



# Mini-Hermet Temperature Transmitter - Explosion Proof, Adjustable

Form 558

**The Series 534MT Mini-Hermet Temperature Transmitter** is a loop-powered (9 to 30 VDC), 3-wire RTD input, and 4-20 mA or 1-5 VDC (optional) output field-mounted instrument. Exterior construction is hermetically sealed 316SS.

The Series 534MT Mini-Hermet Temperature Transmitter can be locally ranged in service while maintaining its explosion-proof integrity which differentiates it from non-serviceable instruments. Its performance is comparable to full-size conventional transmitters.

## Applications

Hermetically sealed 316SS exterior construction makes the 534MT Temperature Transmitter suitable for hazardous locations and hostile environments where space is limited. When the RTD is enclosed in a 316SS or 347SS thermowell, the temperature of a wide variety of process fluids can be sensed. The 534MT Temperature Transmitter meets offshore and onshore specifications for the petrochemical industry and other industrial process applications.

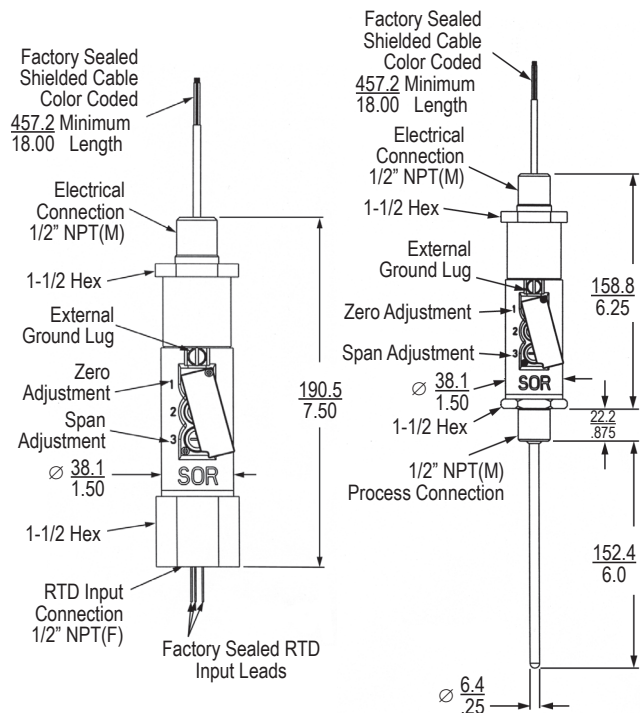
## Features and Benefits

- Compact, hermetically sealed 316SS housing
- Ranges available from -328 to 1000°F (-200 to 538°C)
- Magnetically coupled, zero and span adjustments permit in-service calibration without declassification of hazardous area
- Accuracy = 0.1% URL
- Weathertight - NEMA 4X
- Serialized with 3-year Warranty
- Mounting: Thermowell, electrical conduit, pipe stanchion, or bulkhead
- Wetted parts meet NACE specifications



## Dimensions

Dimensions are for reference only and subject to change without notice. Contact the factory for certified drawings. All dimensions are expressed as millimeters over inches. (Linear = mm/in.)



# Mini-Hermet Temperature Transmitter

## Specifications

Product Specifications		
Accuracy (L, H, and R)	$\pm 0.3\%$ URL	<b>RTD Connection</b> Remote Mount 1/2" NPT(F), 3166; 18-inch, 24 AWG leads (optional junction box with screw terminals)  Direct Mount 1/2" NPT(M), 316SS; 6 -inch insertion length (standard); 2000 psi (138 bar) maximum working pressure  <b>Electrical Connection</b> Size 1/2" NPT(M) Termination 18 inch, 24 AWG leads (optional junction box with screw terminals)  Shipping Weight 3 lbs. (1.5 kg) Warranty 3 year
Linearity	$\pm 0.2\%$ URL	
Turndown	5:1	
Zero Offset	$\pm 20\%$ URL	
Temperature Range		
Ambient	-40 to 160°F (-40 to 71°C)	
Storage	-40 to 185°F (-40 to 85°C)	
Temperature Effects	$\pm 1.0\%$ URL Total Error Band	
Supply Voltage	9 to 30 VDC	
Output	4 to 20 mA (1 to 5 VDC optional), loop powered	
Loop Resistance	750 $\Omega$ 24 VDC	
Circuit Protection	Reverse polarity, EMI/RFI	
Construction	316SS housing (CF8M)	
Environment Protection	NEMA 4X, IP66	

Design and specifications are subject to change without notice. For latest revision, see [www.sorinc.com](http://www.sorinc.com).

### Agency Listings

Junction Box (Only)

**FM and CSA**

Explosion Proof

Class I, Groups A, B, C, and D;

Class II, Groups E, F, and G;

Class III; Divisions 1 and 2

**Weathertight**

NEMA 4X, Type 4X, IP66



### Ordering Information

Select an adjustable range designator ① from the transmitter range selection table and insert it in the appropriate model number.

Model Number	Output	Mounting
534MT - TN① - P9 - C2A	4-20 mA	Remote
534MT - TN 15 - P9 - C7A		Direct

①

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## Transmitter Range Selection

### Remote Mount

Designator ①	RTD Temperature Range		Maximum Process Temperature	
	°F	°C	°F	°C
1	-328 to 0	-200 to -18	450	232
15	-150 to 1500	-46 to 66		
41	0 to 400	-181 to 204		

Contact factory for other ranges.

### Direct Mount

Designator	Adjustable Range		Maximum Process Temperature	
	°F	°C	°F	°C

Six-inch insertion length is normally available from stock. Optional insertion lengths are designated with an X at the end of the model number. Consult the factory for availability and lead times.

### Remote Sensor

A factory-supplied RTD can be ordered as a separate line item by using its part number. The part number is not part of the transmitter model number.

Part Number	RTD Temperature Range		Cable Length Feet
	°F	°C	
8924 - 103	-150 to 400	-101 to 204	10
8924 - 104	-150 to 1000	-101 to 536	10
8924 - 114	-150 to 400	-101 to 204	15
8924 - 115	-150 to 1000	-101 to 536	15
8924 - 116	-150 to 400	-101 to 204	20
8924 - 117	-150 to 1000	-101 to 536	20

### Notes

1. Part number 8924-103 is stocked for normal delivery. Longer lead times can be expected with other part numbers.
2. RTD leads are Teflon insulated with PVC coated, flexible stainless steel armor. 1/2" NPT(M) cable gland fitting included.
3. RTD sensor wetted material: 1/4" O.D. 316SS sheathed sensor, 1/2" NPT(M) brass compression fitting.
4. RTD insertion length 12 inches.
5. Three-wire RTD's, .00385 temperature coefficient of resistance.

### Accessories

Add accessory designator(s) to the end of the model number.

Accessory / Option Description	Designator
Cleaned for industrial oxygen service	BB
Pipe Kit	PK
Fiber tag attached to housing	PP
Stainless steel tag wired to housing	RR
Stainless steel terminal box with terminal block (on electrical connection end)	TL
Stainless steel terminal box with RTD terminal strip (on sensor end)	TM
Stainless steel oversize nameplate	TT
Fungicidal varnish	VV
Epoxy coating	YY

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