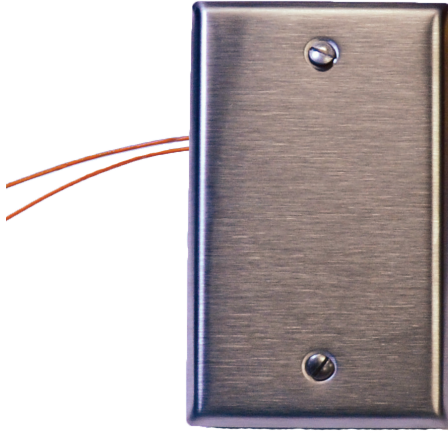


TP SERIES

Durable Device for Temperature Monitoring



TP

TP Series flush mounted temperature sensors are designed to monitor the temperature of the air in areas where sensor durability and security are needed. They are ideal for spaces where moisture and water vapor are concerns. The back of the TP is insulated to reduce interior wall temperature influence. The TP is for indoor use only, and it is warranted for a period of five years.

SPECIFICATIONS

Wiring	22 AWG; 2-wire: RTD/Thermistor; 3-wire: Linitemp
Housing	Brushed 430 stainless steel
Operating Temperature	-25 to 105 °C (-13 to 221 °F)*

WARRANTY

Limited Warranty	5 years
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AGENCY APPROVALS



* For RTD and thermistor accuracies and ranges, see the thermistor table.

**The CE mark indicates RoHS2 compliance. Please refer to the CE Declaration of Conformity for additional details.

Moisture resistant

Potted sensor element

Durable

Stainless steel construction

Easy installation

Mounts to standard duplex wall mount box

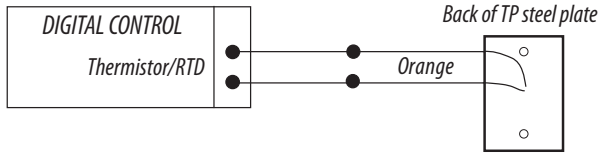
Flexible

Available with linitemp, RTD, or thermistors...application flexibility

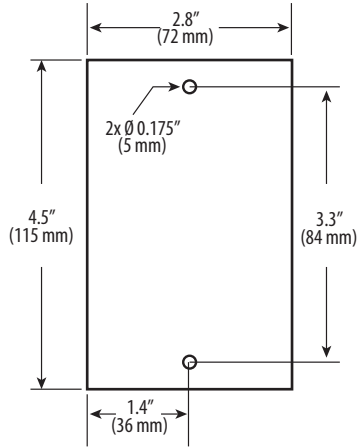
Simple maintenance

Easy to clean

WIRING DIAGRAM



DIMENSIONAL DRAWING



ORDERING INFORMATION

<p>Sensor Type</p> <p>TP <input type="checkbox"/></p> <p>B = 100R Platinum, RTD C = 1k Platinum, RTD D = 10k T2, Thermistor E = 2.2k, Thermistor F = 3k, Thermistor G = 10k CPC, Thermistor H = 10k T3, Thermistor I = 1k Balco (Nickel-iron) RTD J = 10k Dale, Thermistor K = 10k w/11k shunt, Thermistor M = 20k NTC, Thermistor N = 1800 ohm, Thermistor R = 10k US, Thermistor S = 10k 3A221, Thermistor T = 100k, Thermistor U = 20k "D", Thermistor W = 10k T2 high accuracy, Thermistor Y = 10k T3 high accuracy, Thermistor</p>	<p>Calibration Certificate</p> <p><input type="checkbox"/></p> <p>0 = None 1 = 1-point cal validation* 2 = 2-point cal validation*</p> <p>Example:</p> <p>TP <input type="checkbox"/> W <input type="checkbox"/> 5 <input type="checkbox"/> 1</p> <p>* Not available with W and Y high-accuracy thermistors.</p>
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THERMISTOR TABLE

Class	Pt RTD		Balco RTD	THERMISTOR				
	100 Ohm	1000 Ohm	1000 Ohm	10k Type 2	10k Type 3	10k Dale	10k "G" US	20k
Accuracy	±0.3°C	±0.3°C	±1% @70°C	±1.0°C	±0.2°C	±0.2°C	±0.2°C	Consult
	0.00385 curve	0.00385 curve		-50/150°C	0/70°C	-20/70°C	0/70°C	Factory
Temp. Response*	PTC	PTC	PTC	NTC	NTC	NTC	NTC	NTC

*PTC: Positive Temperature Coefficient *NTC: Negative Temperature Coefficient

STANDARD RTD AND THERMISTOR VALUES (Ohms Ω)

°C	°F	100 Ohm	1000 Ohm	1000 Ohm	10k Type 2	10k Type 3	10k Dale	10k "G" US	20k NTC
-50	-58	80.306	803.06	740.46	692,700	454,910	672,300	441,200	1,267,600
-40	-40	84.271	842.71	773.99	344,700	245,089	337,200	239,700	643,800
-30	-22	88.222	882.22	806.02	180,100	137,307	177,200	135,300	342,000
-20	-4	92.160	921.60	841.00	98,320	79,729	97,130	78,910	189,080
-10	14	96.086	960.86	877.46	55,790	47,843	55,340	47,540	108,380
0	32	100.000	1,000.00	913.66	32,770	29,588	32,660	29,490	64,160
10	50	103.903	1,039.03	952.25	19,930	18,813	19,900	18,780	39,440
20	68	107.794	1,077.94	991.82	12,500	12,272	12,490	12,260	24,920
25	77	109.735	1,097.35	1,013.50	10,000	10,000	10,000	10,000	20,000
30	86	111.673	1,116.73	1,035.18	8,055	8,195	8,056	8,194	16,144
40	104	115.541	1,155.41	1,077.68	5,323	5,593	5,326	5,592	10,696
50	122	119.397	1,193.97	1,120.52	3,599	3,894	3,602	3,893	7,234
60	140	123.242	1,232.42	1,166.13	2,486	2,763	2,489	2,760	4,992
70	158	127.075	1,270.75	1,210.75	1,753	1,994	1,753	1,990	3,512
80	176	130.897	1,308.97	1,254.55	1,258	1,462	1,258	1,458	2,516
90	194	134.707	1,347.07	1,301.17	919	1,088	917	1,084	1,833
100	212	138.506	1,385.06	1,348.38	682	821	679	816.8	1,356
110	230	142.293	1,422.93	1,397.13	513	628	511	623.6	1,016
120	248	146.068	1,460.68	1,447.44	392	486	389	481.8	770
130	266	149.832	1,498.32	1,496.28	303	380	301	376.4	591
Sensor Codes		B	C	I	D	H	J	R	M

To compute Linitemp Temperature
 mV reading/10 - 273.15 = Temperature in °C

