

AST44LP Class 1 Div 1 IS Groups C, D with Approved Barrier



Stainless Steel Media Isolated Low Pressure Sensor

OVERVIEW

The AST44LP is a media isolated stainless steel pressure sensor with a wide variety of options. With its rugged construction and the best price-to-performance ratio in the industry, the AST44LP is the solution for low pressure measurement in Intrinsically Safe areas.

BENEFITS

- UL/cUL 913 (CSA 157) Class 1 Div 1 Groups C,D when installed with an approved barrier
- High Strength Stainless Steel Construction
- No Welds or Internal O-rings
- Wide Operating Temperature Range
- Ranges from 0-2.5 to 0-15 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Compatible with Wide Range of Liquids and Gases
- EMI/RFI Protection

APPLICATIONS

- Industrial OEM Equipment
- Water Management
- Pneumatics
- Vapor Recovery
- External Tank Levels
- HVAC/R Equipment
- Control Panels
- Hydraulic Systems
- Data Loggers



Environmental Data

Temperature

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

Thermal Limits

Compensated Range	0 to 55°C (30 to 130°F)
TC Zero	<±1.5% of FS
TC Span	<±1.5% of FS

Other

Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

Performance @ 25°C (77°F)

Accuracy*	< ±0.25% BFSL (< ±0.5% BFSL for 0-1 PSI)
Stability (1 year)	±0.25% FS, typical
Over Range Protection	2X Rated Pressure
Burst Pressure	5X or 75 PSI (whichever is less)
Pressure Cycles	> 100 Million

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

Electrical Data

Output	4-20mA	1-5VDC, 1-6VDC	0-50mV (10mV/V)
Excitation	10-28VDC	10-28VDC	5VDC, typical
Output Impedance	>10k Ohms	<100 Ohms, Nominal	1100 Ohms, Nominal
Current Consumption:	20mA, typical	5mA, typical	<5mA
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 5kHz, min
Output Noise:	-	<2mV RMS	-
Zero Offset:	<±1% of FS	<±1% of FS	< ±2% of FS
Span Tolerance:	<±2% of FS	<±1.5% of FS	< ±2% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, Min.	>1M Ohms
Reverse Polarity Protection	Yes	Yes	-

