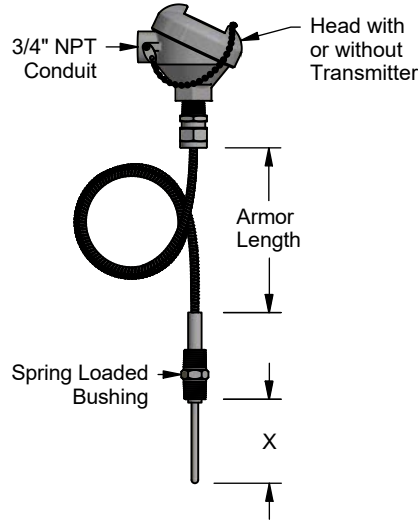


REMOTE MOUNT THERMOCOUPLE HEAD ASSEMBLY

Reotemp offers a large selection of customizable Remote Industrial Head Assemblies with options such as explosion proof heads, armored capillary, and LED displays. Remote head assemblies allow the customer to move the head away from a hot process or to a more convenient location. Head assemblies can be configured with or without a transmitter.



Made in USA



BUILD YOUR REMOTE ASSEMBLY: Choose options to build a part number. For example: **AM12J1SG6-LJ2P36T2RHB-TS**

A



STYLE

STEM OPTIONS (OPTIONAL)

A		H	
	Plain Stem (Lead Assembly)		Spring Loaded Bushing
B		P	
	Welded SS Bushing		1/2" NPT Nipple w/ Bayonet
R		S	
	Bayonet Cap w/ Spring		Load Spring Only
4T			
	5" Nominal Spring Loaded N-U-N		

Leave blank for no stem option.

T		U	
	1.5"		1.8"
	1/4" NPT Sliding Compression Fitting Loose On Plain 316SS Stem		1/2" NPT Sliding Compression Fitting Loose On Plain 316SS Stem
V		W	
	1.3"		
	1/8" Compression Fitting Loose on Plain 316SS Stem		Weld Pad, 1"x1"x1/8"

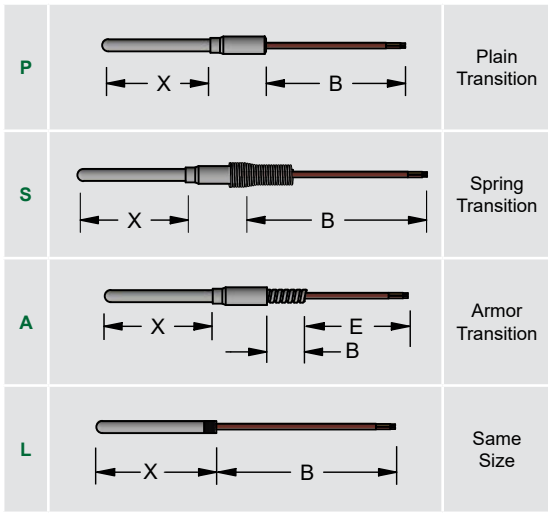
Note: Compression fitting lengths will decrease overall stem length.

REMOTE MOUNT THERMOCOUPLE HEAD ASSEMBLY

THERMOCOUPLES

M	12	J	1	S	G	6
METAL SHEATHED	SHEATH DIAMETER	THERMOCOUPLE TYPE	TYPE OF SHEATH MATERIAL	NUMBER OF ELEMENTS	TYPE OF JUNCTION	STEM LENGTH "X"
M = Metal Sheathed Thermocouple	06 = 0.062 in. 12 = 0.125 in. 18 = 0.188 in. 25 = 0.250 in. 37 = 0.375 in.	J = Type J K = Type K E = Type E T = Type T JS = Type J Special Limits of Error KS = Type K Special Limits of Error ES = Type E Special Limits of Error TS = Type T Special Limits of Error For thermocouple accuracy information see page 5. For thermocouple temperature operating ranges see page 6.	1 = 316 Stainless Steel 2 = 310 Stainless Steel 3 = 304 Stainless Steel 5 = Inconel 600	S = Single Element Assembly D = Dual Element Assembly	G = Grounded U = Ungrounded E = Exposed UU = Ungrounded Uncommon	?? = Stem Length in Inches (See diagram from style selection on previous page.)

-L	J	2	P	36
LEAD WIRE	THERMOCOUPLE TYPE	NUMBER OF LEADS	TRANSITION TYPE	LEAD OR ARMOR LENGTH "B"
-L = Lead Wire	J = Type J K = Type K E = Type E T = Type T	2 = Single Thermocouple 4 = Duplex Thermocouple		?? = Insert "B" Length in Inches (See Transition Type Diagram.)



REMOTE MOUNT THERMOCOUPLE HEAD ASSEMBLY

T2

RHB

INSULATION /CONDUCTOR

HEAD STYLE

- T1 = Teflon, Solid
- F1 = Fiberglass, Solid
- T2 = Teflon, Stranded
- F2 = Fiberglass, Stranded (J&K Only)
- P1 = PVC, Solid

Head	Code	Description	Ratings	FM APPROVED	SP US	EX	Display	Standard Conduit
	RHA	Cast Iron Black	NEMA 4					3/4"
	RHB	Cast Aluminum	NEMA 4X					3/4"
	RHE	Explosion Proof Aluminum	NEMA 4X	✓	✓			3/4"
	RHI	Blue Epoxy Aluminum	NEMA 4X					3/4"
	RHS	Polypropylene White	NEMA 4					3/4"
	RHW	Field HART Transmitter	IP68, NEMA 4X	✓	✓	✓	✓	1/2"
	RHZ	Z-Temp™ Explosion Proof Aluminum	NEMA 4X, IP66	✓	✓	✓	✓	1/2"
	RHG	316SS	NEMA 4X					3/4"
	RHT	ATEX Explosion Proof Aluminum	NEMA 4X	✓	✓	✓		1/2"
	RHL	Explosion Proof Epoxy Coated Aluminum	NEMA 4X	✓	✓			3/4"

See page 49 for additional head style options. Add "RH" in front of any head code.



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 x 1.5"
- N = No Terminal Block

TRANSMITTER (OPTIONAL)

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

WIRE PROTECTION (OPTIONAL)

Omit if No Armor

- A = Stainless Steel Armor
- P = PVC Coated Stainless Steel Armor
- T = Teflon Coated Stainless Steel Armor
- O = Stainless Steel Overbraid

OPTIONS

- 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.

REFERENCE INFORMATION

THERMOCOUPLE WIRE COLOR CODES (U.S.A. ANSI)					
Thermocouple Grade	Extension Grade	Plug/Jack	Thermocouple Grade	Extension Grade	Plug/Jack
K		Yellow	N		Orange
J		Black	S		Green
T		Blue	R		Green
E		Purple	B		White

THERMOCOUPLE & RTD ACCURACIES

	Type K	Type J	Type T	Type E	Type N	Type S	Type R	Type B	RTD Class B	RTD Class A
-328°F	*	—	*	*	—	—	—	—	± 2.34°F	± 2.34°F
-148°F	*	—	*	*	—	—	—	—	± 1.44°F	± 1.44°F
32°F	± 3.96°F	± 3.96°F	± 1.8°F	± 3.06°F	± 3.96°F	± 2.7°F	± 2.7°F	—	± 0.54°F	± 0.27°F
392°F	± 3.96°F	± 3.96°F	± 2.7°F	± 3.06°F	± 3.96°F	± 2.7°F	± 2.7°F	—	± 2.34°F	± 0.99°F
752°F	± 5.4°F	± 5.4°F	—	± 3.6°F	± 5.4°F	± 2.7°F	± 2.7°F	—	± 4.14°F	± 4.14°F
1112°F	± 8.1°F	± 8.1°F	—	± 5.4°F	± 8.1°F	± 2.7°F	± 2.7°F	—	± 5.94°F	± 5.94°F
1472°F	± 10.8°F	—	—	± 7.2°F	± 10.8°F	± 3.6°F	± 3.6°F	—	—	—
1832°F	± 13.5°F	—	—	—	± 13.5°F	± 4.5°F	± 4.5°F	± 9°F	—	—
2192°F	± 16.2°F	—	—	—	± 16.2°F	± 5.4°F	± 5.4°F	± 10.8°F	—	—
2552°F	—	—	—	—	—	± 6.3°F	± 6.3°F	± 12.6°F	—	—
2912°F	—	—	—	—	—	—	—	± 14.4°F	—	—

Note: The accuracies in the above table are estimates given at fixed points, they do not apply to temperature ranges and are intended only as examples to give a general idea of what can be expected. Consult Reotemp if a specific accuracy is required or to confirm accuracies at any points not listed in the above table.

*Thermocouples are normally supplied to meet the tolerances specified in the table for temperatures above 32°F. The same materials, however, may not fall within the tolerances for temperatures below 32°F. If materials are required to meet the tolerances stated for temperatures below 32°F, contact Reotemp sales.

Looking for better accuracy?



Reotemp offers **RTDs** up to 5x more accurate than Class B RTDs with the Hi-Accuracy™ option.

Thermocouples up to 2x more accurate with the Special Limits of Error option.

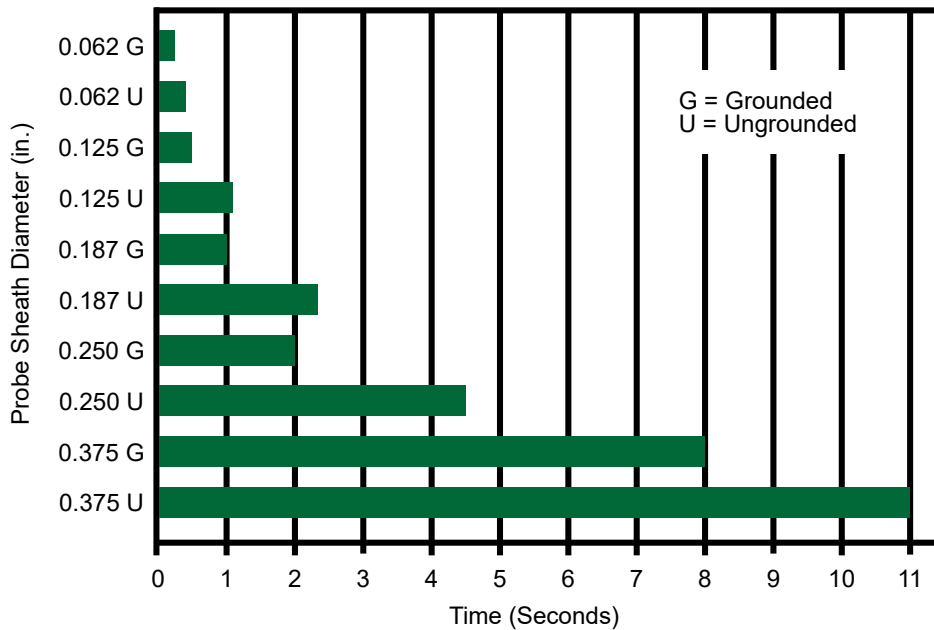
REFERENCE INFORMATION

THERMOCOUPLE TEMPERATURE OPERATING RANGES

Type	Minimum Temp. °F	Maximum Temp. °F
K	-328	2300
J	32	1400
T	-328	700
E	-328	1600
N	32	2300
S	32	2700
R	32	2700
B	1600	3100

THERMOCOUPLE TYPICAL RESPONSE TIMES

63.2% Temperature Change in an Agitated Water Bath



TEMP. LIMITS OF WIRE JACKETS

Jacket	Temp. Limit
PVC	221°F
Teflon	400°F
Fiberglass	900°F

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.

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				Display	STD Conduit	Material
	A	Cast Iron Black	4	65					3/4"	Cast Iron
	B	Cast Aluminum	4X	68					3/4"	Cast Aluminium
	E	Explosion Proof Aluminum	4X	68	✓	✓			3/4"	Cast Aluminium
	I	Blue Epoxy Aluminum	4X	68					3/4"	Cast Aluminium
	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
	C	Polypropylene Black	4	65					3/4"	Polypropylene
	G	316SS	4X	65					3/4"	316SS
	H	Aluminum Flip Top	4	65					3/4"	Cast Aluminium
	J	Explosion Proof 316SS	4X	65	✓	✓			3/4"	316SS
	T	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