



SUBMERSIBLE

Pressure & Temperature Transmitter

AST45PT

Overview

The AST45PT is a combined pressure and temperature transmitter for accurate liquid level measurement.

For pressure ranges from 0-1 to 100 PSI that require a wide range of media compatibility, the AST45PT submersible series is an excellent solution to monitor level and temperature for indoor and outdoor applications.

Benefits

- High Strength Stainless Steel Construction
- No Internal O-rings
- Wide Operating Temperature
- Pressures up to 100 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Rugged Design
- New Conduit Fitting at Electrical Connection
- Compatible with Wide Variety of Liquids
- EMI/RFI Protection

INDUSTRIAL

AST45PT Pressure & Temperature Submersible Transmitter

Applications

- Ground Water Level Measurement
- Earthen & Concrete Dams
- Liquid Tanks
- Irrigation
- Environmental Sites
- Building Automation Controls
- Waste Water Canals

Performance @ 25°C (77°F)

Accuracy (Pressure)	< ±0.25% of FS BFSL (Accuracy includes non-linearity, hysteresis & non-repeatability)
Accuracy (Temp.)	< ±1.0% of FS BFSL (Accuracy includes non-linearity, hysteresis & non-repeatability)
Over Range Protection	2X Rated Pressure
Burst Pressure	5X or 1,250 PSI (whichever is less)
Pressure Cycles	> 50 Million

Environmental Data

Temperature

Operating Ambient	-40 to 85°C (-40 to 185°F)
Storage	-40 to 100°C (-40 to 212°F)

0-100% relative humidity, non-condensing

Thermal Limits

Compensated Range 0-55°C (32 to 131°F)

TC Zero < ±1.5% FS

TC Span < ±1.5% FS

Other

Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-68

INDUSTRIAL

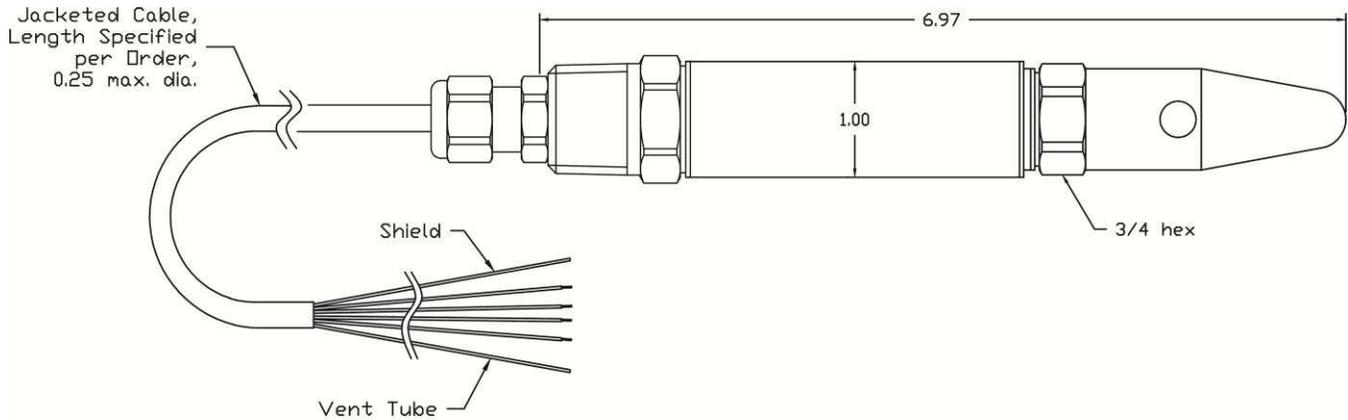
AST45PT Pressure & Temperature Submersible Transmitter

Electrical Data

Output	4-20mA+	1-5V
Excitation	10-28VDC	10-28VDC
Current Consumption:	-	< 10mA
Sampling Rate	400 Hz	400 Hz
Output Noise	< 1mV, RMS	< 1mV, RMS
Zero Offset:	< $\pm 0.5\%$ of FS	< $\pm 0.5\%$ of FS
Span Tolerance:	< $\pm 0.5\%$ of FS	< $\pm 0.5\%$ of FS
Output Load:	0-800 Ohms@10-28VDC	5k Ohms, Min.
Reverse Polarity Protection	Yes	Yes

+For units with loop-powered 4-20mA output, the pressure loop must be powered or the temperature output will not operate.

Dimensions



Output	Red	Black	Green	White
Voltage	+V Supply	-V Supply	Temperature	Pressure
4-20mA	+Pressure	-Pressure	+Temperature	-Temperature

