

# AST43LP Class 1 Div 2 Groups A, B, C, D Non-Incendive



## Stainless Steel Media Isolated Low Pressure Sensor

### Overview

The AST43LP is a low pressure Class I Division 2 stainless steel pressure transmitter for use in hazardous areas. In addition to its rugged construction and the best price-to-performance ratio in the industry, the AST43LP is the solution for low pressure measurement for a variety of applications.

### Benefits

- UL/cUL 1604 (CSA 213) Class 1 Div 2 Groups A, B, C, D
- 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

- Refrigeration
- Industrial OEM Equipment
- Pressure Instrumentation
- Gas Compression & Storage
- Oxygen Delivery Systems
- Water Management
- Oil & Gas Platforms
- Process Control
- Test Stands
- External Tank Level



### 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% BFS ( < ±0.5% BFS 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	-



## Ordering Information

**AST43LP A 00005 P 4 L 1 000**

**Series Type**

**Process Connection**

A=1/4" NPT Male  
I= 1/4" NPT Female

**Pressure Range**

Insert pressure range code from chart

**Pressure Unit**

H= Inches H<sub>2</sub>O  
P= PSI

**Outputs**

3= 1-5V  
4= 4-20mA (2 wire loop powered)  
6= 1-6V  
A= 0-50mV (10mV/V)

**Electrical**

I= DIN 43650A (mate included)  
L= Conduit fitting, Cable 2 ft. (0.6 m)  
M= Conduit fitting, Cable 4 ft. (1.2 m)  
N= Conduit fitting, Cable 6 ft. (1.8 m)  
P= Conduit fitting, Cable 10 ft. (3.0 m)

**Wetted Material**

1=316 L

**Options**

000 = No Options

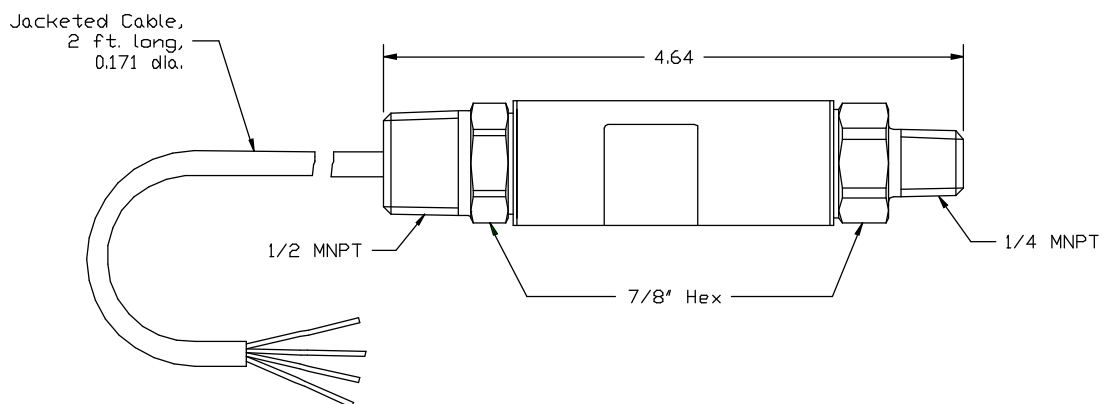
### Pressure Ranges

Gage PSIG	Pressure Range Code
0-1	00001
0-2.5*	00069
0-5*	00005
0-7.5	00208
0-10	00010
0-15	00015

\*2.5 and 7.5 PSI Sensor must be ordered in inches of H<sub>2</sub>O.

\*Wiring information available at: <http://www.astensors.com/mediacenter.php>

## Dimensional Data



## Warranty

**Workmanship** - AST, Inc. pressure transmitters have a limited one-year warranty to the original purchaser. AST, Inc. will replace or repair, free of charge, any defective transmitter. This warranty does not apply to any units that have been modified; misused, neglected or installed where the application exceeds published ratings. AST43LP is not recommended for use with hydrogen. AST's sensors are made with pride in New Jersey, USA. If in the area please feel free to stop by for a visit!

**Installation/Applications** - The purchaser is responsible for media compatibility, functional adequacy, and correct installation of the transmitter.