

AST47LP *Low Pressure*



Stainless Steel Media Isolated Pressure Sensor

Overview

The AST47LP is constructed to meet low pressure sensing needs in a variety of applications. With pressure ranges of 0-2.5 to 0-15 PSIG, the AST47LP is offered with various fittings, electrical connections and output signals

Benefits

- ✓ All Stainless Steel Construction
- ✓ No Internal O-rings
- ✓ Wide Operating Temperature Range
- ✓ Ranges from 0-2.5 PSI to 0-15 PSI
- ✓ Low Static and Thermal Errors
- ✓ Rugged Design Survives Harsh Environments
- ✓ Compatible with Wide Range of Liquids
- ✓ EMI/RFI Protection

Applications

- ✓ Pneumatics
- ✓ Test Stands
- ✓ Pressure Instrumentation
- ✓ External Tank Level Monitoring
- ✓ Boiler Controls
- ✓ Dynamometers
- ✓ Data Loggers
- ✓ P to I Converters



Performance @ 25°C (77°F)

Accuracy*	< ± 0.25% BFSL
Stability (1 year)	±0.25% FS, typical
Over range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	>50 Million

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

Environmental Data

Temperature

Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 to 250°F)

Thermal Limits

Compensated Range	0 to 70°C (30 to 160°F)
TC Zero	<±1.0% 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

Electrical Data

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

Ordering Information

AST47LP A 00005 P 4 A 1 000

Series Type

Process Connection

A=1/4" NPT Male
 C=1/4" BSP Male
 F=7/16"-20 UNF Male
 J= 1/8" NPT Female (panel mount)

Pressure Range

Insert 5 digit pressure range code

Pressure Unit

H= inches of H₂O
 P=PSI

Outputs

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

Electrical[†]

A=2 ft. D=10 ft. R=Bendix 6 Pin
 B=4 ft. E=mini DIN 43650 V=mini-DIN 43650B
 C=6 ft. I= DIN 43650A

Wetted Material

1=316L / 304

Options

000= No special options

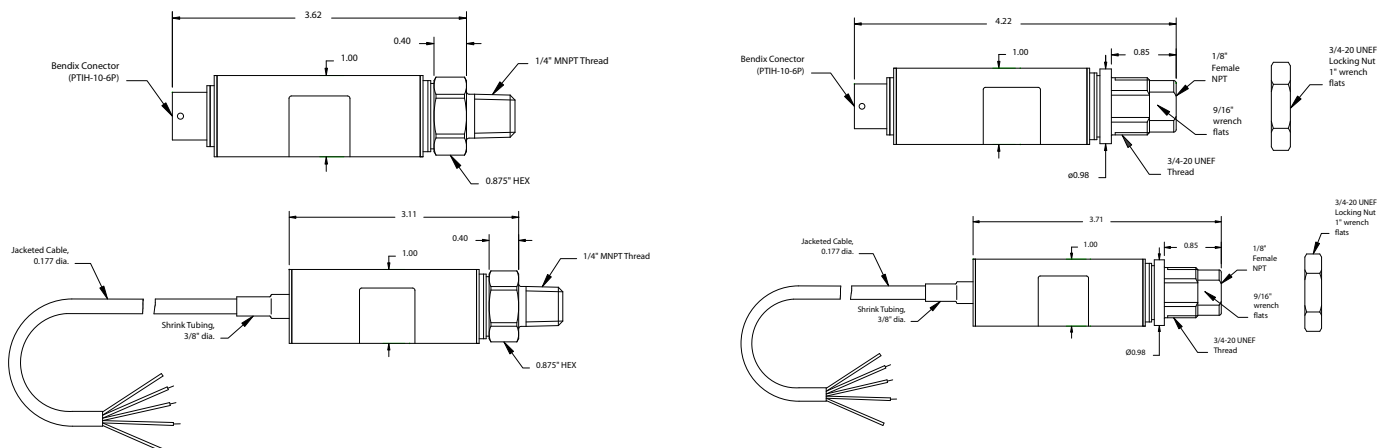
[†]Wiring information available at: <http://www.astensors.com/mediacenter.php>

Pressure Ranges

Gage PSIG	Pressure Range Code
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 H₂O.

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. AST47LP 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