

PVDF/PTFE Submersible Pressure Transducer



AST4530

ISO9001:2008



The AST4530 submersible pressure transducer is constructed using PVDF material and a PTFE diaphragm. Designed to measure liquid level of harsh liquids, the AST4530 features submersible PVDF cable, cord grip and housing.

The AST4530 features a conduit connection for turbulent installations such as on-board ships, turbulent tanks, and rail cars.

Voltage and 4-20mA output signals allow users to interface for low current consumption or long distance transmission applications.

Benefits

- Excellent liquid and gas compatibility
- Compact, Submersible design
 - Cost effective alternative to ultrasonic & radar sensor technologies
- Works with reflective liquids
- Will not fail due to vapor

Applications

- Chemical totes
- Salt water holding tanks
- Process plants
- Rail-car liquid level monitoring
- Storage tanks

Environmental Data

Temperature

Operating	0 to 60°C (32 to 140°F)
Storage	0 to 80°C (32 to 176°F)

Thermal Limits

Compensated Range	0 to 55°C (32 to 131°F)
TC Zero	<±2.0% of FS
TC Span	<±2.0% of FS

Other

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

Performance @ 25°C (77°F)

Accuracy*	< ±0.5% BFLS
Over Range Protection	2X Rated Pressure
Burst Pressure	5X or 1,250 PSI (whichever is less)
Pressure Cycles	> 50 Million

*Accuracy includes non-linearity, hysteresis & non-repeatability

Electrical Data

Output	4-20mA	1-5VDC	0.5-4.5V Ratiometric
Excitation	10-28VDC	10-28VDC	5VDC, regulated
Output Impedance	>10k Ohms	<100 Ohms, Nominal	<100 Ohms, Nominal
Current Consumption:	20mA, typical	<10mA	5mA, typical
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 1kHz
Output Noise:	-	<2mV RMS	<2mV RMS
Zero Offset:	<±1% of FS	<±1% of FS	<±1% of FS
Span Tolerance:	<±1% of FS	<±1% of FS	<±1% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, min	10k Ohms, min
Reverse Polarity Protection	Yes	Yes	Yes

Ordering Information

AST4530 **I** **00020** **P** **4** **X** **9** **354**

Series Type

Process Connection

I= 1/4" FNPT
(Not intended for threaded installation.)

Pressure Range

Insert 5-digit pressure code

Pressure Unit

B= Bar K= kg/cm²
H= Inches H₂O P= PSI

Outputs

1= 0.5-4.5V ratiometric 3= 1-5V 4= 4-20mA

Electrical (for wiring information visit: <http://www.astensors.com/mediacenter.php>)

X= See Options Below

Wetted Material

9= PVDF / PTFE / Viton

AST4530	Pressure	Pressure Code	Feet of Water Column @ 4°C (approx.)
	0-30	00030	69.20
	0-20	00020	46.13
	0-15	00015	34.60
	0-10	00010	23.07
	0-7.5*	00208*	17.30
	0-5	00005	11.53
	0-2.5*	00069*	5.77

*Requires "H" pressure unit for inches H₂O
Notes: Other pressures available. Contact Factory

Options Cable Lengths:

353 = 25 ft. (7.62 m) 354 = 50 ft. (15.24 m) 355 = 75 ft. (22.86 m)

Dimensional Data

