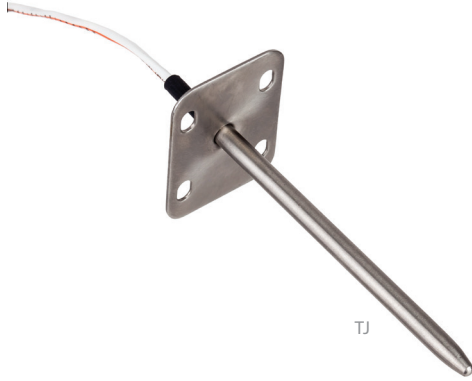


## TJ SERIES

VAV Discharge Air Sensor for Reheat Applications



### Easy installation

Stainless steel duct probe with mounting flange

### Two wires

2-wire installation (optional quick disconnect)...installs in minutes

### VAV systems

Installation-ready for VAV systems and plenum areas...saves money on job commissioning and warranty service

### Plenum rated

Plenum rated cable standard

### Application flexibility

4" or 8" (102 mm or 204 mm) duct probes

The TJ Series temperature sensors are highly accurate and cost effective, with trouble-free installation. The sensor is encased in a sturdy corrosion-resistant stainless steel probe. A variety of RTD/thermistor sensor and probe length options are available for maximum versatility in applications.

#### SPECIFICATIONS

Wiring	22 AWG; 2-wire: RTD/Thermistor
Probe	Stainless steel
Operating Temp	Probe: -25° to 105 °C (-13 to 221 °F) Wiring side: Up to 75 °C (167 °F)

#### WARRANTY

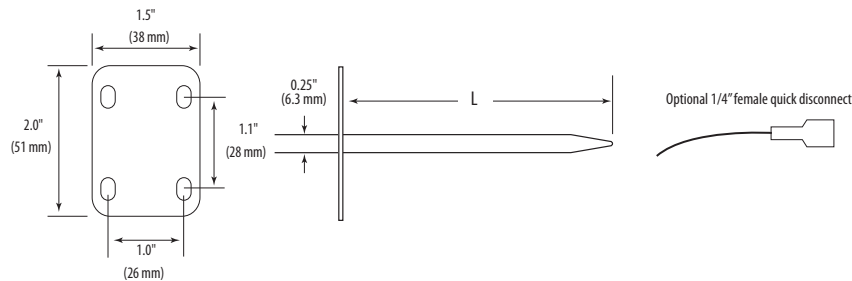
Limited Warranty	5 years
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Increased cable length affects the readings of lower resistance RTDs (100R platinum, RTD).  
\* Room temperature offset documented on each unit.

#### APPLICATIONS

- VAV reheat boxes
- Dual duct boxes
- Fan coils
- Prove that hot water valve or electric heat is functioning properly
- Check individual reheating stages
- Check for hot water valve leaks
- Determine if damper actuators are functioning on dual duct boxes

#### DIMENSIONAL DRAWING



**ORDERING INFORMATION**

<p>Probe Length "L"</p> <p>TJ <input type="checkbox"/></p> <p>B = 4" (102mm) D = 8" (203mm)</p>	<p>Sensor Type</p> <p><input type="checkbox"/></p> <p>B = 100R platinum, RTD C = 1k platinum, RTD D = 10k T2, Thermistor E = 2.2k, Thermistor F = 3k, 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 P = 10mV/°C, Linitemp T = 100k, Thermistor W = 10k T2 high accuracy, Thermistor Y = 10k T3 high accuracy, Thermistor</p>	<p>Output</p> <p><input type="checkbox"/></p> <p>= Resistive</p>	<p>Cal Certificate</p> <p><input type="checkbox"/></p> <p>0 = None 2 = 3-point NIST calibration</p>	<p>Option</p> <p><input type="checkbox"/></p> <p>0 = Standard 5 ft. cable, No QDs 1 = 1/4" Female Quick Disconnects (QD) 2 = 1/4" QDs with 8 ft. leadwires 3 = 10 ft. cable, no QDs</p>
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Example:

TJ  B  D  R  2  1

**STANDARD RTD AND THERMISTOR VALUES**

Class	Pt RTD		Balco RTD	THERMISTOR									
	100 Ohm	1000 Ohm	1000 Ohm	2.2k	3k	10k Type 2	10k Type 3	10k Dale	20k	100k	10k Type 2	10k Type 3	
Accuracy	±0.3°C 0.00385 curve	±0.3°C 0.00385 curve	±1% @70°C	±0.2°C 0/70°C	±0.2°C 0/70°C	±1.0°C -50/150°C	±0.2°C 0/70°C	±0.2°C -20/70°C	Consult Factory	Consult Factory	±0.1°C 20/70°C ±0.2°C 0/20°C	±0.1°C 0/70°C	
Temp. Response*	PTC	PTC	PTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	NTC	
High Accuracy													

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

**STANDARD RTD AND THERMISTOR VALUES (Ohms Ω)**

°C	°F	100 Ohm	1000 Ohm	1000 Ohm	2.2k	3k	10k Type 2	10k Type 3	10k Dale	20k NTC	100k	10k Type 2	10k Type 3
-50	-58	80.306	803.06	740.46	154,464	205,800	692,700	454,910	672,300	1,267,600	-	692,700	454,910
-40	-40	84.271	842.71	773.99	77,081	102,690	344,700	245,089	337,200	643,800	3,366,000	344,700	245,089
-30	-22	88.222	882.22	806.02	40,330	53,730	180,100	137,307	177,200	342,000	1,770,000	180,100	137,307
-20	-4	92.160	921.60	841.00	22,032	29,346	98,320	79,729	97,130	189,080	971,200	98,320	79,729
-10	14	96.086	960.86	877.46	12,519	16,674	55,790	47,843	55,340	108,380	553,400	55,790	47,843
0	32	100.000	1,000.00	913.66	7,373	9,822	32,770	29,588	32,660	64,160	326,600	32,770	29,588
10	50	103.903	1,039.03	952.25	4,487	5,976	19,930	18,813	19,900	39,440	199,000	19,930	18,813
20	68	107.794	1,077.94	991.82	2,814	3,750	12,500	12,272	12,490	24,920	124,900	12,500	12,272
25	77	109.735	1,097.35	1,013.50	2,252	3,000	10,000	10,000	10,000	20,000	100,000	10,000	10,000
30	86	111.673	1,116.73	1,035.18	1,814	2,417	8,055	8,195	8,056	16,144	80,580	8,055	8,195
40	104	115.541	1,155.41	1,077.68	1,199	1,598	5,323	5,593	5,326	10,696	53,260	5,323	5,593
50	122	119.397	1,193.97	1,120.52	811.5	1,081	3,599	3,894	3,602	7,234	36,020	3,599	3,894
60	140	123.242	1,232.42	1,166.13	561.0	747	2,486	2,763	2,489	4,992	24,880	2,486	2,763
70	158	127.075	1,270.75	1,210.75	395.5	527	1,753	1,994	1,753	3,512	17,510	1,753	1,994
80	176	130.897	1,308.97	1,254.55	284.0	378	1,258	1,462	1,258	2,516	12,560	1,258	1,462
90	194	134.707	1,347.07	1,301.17	207.4	-	919	1,088	917	1,833	9,164	919	1,088
100	212	138.506	1,385.06	1,348.38	153.8	-	682	821	679	1,356	6,792	682	821
110	230	142.293	1,422.93	1,397.13	115.8	-	513	628	511	1,016	5,108	513	628
120	248	146.068	1,460.68	1,447.44	88.3	-	392	486	389	770	3,894	392	486
130	266	149.832	1,498.32	1,496.28	68.3	-	303	380	301	591	3,006	303	380
Sensor Codes		B	C	I	E	F	D	H	J	M	T	W	Y

Z202030-0U

