

# Temperature Sensors & Transmitters

## High Temp, Low Temp



# High & Low

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High Temperature (HT) and Low Temperature (LT) sensors are air encapsulated. This allows the sensor to have a more stable output since the sensing element isn't subjected to the constant expansion and contraction of the encapsulation materials. The sensors are mounted in a 1/4" diameter stainless steel probe and have with either nickel plated fiberglass (HT) or teflon (LT) lead wires. Key components are rated up to 743°F for High Temperature Sensors and down to -328°F for Low Temperature Sensors.

## Specifications

<b>Transmitter Supply Voltage</b>	8.5 to 32 VDC	249Ω Load: +13.5 to 32 VDC	49Ω Load: +18.5 to 32 VDC
<b>Temperature Transmitter Output</b>	2-wire, Linear 4 to 20 mA DC Current (Standard)		1 to 5 VDC or 2 to 10 VDC
<b>Temperature Accuracy</b>	+/- .12% @ 32°F (0°C)		
<b>Sensor Temperature Coefficient</b>	0.00385Ω/Ω/°C		
<b>Sensor Operating Range</b>	Low Temp: -328 to 392°F (-200 to 200°C)	High Temp: -40 to 743°F (-40 to 395°C)	
<b>Temperature Effect</b>	+/- .2% of full scale for spans <100°F (55°C)	+/- .5% of full scale for spans >100°F (55°C)	
<b>Calibrated Accuracy (Linearity, Hysteresis)</b>	+/- .2% of full scale for spans >500°F (275°C)	+/- .4% of full scale for spans <500°F (275°C)	
<b>Minimum &amp; Maximum Spans</b>	50°F (28°C) minimum/1000°F (550°C) maximum		
<b>Transmitter Operating Temperature</b>	-40 to 185°F (-40 to 85°C)		
<b>Sensor Standardization</b>	Din IEC 751 class B		
<b>Product Dimensions (Duct without Box)</b>	(L) 4.00" (W) 2.00" (H) 1.70"		
<b>Product Dimensions (Immersion)</b>	(L) 4.56" (W) 2.81" (D) 1.62" (Dimension does not include probe length)		
<b>Product Dimensions (Immersion, Machined Well)</b>	(L) 4.56" (W) 2.81" (D) 1.62" (Dimension does not include probe length)		
<b>Product Dimensions (Outside Air)</b>	(H) 3.70" (W) 2.55" (D) 2.22" (Dimension does not include probe length)		

## Ordering

Select one Series (A) & specify Span if a TT version is selected. Choose one Configuration (B) & one Length (C). If a TT version was selected in (A) complete Output (D). If a TT version was not selected in (A), your part number is finished. Only complete (D) if a TT version was selected in (A). **NOTE:** See Thermowell data sheet for proper well selection for all Immersion related sensors.

A Sensor Series	B Configuration	C Length	D Output
<input type="radio"/> I-100-LT	<input type="radio"/> D (Duct) ▶	<input type="radio"/> 4" <input type="radio"/> 8" <input type="radio"/> 12" <input type="radio"/> 18"	<input type="radio"/> 1 (1 to 5 VDC)
<input type="radio"/> I-1K-LT	<input type="radio"/> DO (Duct without Box) ▶	<input type="radio"/> 4" <input type="radio"/> 8" <input type="radio"/> 12" <input type="radio"/> 18"	<input type="radio"/> 2 (2 to 10 VDC)
<input type="radio"/> I-100-HT	<input type="radio"/> I (Immersion) ▶	<input type="radio"/> 2.5" <input type="radio"/> 4" <input type="radio"/> 6"	<input type="radio"/> 4 (4 to 20 mA)
<input type="radio"/> I-1K-HT	<input type="radio"/> IM (Immersion, Machined Well) ▶	<input type="radio"/> 2.5" <input type="radio"/> 4" <input type="radio"/> 6"	
<input type="radio"/> I-TT100-LT (Specify Span & Output (E))	<input type="radio"/> O (Outside Air) ▶	<input type="radio"/> ----	
<input type="radio"/> I-TT1K-LT (Specify Span & Output (E))			
<input type="radio"/> I-TT100-HT (Specify Span & Output (E))			
<input type="radio"/> I-TT1K-HT (Specify Span & Output (E))			

## Build your part number

After completing (A), (B), (C), & (D) from the above table, fill in the Part Number Table below. An example part number is offered.

A	B	C	D
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EXAMPLE: I-1K-LT - IM - 4"

