# RTD

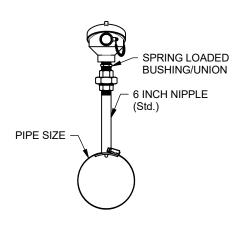


### PIPE MOUNTING KIT

The Pipe Mounting Kit allows for non-intrusive surface temperature measurement. It's available in various pipe sizes to meet your application needs. The minimum pipe size is 3/4".







**BUILD YOUR HEAD ASSEMBLY:** Build your thermocouple or RTD head assembly part number, then add the following code on the end as an option. Example: B4T6PX1256X-PMK4

# B4T6PX1256X -PMK4

# HEAD ASSEMBLY PART NUMBER

Note: a spring loaded nipple or nippleunion-nipple process connection is required.

See page 52 for the RTD Head Assembly part builder.

### OPTIONS

Note: The minimum pipe size is 3/4".

-PMK2 = Pipe Mounting Kit for 2" Pipe

-PMK4 = Pipe Mounting Kit for 4" Pipe -PMK6 = Pipe Mounting

Kit for 6" Pipe
-PMK? = Pipe Mounting
Kit for ?" Pipe

(800) 648-7737

sales@reotemp.com

# **RTD**



# RTD HEAD ASSEMBLY

Reotemp offers a large selection of RTD Head Assemblies featuring explosion proof, corrosion resistant, LED Display, and many other head options. Head assemblies can be configured with a HART or 4-20 mA transmitter.







# RTD HEAD ASSEMBLY

BUILD YOUR HEAD ASSEMBLY: Choose options to build a part number. For example: B1TPX1256X



#### **HEAD STYLE**

Head	Code	Description	Ratings	C FM US APPROVED		$\langle \epsilon_x \rangle$	Display	Standard Conduit
	Α	Cast Iron Black	NEMA 4					3/4"
19	В	Cast Aluminum	NEMA 4X					3/4"
	E	Explosion Proof Aluminum	NEMA 4X	✓	✓			3/4"
	ı	Blue Epoxy Aluminum	NEMA 4X					3/4"
3	S	Polypropylene White	NEMA 4					3/4"
	w	Field HART Transmitter	IP68, NEMA 4X	✓	✓	✓	✓	1/2"
	Z	Z-Temp™ Explosion Proof Aluminum	NEMA 4X, IP66	✓	✓	✓	✓	1/2"
	G	316SS	NEMA 4X					3/4"
100	т	ATEX Explosion Proof Aluminum	NEMA 4X	✓	✓	✓		1/2"
	L	Explosion Proof Epoxy Coated Aluminium	NEMA 4X	✓	✓			3/4"

See page 50 for additional head style options.





TRANSMITTER

(OPTIONAL)

# HEAD OPTIONS (OPTIONAL)

Standard

Note: All heads come standard with a ceramic terminal block unless no terminal block or a transmitter is chosen

X = 4-20 mA 2-wire Transmitter R = 4-20 mA 2-wire HART Transmitter

transmitter is chosen.

**F** = 4-20 mA 2-wire Foundation Fieldbus **P** = 4-20 mA 2-wire Profibus

H = 1/2" Conduit S = 1/2" BSPP Conduit

Required when Z-Head is Selected:

M = M20 x 1.5"

B = 4-20 mA 2-wire Transmitter with Digital
Display

N = No Terminal Block

Y = 4-20 mA 2-wire HART Transmitter with Digital Display

57



Accuracy

at 0°C(Ω)

± 0.12%

± 0.06%

± 0.03%

± 0.01%

± 0.12%

 $\pm 0.06\%$ 

± 0.12%

 $\pm 0.10\%$ 

± 0.50%

± 0.50%

at 25°C

Ω at 0°C

100Ω

100Ω

100Ω

100Ω

1000Ω

 $1000\Omega$ 

500Ω

100Ω

120Ω

10Ω at

25°C

## RTD HEAD ASSEMBLY



#### THREADED CONNECTIONS

- All have 1/2" NPT male unless noted.
- Use a spring loaded connection with a thermowell.
- Use a welded connection when the stem goes directly into the process medium.
- All threaded connections have 316 stainless steel fittings.

#### Threaded Connections

- 1T = Spring-loaded 316SS Hex Bushing
- 4T = 5" Nominal Spring Loaded Nipple-Union-Nipple 316SS
- 2T = 2.5" Spring Loaded Nipple 316SS
- 7T = Spring Loaded Explosion Proof Bushing 316SS
- 5T = Nipple-Union-Nipple Spring Loaded Explosion Proof Bushing, Explosion **Proof Union**

#### Welded Fittings

- 1F = Welded Hex Bushing 316SS
- 4F = Nipple-Union-Nipple Welded 316SS
- 6F = Stainless Steel Bushing, 1/2" NPT, No Process Threads

#### Welded Fittings with Compression Fitting Loose on Stem

- 6FT = SS Welded Bushing with 1/4" NPT Comp Fitting "Set Once" Loose On Stem
- 6FU = SS Welded Bushing with 1/2" NPT Comp Fitting "Set Once" Loose On Stem
- 6FV = SS Welded Bushing with 1/8" NPT Comp Fitting "Set Once" Loose On Stem

#### Other Nipple-Union-Nipple

- 4T3 = 3" Nominal Spring Loaded N-U-N
- 4T4 = 4" Nominal Spring Loaded N-U-N
- 4T6 = 6" Nominal Spring Loaded N-U-N
- 4T7 = 7" Nominal Spring Loaded N-U-N

#### Other Nipples

- 2T3 = 3" Spring Loaded Nipple
- 2T4 = 4" Spring Loaded Nipple
- 2T5 = 5" Spring Loaded Nipple
- 2T6 = 6" Spring Loaded Nipple
- 2T7 = 7" Spring Loaded Nipple
- 2T8 = 8" Spring Loaded Nipple

#### Special Fittings

8T = Spring Loaded Terminal Block, No Fitting 1/2" NPT Female Head

CU Copper/421 Opening \*Available in Reotemp Extended temperature RTDs

Туре

Standard DIN

**B** Platinum

1000

Platinum 100Ω

with Other

Accuracies

Other RTDs

Code

PX\*

PA\*

PD\*

PE\*

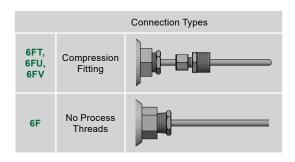
PK\*

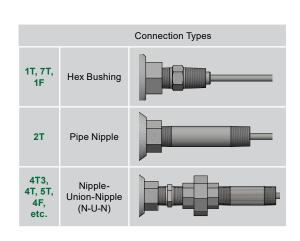
PH\*

РМ

PY\*

NI





**RTD SENSOR** 

Material/Class

Pt/385/B

Pt/385/A

Pt/385/A3

Pt/385/A5

Pt/385/B

Pt/385/A

Pt/385/B

Pt/392

Nickel/6725

X 25 6

#### **TEMPERATURE** STEM DIAMETER STEM LENGTH **NUMBER OF RANGE** "X" LEADS/RTDs **25** = 0.250" 1 = -328°F/400°F ? = Stem Length in Inches X = Single 3-wire **12** = 0.125" (Standard) (See "X" length XX = Duplex 3-wire

2 = Extended Range -328°F/1100°F (Only Available on PX, PA, PD, PE, PK, PH, or PY RTDs)

18 = 0.188" 37 = 0.375" drawings on page 55.)

Y = Single 4-wire

YY = Duplex 4-wire W = Single 2-wire WW = Duplex 2-wire

- -TS = Stainless Tag
- -R1 = One Point Calibration Certification (Reotemp Chooses)

**OPTIONS** 

-R3 = Three Point Calibration Certification (Reotemp Chooses)

For additional options see page 149.

For thermowells see pages 142-148.



# Thermocouples & RTD

# **HEAD STYLES**

All head styles are IP65 or greater. Additional head styles available, contact customer service for more information.

Head	Code	Description	NEMA Rating	IP Rating	C FM US APPROVED	<b>∰</b> * ∪s	⟨£x⟩	Display	STD Conduit	Material
	A	Cast Iron Black	4	65					3/4"	Cast Iron
0	В	Cast Aluminum	4X	68					3/4"	Cast Aluminium
1	E	Explosion Proof Aluminum	4X	68	✓	✓			3/4"	Cast Aluminium
	ı	Blue Epoxy Aluminum	4X	68					3/4"	Cast Aluminium
3	s	Polypropylene White	4	65					3/4"	Polypropylene
	w	Explosion Proof Field HART Transmitter	4X	68	✓	✓	✓	✓	1/2"	Cast Aluminium
	z	Z-Temp™ Explosion Proof Aluminum	4X	66	✓	✓	✓	✓	1/2"	Cast Aluminium
	С	Polypropylene Black	4	65					3/4"	Polypropylene
	G	316SS	4X	65					3/4"	316SS
8	н	Aluminum Flip Top	4	65					3/4"	Cast Aluminium
	J	Explosion Proof 316SS	4X	65	✓	✓			3/4"	316SS
	т	ATEX Explosion Proof Aluminum	4X	68	✓	✓	✓		1/2"	Cast Aluminium
	L	Explosion Proof Epoxy Coated Aluminium	4X	68	✓	✓			3/4"	Cast Aluminium
	D	Mini Cast Aluminum	4	65					3/4"	Cast Aluminium
	K	Polished 316SS Knurl	4X	65					1/2"	316SS
	P	DIN Black Polypropylene	4	65					3/4"	Polypropylene
	U	Hi-dome Aluminum Fliptop	4	65					3/4"	Cast Aluminium
	V	Ball-dome Aluminum Fliptop	4	65					3/4"	Cast Aluminium

# **Customization**



# **THERMOCOUPLE & RTD OPTIONS**

		Thermocouple	RTD	Digital Thermometers	Handheld Digital				
	CERTI	FICATION OPTIONS							
-R1	1 Point Calibration Certification, Reotemp Chooses	<b>√</b>	<b>√</b>	✓	✓				
-R3	3 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓				
-C1	1 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓				
-C3	3 Point Calibration Certification, Customer Chooses	✓	✓	✓	✓				
-cc	Certificate of Conformance	✓	✓	✓	✓				
-cs	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓				
OTHER OPTIONS									
-VB	Hi-Vibration	N/A	✓	✓	✓				
-AC	Hi-Accuracy	N/A	✓	N/A	N/A				
-PS	Pointed Stem	✓	✓	✓	✓				
-TF	Teflon Coating	✓	✓	✓	✓				
-SS	316 SS stem	N/A	STD	✓	✓				
-NL	No Logo	✓	✓	✓	✓				
-HT	Heat Transfer Compound (2 oz)	✓	✓	✓	N/A				
-GL	Plain Glass Lens	N/A	N/A	✓	✓				
-CL	Custom Logo Dial	N/A	N/A	✓	✓				
-BP	Replacement Battery Pack	N/A	N/A	✓	✓				
-WD	White Dial	N/A	N/A	✓	✓				
-AS	Allows to Fit 1-1/4-18 Industrial Thermowell	✓	✓	✓	N/A				
		TAG OPTION							
-TS	Stainless Steel Tag (1-10 Characters) ✓								
-TM	Stainless Steel Tag (11-80 Characters)	✓							
-TP	Paper Tag	✓							
<b>√</b>	Indicates that the option is available with this model.								
N/A	Indicates that the option is available with this model.  Indicates the option is not available with this model.								
STD Indicates standard options with no additional cost.									