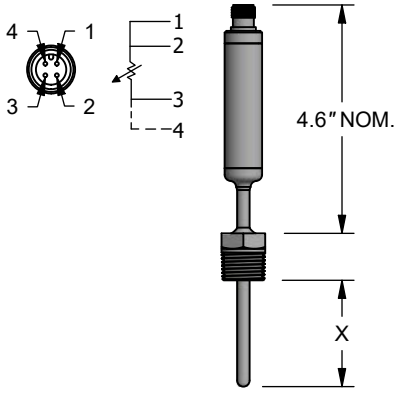
SLIMLINE TEMPERATURE TRANSMITTER

Reotemp's Slimline Temperature Transmitter is a compact, rugged transmitter for applications where space is limited. The fully sealed design keeps out any water, liquids or moisture. It's great for applications where the transmitter is exposed to the elements or equipment is washed down. Our thick-walled 316SS construction makes this transmitter shock and vibration resistant, increasing product longevity.

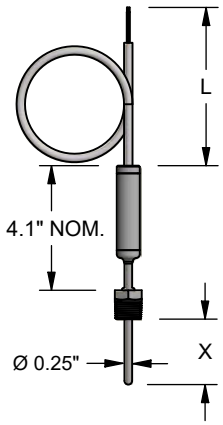
Made in USA

FEATURES / BENEFITS

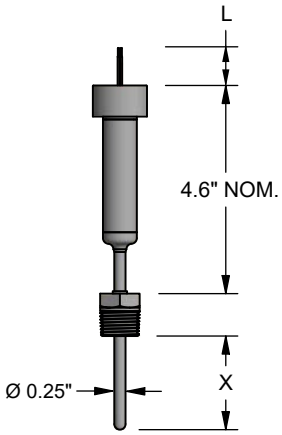
- Minimal Installation Space Required
- Rugged, Vibration & Impact Resistant Transmitters
- Hermetically Sealed (IP67)
- All-Welded 316SS Construction
- 4-20mA Linearized Two Wire Output
- Wide Temperature Range with High Accuracy
- A Variety of Process Connections and Electrical Terminations



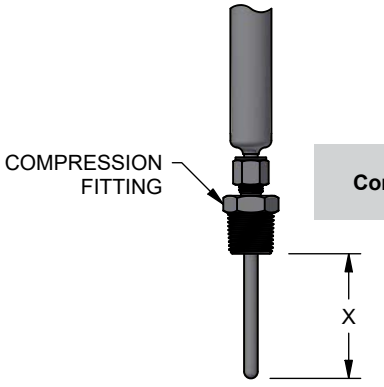
1/2" NPT Connection with M12 Out



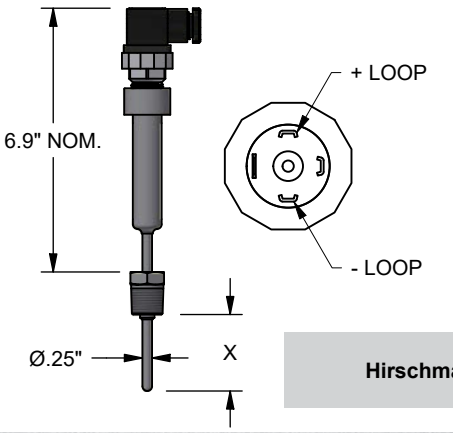
1/2" NPT Connection with Lead Wire Out



1/2" NPT Connection with 1/2" NPT Conduit Out



Compression Fitting



Hirschmann

SLIMLINE TEMPERATURE TRANSMITTER

SENSOR SPECIFICATIONS

Environmental Conditions	
Maximum Process Temperature	-328/400°F
Common Specifications	
Wire Types	Teflon insulated 24 AWG stranded, PVC insulated 24 AWG Stranded, or Teflon insulated 24 AWG Stranded with Aluminum Mylar Shield and Drain Wire
Wetted Material	316 Stainless Steel
Housing Material	316 Stainless Steel
RTD Accuracy	Class A = ± (0.15 + 0.002|t|)°C [-30/200°C] 1/10 B = ± (0.03 + 0.0005|t|)°C [0/50°C] Outside of Stated Ranges = ± (0.3 + 0.005|t|)°C [-200/200°C]
Input Specifications	
RTD Type	Pt100, Ni100

Observed Authority Requirements	
RoHS	2011/65/EU

TRANSMITTER SPECIFICATIONS

Environmental Conditions	
Ambient Temperature	-40/185°F
Relative humidity	<95% relative humidity (non-condensing)
Common Specifications	
Supply Voltage	8.0 to 35 VDC
Internal Power Dissipation	25 mW to 0.8 W
Response Time (Programmable)	0.33 to 60s
Voltage Drop	8.0 VDC
Warm-up Time	5 min.
Effect of Supply Voltage Change	< 0.005% of Span / VDC
Accuracy	Better than 0.1% of selected range + RTD Accuracy
EMC Immunity Influence	<±0.5% of Span

Output Specifications	
Updating Time	135 ms
Signal Range	4-20 mA
Min. Signal Range	16 mA
Load (@ current output)	≤ (Vsupply - 8) / 0.023 [Ω]
Load Stability	≤ 0.01% of span /100Ω
Sensor Error Indication	Programmable 3.5 to 23 mA
NAMUR NE43 Upscale/ Downscale	23 mA / 3.5 mA
Of Span	= of the presently selected range
Input Specifications	
Cable Resistance Per Wire	10 Ω (max.)
Sensor Current	> 0.2 mA, < 0.4 mA
Effect of Sensor Cable Resistance (3-wire)	< 0.002 Ω/Ω
Sensor Error Detection	Yes
Max. Offset	50% of selected max. value

SLIMLINE TEMPERATURE TRANSMITTER

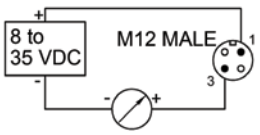
BUILD YOUR SLIMLINE TRANSMITTER: Choose options to build a part number. For example: RTDX0251F1P36

RTDX	025	1	F	1	P36
MODEL	STEM LENGTH "X"	CONNECTION	TEMPERATURE SCALE	OUTPUT	ELECTRICAL CONNECTION
RTDX = Slimline RTD Temperature Transmitter	**025** = 2.5" **040** = 4" **060** = 6" **090** = 9" **120** = 12"	**1** = 1/2" NPT* **4** = 1/4" NPT* **X** = Plain Bushing **T** = 1/4" NPT Sliding Compression Fitting** **U** = 1/2" NPT Sliding Compression Fitting**	**F** = Fahrenheit **C** = Celsius	**1** = 4-20mA, 2-wire	**P??** = Lead wire, with Cable Length "L" in Inches. Example: P36 = 36" **C??** = 1/2" NPT Conduit, with lead wire length "L" in inches. Example: C06 = 6" **M** = M12 Connector **H** = Std. Hirschmann (DIN Form A), field wireable

*If using a thermowell with 1/2" NPT or 1/4" NPT connection, select stem length "X" to be 1/2" shorter than the thermowell "A" dimension.

**If using a thermowell with a compression fitting, select stem length "X" to be 2" longer than the thermowell "A" dimension to account for compression fitting length.

M12 Wiring Diagram for 4-20 mA Output Option



TRANSMITTERS