# REOTEMP



# **THERMOCOUPLE & RTD**



# **WHY REOTEMP?**



#### **Exceptional Customer Support**

Direct access to our friendly and knowledgeable regional sales teams, product managers, engineers, and product specialists. No phone trees, no frustration.



#### **Online Product Configurators**

Our online product configurators are powerful tools that make specifying temperature and pressure instrumentation quick & easy. Create part numbers, see list pricing, & generate custom engineering drawings in seconds.





#### **Fast Standard Lead Times**



#### **Expedites Available**

Product	Standard Lead Time	Expedite
Head & Stem Assemblies	5-7 Days	1 Day
Digital Thermometers	5-7 Days	1 Day
Dual Mode Thermometers	5-7 Days	2-3 Days
Thermowells	1-10 Days	Same Day





Reotemp is a globally recognized ISO 9001 registered company that has been **manufacturing in the USA since 1965**.

#### **HEAD ASSEMBLIES 5-7 DAYS**



design that significantly improves lifespan and helps to maintain calibration in high vibration environments.



**Hi-Accuracy**™ is an optional feature on many of our RTD sensors. Reotemp uses high accuracy fixed point calibration cells to determine precise coefficients for the sensor you purchase. You will later input these values into your transmitter. Once the precision coefficients are entered, your sensor will be up to 5 times more accurate!

#### **HANDHELD PROBES**



## STEM ASSEMBLIES 5-7 DAYS



#### **MODEL W TRANSMITTER**



RTD or TC Input, Analog Output

> High Definition Local Operator Interface (LOI) with 3 Optical **Buttons**

Selectable Red or White Backlight, Backlight Flashes Red to Indicate Errors

Ex d Explosion Proof / Flame Proof Aluminum Head



HART 7 Functionality with HART 5 Compatibility















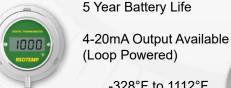


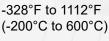






## **DIGITAL THERMOMETERS 5-7 DAYS**







4-20mA Output Available



#### RAILCAR THERMOMETER

Reotemp's Railcar Temperature Probes allow railcar terminals to measure the temperature of incoming and outgoing crude oil, corn syrup and other tanker fluids.



#### **Z-TEMP™TRANSMITTER**



The Z-Temp™ temperature transmitter is perfectly suited for applications where an explosion-proof sensor with a digital readout is required, but all of the extra features of a smart transmitter are not.







#### **PROTECTION TUBES**



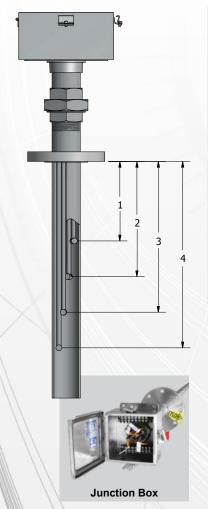
Material	Type	Max Temp		
Carbon Steel	Metal	700°F		
304SS	Metal	1,650°F		
316SS	Metal	1,650°F		
Inconel 600	Metal	2,150°F		
Mullite	Ceramic	2,700°F		
Hexoloy®	Ceramic	3,000°F		
Alumina	Ceramic	3,400°F		

Hexoloy® is a registered trademark of Saint-Gobain Ceramics & Plastics, Inc.

## **DMT** 5-7 DAYS

# RTD or Thermocouple for Remote Reading 200 **Bimetal Thermometer** for Local Reading **Increase Safety** Get a local reading when power fails or get a remote reading when the stem is bent.

## **MULTIPOINT SENSORS**

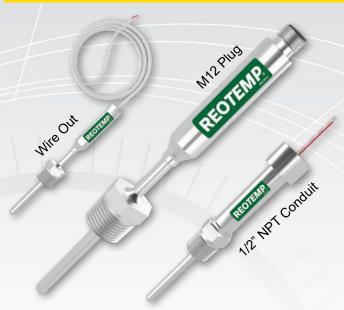






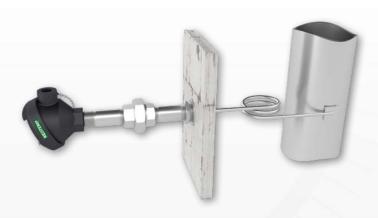


## **SLIMLINE™ TRANSMITTERS**



- Minimal Installation Space Required
- Rugged, Vibration & Impact Resistant Transmitters
- Hermetically Sealed (NEMA 7, IP67)

## **WELD PADS**



## **THERMOWELLS**

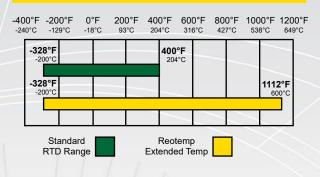


- - **Hydrostatic Testing**
  - Wake Frequency Calculation

#### THERMOCOUPLE TEMPERATURE OPERATING RANGES

#### 500°F 1000°F 1500°F 2000°F 2500°F 3000°F 3500°F -240°C 1093°C 1371°C 1649°C 1927°C -18°C 260°C 538°C 816°C -328/2300°F 32/1400°F -328/700°F Ε -328/1600°F ıΕ N 32/2300°F S 32/2700°F R 32/2700°F **B** 1600/3100°F B

#### RTD TEMPERATURE LIMITS



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	0
-328°F	*	-	*	*	-	-	-	-	± 2.34°F	± 2.34°F	Hi-Accuracy <sup>™</sup>
-148°F	*	-	*	*	-	-	-	_	± 1.44°F	± 1.44°F	Looking for
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	better accuracy?
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	RTDs
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	Up to 5x more accurate than Class
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	B RTDs with the Hi-Accuracy™
1472°F	± 10.8°F	-	-	± 7.2°F	± 10.8°F	± 3.6°F	± 3.6°F	-	-	-	option.
1832°F	± 13.5°F	-	-	-	± 13.5°F	± 4.5°F	± 4.5°F	± 9°F	-	-	Thermocouples
2192°F	± 16.2°F	-	-	-	± 16.2°F	± 5.4°F	± 5.4°F	± 10.8°F	-	-	Up to 2x more
2552°F	-	-	-	-	-	± 6.3°F	± 6.3°F	± 12.6°F	-	-	accurate with the Special Limits of
2912°F	-	-	-	-	-	-	-	± 14.4°F	-	-	Error option.

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.

TEMP. LIMITS OF WIRE JACKETS						
Jacket	Temp. Limit					
PVC	221°F					
Teflon	400°F					
Fiberglass	900°F					

	THERMOCOUPLE WIRE COLOR CODES (U.S.A. ANSI)									
	Thermocouple Grade	Extension Grade	Plug/Jack		Thermocouple Grade	Extension Grade	Plug/Jack			
K	Brown Red -	Yellow Yellow Red -	Yellow	N	Brown Orange +	Orange Orange +	Orange			
J	Brown White +	Black White +	Black	s	None Established	Green Black +	Green			
Т	Brown Red -	Blue + Red -	Blue	R	None Established	Green Black +	Green			
E	Brown Red -	Purple Purple Red -	Purple	В	None Established	Grey Grey +	White			

# **REOTEMP**

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