

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. The AST4710 is approved to CE EN61326 certification.

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



Performance @ 25°C (77°F)

Accuracy*	< ±0.25% BFS
Stability (1 year)	±0.25% FS, typical
Over range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	> 10 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	20G peak, 20 to 2400 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66

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

