

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.





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RTD



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	1 0%	$\langle \epsilon_x \rangle$	Display	Standard Conduit
	Α	Cast Iron Black	NEMA 4					3/4"
0	В	Cast Aluminum	NEMA 4X					3/4"
1	E	Explosion Proof Aluminum	NEMA 4X	✓	✓			3/4"
	- 1	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 49 for additional head style options.





TRANSMITTER

(OPTIONAL)

HEAD OPTIONS (OPTIONAL)

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

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

 $M = M20 \times 1.5$ "

N = No Terminal Block

Standard

X = 4-20 mA 2-wire Transmitter

R = 4-20 mA 2-wire HART Transmitter

F = 4-20 mA 2-wire Foundation Fieldbus

P = 4-20 mA 2-wire Profibus

Required when Z-Head is Selected:

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

Display

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

Digital Display



RTD HEAD ASSEMBLY



Туре

Standard DIN

B Platinum

1000

Platinum 100Ω

with Other

Accuracies

Other RTDs

Code

PX*

PA*

PD*

PE*

PK*

PH*

РМ

PY*

NI

CU

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 Opening

25°C *Available in Reotemp Extended temperature RTDs

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

Copper/421

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

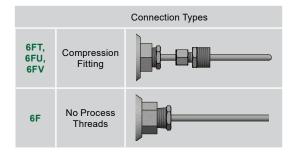
 1000Ω

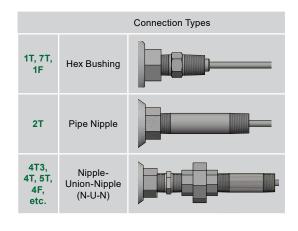
500Ω

100Ω

120Ω

10Ω at





25

STEM DIAMETER

6

STEM LENGTH

"X"

X

NUMBER OF

LEADS/RTDs



OPTIONS

TEMPERATURE RANGE

1 = -328°F/400°F (Standard) 2 = Extended Range -328°F/1100°F (Only Available on PX, PA, PD, PE, PK, PH, or

PY RTDs)

- **25** = 0.250" **12** = 0.125" **18** = 0.188" 37 = 0.375"
- ? = Stem Length in Inches (See "X" length drawings on page 54.)
- X = Single 3-wire XX = Duplex 3-wire 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)
- -R3 = Three Point Calibration Certification (Reotemp Chooses)

For additional options see page 147.

For thermowells see pages 140-146.

Thermocouples & RTD



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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	©®° ∪s	€ x	Display	STD Conduit	Material
	A	Cast Iron Black	4	65					3/4"	Cast Iron
50	В	Cast Aluminum	4X	68					3/4"	Cast Aluminium
	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
4	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



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THERMOCOUPLE & RTD OPTIONS

		Thermocouple	RTD	Digital Thermometers	Handheld Digital			
CERTIFICATION OPTIONS								
-R1	1 Point Calibration Certification, Reotemp Chooses	✓	✓	✓	✓			
-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			✓				

✓	Indicates that the option is available with this model.
N/A	Indicates the option is not available with this model.
STD	Indicates standard options with no additional cost.