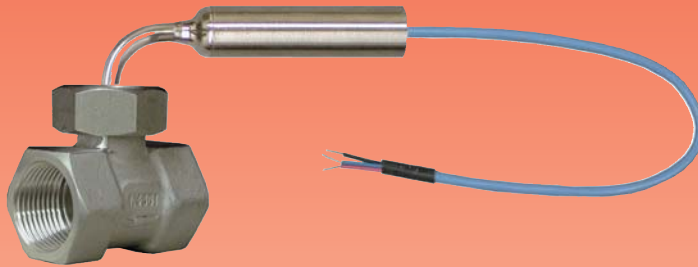


## TSP SERIES TEMPERATURE SENSOR FOR PIPES

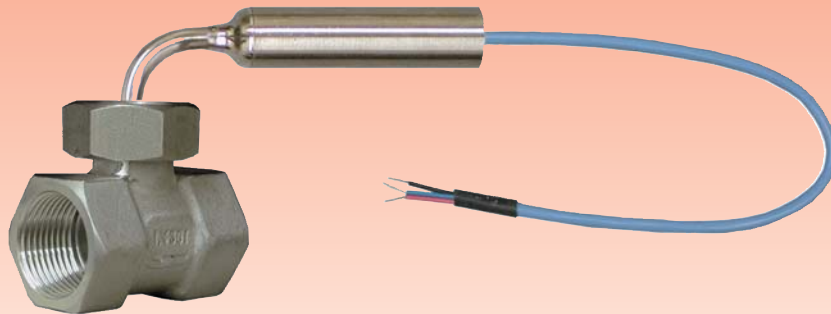


Flow  
Pressure  
Level  
Temperature  
measurement  
monitoring  
control

T2



- For Liquids or Gases in Pipes
- Pt-100 RTD or 4-20 mA Output
- 1/4" to 1-1/2" Pipe Sizes
- Temperature Ranges -40 to +300°F
- Brass or Stainless Steel Housings
- Simple and Reliable



Contact:  
Industrial Process Measurement, Inc.  
3910 Park Avenue, Unit 7  
Edison, NJ 08820  
732-632-6400  
support@instrumentation2000.com  
<http://www.instrumentation2000.com>

Model:  
TSP

**Features**

- For Liquids or Gases in Pipes
- Pt-100 RTD or 4-20 mA Output
- 1/4" to 1-1/2" Pipe Sizes
- Temperature Ranges -40 to +300°F
- Brass or Stainless Steel Housings
- Simple and Reliable

The series TSP temperature sensors are ideal for temperature measurement of liquids and gases in pipes up to 1-1/2" in diameter. The sensor is conveniently installed into a threaded pipe tee made of either brass or stainless steel, making installation completely hassle free. The user has the choice of either a Pt-100 RTD or fixed range integral 4-20 mA transmitter as an output.

The TSP series' simple design makes it an economical choice for OEMs and end users who are looking for an economical yet reliable solution for temperature measurement in small pipes.

**Specifications**

**Temperature**

**Range:** -40 to +300°F

**Max. Pressure:** 750 PSIG

**Wetted Materials**

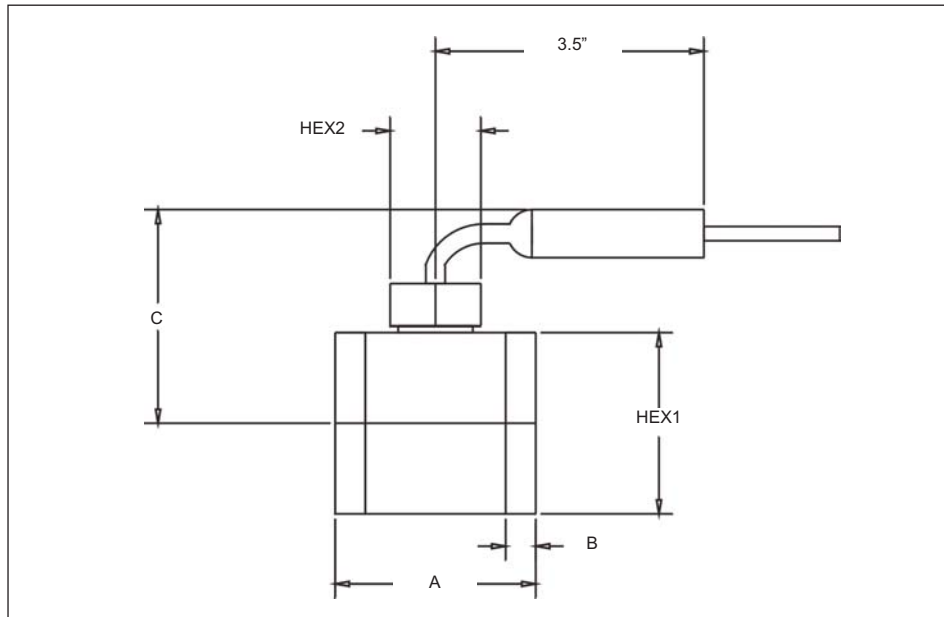
**Brass Housing:** Brass, 316 SS, Viton

**Stainless Housing:** 316 SS, 304 SS, Viton

**Electrical Specifications**

**Available Outputs:** RTD or 4-20 mA integral transmitter based on order code

**RTD Type:** Pt-100, 3-wire, Class B per DIN 43670,  $\alpha = 0.00385$



**TSP Dimensional Drawing**

Order Number	Dimensions (inches)			HEX <sub>1</sub>	HEX <sub>2</sub>	Thread (NPT)
	A	B	C			
TSP-5...N2....	1.97	0.39	2.45	1.06	1.18	1/4"
TSP-5...N3....	1.97	0.39	2.45	1.06	1.18	3/8"
TSP-5...N4....	1.97	0.39	2.45	1.06	1.18	1/2"
TSP-5...N5....	2.05	0.59	2.51	1.25	1.18	3/4"
TSP-5...N6....	2.20	0.59	2.61	1.54	1.18	1"
TSP-5...N7....	2.60	-	2.80	1.97	1.18	1-1/4"
TSP-5...N8....	2.60	-	2.92	2.36	1.18	1-1/2"

**Transmitter**

**Type:** 4-20 mA, 2-wire fixed range

**Supply Voltage Range:** 10-30 VDC

**Max. Loop Load:**  $50(V_{supply} - 10)$  ohms

**Accuracy:**  $\pm 0.5\%$  of span

**Zero/Span Drift:** 0.025%/F

**Electrical**

**Connection:** 6 Ft. Teflon jacketed cable or 6 Ft. Teflon jacketed cable with stainless steel armor

**Electrical Protection:** NEMA 6P/IP 68

**Ordering Codes**

Housing	Output Type/Measuring Range	Fitting(NPT)	Cable	Options
TSP - 51... = Brass	...05.. = Pt-100 RTD/-40 to +300°F ...10.. = 4-20 mA/ -40 to +50°F ...15.. = 4-20 mA/ -40 to +120°F ...20.. = 4-20 mA/ 0 to +120°F	...N2.. = 1/4" ...N3.. = 3/8" ...N4.. = 1/2" ...N5.. = 3/4" ...N6.. = 1" ...N7.. = 1-1/4" ...N8.. = 1-1/2"	...TA.. = 6 Ft. Teflon w/ SS armor ...TF.. = 6 Ft. Teflon	C = 1/2" NPT conduit fitting  EC = Extended cable length (specify desired length when ordering)
TSP-52.. = SS	...25.. = 4-20 mA/ 32 to +250°F ...30.. = 4-20 mA/ 32 to +300°F ...YY.. = 4-20 mA/ Custom Range			

**Example Ordering Code: TSP-5220N4TAC**