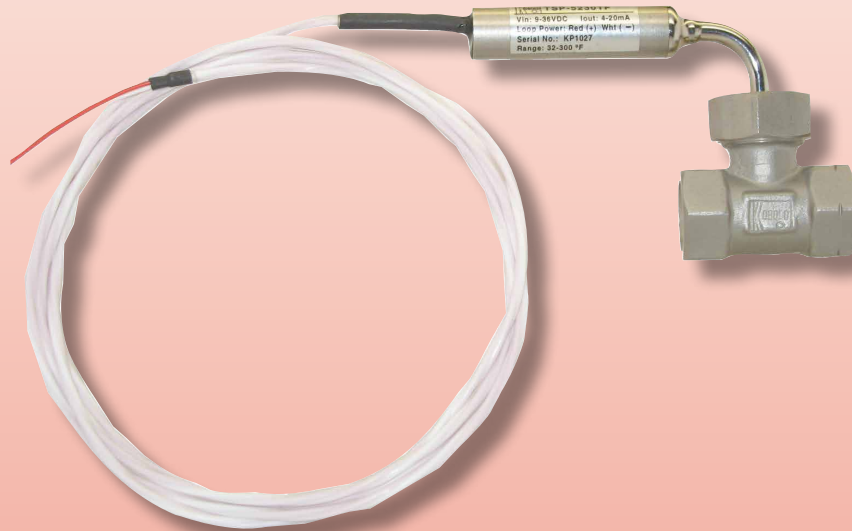


Temperature Sensor for Pipes



measuring
•
monitoring
•
analyzing

TSP



- For Liquids and Gases in Pipes
- Pt-100 RTD or 4-20 mA Output
- Pipe Sizes: 1/4" ...1-1/2"
- Temperature Range: -40...300 °F
- Brass or Stainless Steel Models
- Simple and Reliable



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KOBOLD Instruments, Inc.
1801 Parkway View Drive
Pittsburgh, PA 15205
☎ Main Office:
1.800.998.1020
1.412.788.4890
✉ info@koboldusa.com
www.koboldusa.com



Description

TSP temperature sensors are ideal for measuring the temperature 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. Installation is hassle free and easy. The TSP comes with either a Pt-100 RTD or a fixed range, integral 4-20 mA transmitter as an output. The simple and economical design makes it an ideal choice for OEM applications and end users who are looking for a reliable solution at a reasonable price.

Technical Details

Temperature Range: -40...300 °F

Max. Pressure: 750 PSIG

Materials

Brass Models: Brass, 316 SS, FKM

SS Models: 316 SS, 304 SS, FKM

Electrical Specifications

Outputs: RTD or 4-20 mA Integral Transmitter

RTD Type: Pt-100, 3-wire, Class B per DIN EN 60751
($\alpha = 0.00385$)

Transmitter

Type: 4-20 mA, 2-wire, Fixed Range

Supply Voltage: 10-30 V_{DC}

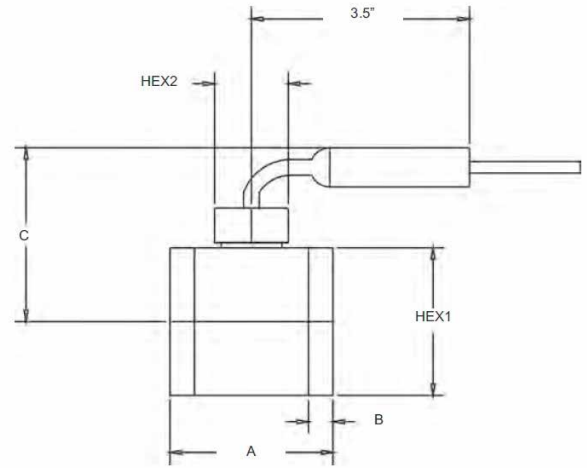
Max. Loop Load: 50 (V_{supply}-10) ohms

Accuracy: ± 0.5% of Span

Zero/Span Drift: 0.025% / °F

Electrical Connection: 6 ft PTFE-Jacketed Cable, with or without SS Armor

Protection: NEMA 6P, IP 67



Dimensions (in inches)

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

Order Details (Example: TSP-52 20 N4 TAC)

Material	Output Type / Measuring Range	Fitting	Cable	Options
TSP-51.. = Brass	..05.. = Pt-100 RTD (-40...300 °F)	..N2.. = 1/4" NPT	..TA = 6 ft PTFE with SS Armor ..TF = 6 ft PTFE	..C = 1/2" NPT Conduit Fitting ..EC = Extended Cable Length (Specify Length when Ordering)
	..10.. = 4-20 mA (-40...50 °F)	..N3.. = 3/8" NPT		
	..15.. = 4-20 mA (-40...120 °F)	..N4.. = 1/2" NPT		
	..20.. = 4-20 mA (0...120 °F)	..N5.. = 3/4" NPT		
TSP-52.. = SS	..25.. = 4-20 mA (32...250 °F)	..N6.. = 1" NPT		
	..30.. = 4-20 mA (32...300 °F)	..N7.. = 1-1/4" NPT		
	..YY.. = 4-20 mA (Custom Range)	..N8.. = 1-1/2" NPT		