temperature

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NPT →

"X"

2.00"

0.125"

0.25"

4.00"

0.125" Slot

Outline & Dimensions	Model	Connection (NPT)		Material & Type	Ambient Temperature	Terminal Block
		Instrument	Conduit			
3.7" / 4.0"	1ALT	1/2"	1x 1/2"[2]	Cast aluminum epoxy coated Buna O-ring Type 4X	-50°C to +85°C (-58°F to +185°F) (+125°C (+257°F) Canada only)	Bakelite - standard Screw terminals to suit sensor configuration
	2ALT	1/2"	1x 3/4"			
	3ALT	3/4"	1x 3/4"			
3.7" / 4.0"	1SS	1/2"	1x 1/2"[2]	316 stainless steel Buna O-ring Type 4X		
	2SS	1/2"	1x 3/4"			
	3SS	3/4"	1x 3/4"			Ceramic - optional Screw terminals to suit sensor configuration Add suffix "C" to connection head model number Example: 2ALTC
3.7" / 4.0"	1AL	1/2"	1x 1/2"[2]	Cast aluminum Buna O-ring Type 4		
	2AL	1/2"	1x 3/4"			
	3AL	3/4"	1x 3/4"			

NOTES:
1. Ambient ratings are of the connection head only, temperature assembly ambient rating is typically -50°C to +50°C (-58°F to +122°F)
2. May be supplied with an approved 3/4" x 1/2" NPT reducer bushing
3. Type ratings are for enclosure component of assembly ONLY and not full assembly

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