

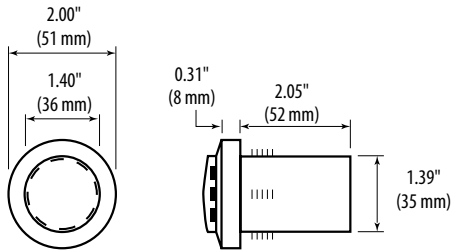


TS Series

Recessed Temperature Sensors

- Recessed press-fit sensor virtually "disappears"...great for museums and galleries
- Easy to install recessed units

DIMENSIONS



ORDERING INFORMATION

(Sensor Type)

(Cal Certificate)

TS



- 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
- J = 10k Dale, Thermistor
- K = 10k w/shunt, Thermistor
- M = 20k NTC, Thermistor
- N = 1800 ohm, Thermistor
- P = 10mV/°C, Linitemp
- R = 10k US, Thermistor
- S = 10k 3A221, Thermistor
- T = 100k, Thermistor

- 0 = None
- 1 = 1 point Cal validation
- 2 = 2 point Cal validation

Example:

TS	C	2
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NOTE: For 4-20mA transmitter output, order a TSBx and accessory AA10xx.
See page 236



SPECIFICATIONS

Connection	2-Wire Leads, 22 AWG on all models
Housing	White ABS Plastic (For Black consult factory)

SPECIFICATIONS (Linitemp)

Connection	3-Wire
Power	5 to 30VDC
Output	1µA/°C or 10mV/°C
Operating Temperature	-25° to 105°C
Accuracy: Calibration Error:	1.5°C typical; 2.5°C max. at 25°C*
Error over Temperature:	1.8°C typical; 3.0°C max. over 0° to 70°C range 2.0°C typical, 3.5°C max. over -25° to 105°C range

*Room temperature error documented on each unit.

To compute Linitemp Temperature: 2-Wire version (1µA/°C)
 µA reading - 273.15 = Temperature in °C
 3-Wire version (10mV/°C)
 (mV reading/10 - 273.15 = Temperature in °C)

Class	Pt RTD		THERMISTOR								
	100 Ohm	1000 Ohm	3k	10k Type 2	10k Type 3	10k Dale	10k 3A221	10k "G" US	20k	100k	TAC 1.8k
Accuracy	±0.3°C	±0.3°C	±0.2°C	±1.0°C	±0.2°C	±0.2°C	±1.1°C	±0.2°C	Consult	Consult	Proprietary
Temp. Response*	0.0385 curve PTC	0.0385 curve PTC	0/70°C NTC	-50/150°C NTC	0/50°C NTC	-20/70°C NTC	0/70°C NTC	0/70°C NTC	Factory NTC	Factory NTC	NTC

*PTC: Positive Temperature Coefficient

*NTC: Negative Temperature Coefficient

STANDARD RTD AND THERMISTOR VALUES (Ohms)

°C	°F	100 Ohm	1000 Ohm	3k	10k Type 2	10k Type 3	10k Dale	10k 3A221	10k "G" US	20k	100k	TAC 1.8k
-50	-58	80.306	803.06	205,800	692,700	454,910	672,300	-	441,200	1,267,600	-	63,880
-40	-40	84.271	842.71	102,690	344,700	245,089	337,200	333,562	239,700	643,800	3,366,000	35,680
-30	-22	88.222	882.22	53,730	180,100	137,307	177,200	176,081	135,300	342,000	1,770,000	20,720
-20	-4	92.160	921.60	29,346	98,320	79,729	97,130	96,807	78,910	189,080	971,200	12,460
-10	14	96.086	960.86	16,674	55,790	47,843	55,340	55,252	47,540	108,380	553,400	7,733
0	32	100.000	1000.00	9,822	32,770	29,588	32,660	32,639	29,490	64,160	326,600	4,940
10	50	103.903	1039.03	5,976	19,930	18,813	19,900	19,901	18,780	39,440	199,000	3,240
20	68	107.794	1077.94	3,750	12,500	12,272	12,490	12,493	12,260	24,920	124,900	2,177
25	77	109.735	1097.35	3,000	10,000	10,000	10,000	10,000	10,000	20,000	100,000	1,800
30	86	111.673	1116.73	2,417	8,055	8,195	8,056	8,055	8,194	16,144	80,580	1,496
40	104	115.541	1155.41	1,598	5,323	5,593	5,326	5,324	5,592	10,696	53,260	1,049
50	122	119.397	1193.97	1,081	3,599	3,894	3,602	3,600	3,893	7,234	36,020	750
60	140	123.242	1232.42	747	2,486	2,763	2,489	2,486	2,760	4,992	24,880	545
70	158	127.075	1270.75	527	1,753	1,994	1,753	1,751	1,990	3,512	17,510	403
80	176	130.897	1308.97	378	1,258	1,462	1,258	1,255	1,458	2,516	12,560	302
90	194	134.707	1347.07	-	919	1,088	917	915	1,084	1,833	9,164	230
100	212	138.506	1385.06	-	682	821	679	678	816.8	1,356	6,792	177
110	230	142.293	1422.93	-	513	628	511	509	623.6	1,016	5,108	139
120	248	146.068	1460.68	-	392	486	389	388	481.8	770	3,894	109
130	266	149.832	1498.32	-	303	380	301	299	376.4	591	3,006	87