

AST4710 *High Accuracy Absolute* Stainless Steel Pressure Sensor



Overview

The AST4710 is built for applications requiring absolute pressure measurement of liquids and gases that are compatible with stainless steel. Due to its stainless steel construction, welded housing and high shock and vibration ratings, the AST4710 translates into a rugged, reliable absolute pressure sensor. Supplied with various pressure port, output and electrical connection options, the AST4710 is well-suited for a variety of applications across many industries.

Benefits

- High Accuracy
- High Strength Stainless Steel Construction
- Wide Range of Media Compatibility
- No Internal O-rings
- Wide Operating and Compensated Ranges
- Rugged Construction
- CE EN61326
- Suitable for High Shock and Vibration

Applications

- Test Stands
- Energy and Water Management
- Autoclave
- Pressure Instrumentation
- Data Loggers
- Barometric Correctors



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	<±1.5% of FS
TC Span	<±1.5% of FS

Other

Shock	100G, 11 msec, 1/2 sine
Vibration	20G peak, 20 to 2400 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

Performance @ 25°C (77°F)

Accuracy*	<±0.25% BFSL
Stability (1 year)	±0.25%FS, typ
Over range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	>10 Million

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

Electrical Data

Output	0-50mV (10mV/V)	4-20mA	Voltage (3 or 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:	N/A	-	<2mV RMS
Zero Offset:	<±2% of FS	<±1% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±2% of FS	<±1.5% of FS
Output Load:	>1M Ohm	0-800 Ohms@10-28VDC	10k Ohms, min
Reverse Polarity Protection	N/A	Yes	Yes



Ordering Information

AST4710 A A0100 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 option code "066" required]

Pressure Range

Insert 5-digit pressure range code

Pressure Unit

P=PSI

Outputs

A=10mV/V
 2=0-5V (3-Wire)
 3=1-5V (3-Wire)
 4=4-20mA (Loop Powered)
 5=0-10V (3-Wire)

Electrical*

A=2 ft. E=Mini DIN 43650C
 B=4 ft. I=DIN43650A
 C=6 ft. R=Bendix 6 Pin
 D=10 ft.

Wetted Material

1=316L

Options

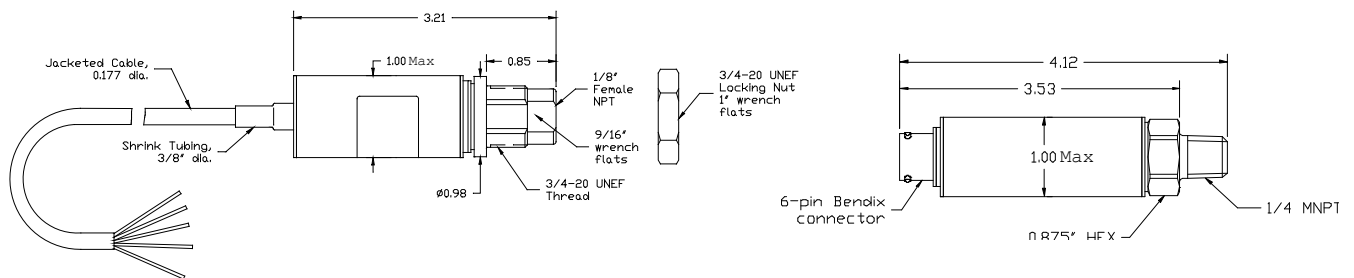
000= No Special Options
 066= Panel Mount (1/8"-27 NPT Female Only)

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

Pressure Ranges

PSI ABSOLUTE	PROOF PSIA	BURST PSIA	PRESSURE RANGE CODE
0-15	30	75	A0015
0-30	60	150	A0030
0-50	100	250	A0050
0-100	200	500	A0100
0-200	400	1000	A0200
0-300	600	1500	A0300

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. AST4710 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.