

AST4300 Class 1 Div 2 Groups A, B, C, D Non-Incendive Stainless Steel Media Isolated Pressure Sensor

OVERVIEW

The AST4300 is a media isolated stainless steel pressure sensor for use in hazardous areas. In addition to its rugged construction and best price-to-performance ratio in the industry, the AST4300 is the solution for 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 Oil, Welds or Internal O-rings
- Wide Operating Temperature Range
- Ranges from Vacuum to 10,000 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
- Hydrogen Fuel (316L)

Performance @25°C (77°F)

Accuracy*	< ±0.25% BFS
Stability (1 year)	±0.25%FS, typ
Over range Protection	2X Rated Pressure
Burst Pressure	5X or 20,000 psi (whichever is less)
Pressure Cycles	> 100 Million

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

CE

UL
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RoHS
COMPLIANT
LEAD FREE

Now With DIN43650A!

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

Electrical Data

Output	4-20mA	1-5VDC, 1-6VDC	0-50mV	0.5-4.5V Ratiometric
Excitation	10-28VDC	10-28VDC	5VDC, typ	5VDC, reg
Output Impedance	>10k Ohms	<100 Ohms, Nominal	1100 Ohms, Nominal	<100 Ohms, Nominal
Current Consumption:	20mA, typ.	<10mA	<5mA	<10mA
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 5kHz, min	(-3dB): DC to 1kHz
Output Noise:	-	<2mV RMS	-	<2mV RMS
Zero Offset:	<±1% of FS	<±1% of FS	<±2% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±1.5% of FS	<±2% of FS	<±1.5% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, Min.	>1M Ohms	10K Ohms, Min.
Reverse Polarity Protection	Yes	Yes	-	No

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Ordering information

AST4300 A 00500 P 4 L 1 000

Series Type

Process Connection

A=1/4" NPT Male

B=1/8" NPT Male

C=1/4" BSPP Male

I= 1/4" NPT Female

P=1/2" NPT Male

Pressure Range

Insert pressure range code from chart

Pressure Unit

B= Bar

K= kg/cm2

P= PSI

Outputs

1= 0.5-4.5V ratiometric

3= 1-5V

4= 4-20mA (2 wire loop powered)

6= 1-6V

A= 10mV/V

Electrical

I= DIN 43650A

L= Conduit fitting, Cable 2ft (0.6m)

M= Conduit fitting, Cable 4ft (1.2m)

N= Conduit fitting, Cable 6ft (1.8m)

P= Conduit fitting, Cable 10ft (3.0m)

Wetted Material

0=17-4PH

1=316 L

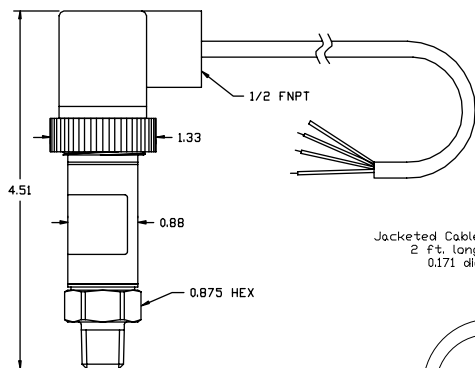
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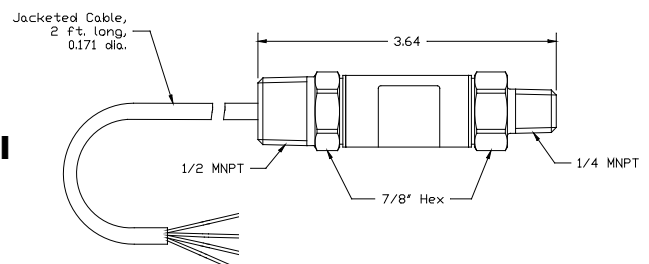
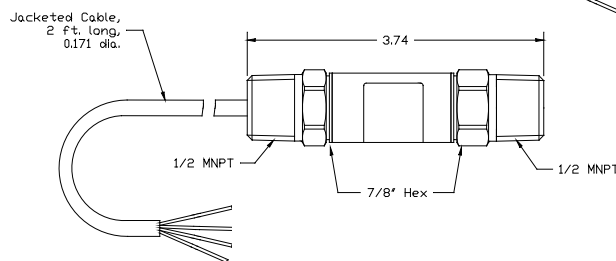
Pressure Ranges*

PSIG Measurement Range	Pressure Range Code	BARG Measurement Range	Pressure Range Code
-14.7 to 30**	V0030**	-1 to 2**	V0002**
0-25	00025	0-2	00002
0-50	00050	0-5	00005
0-100	00100	0-10	00010
0-200	00200	0-20	00020
0-250	00250	0-50	00050
0-300	00300	0-100	00100
0-500	00500	0-250	00250
0-1,000	01000	0-350	00350
0-1500	01500	0-500	00500
0-2,500	02500	0-700	00700
0-3000	03000		
0-5,000	05000		
0-7,500	07500		
0-10,000	10000		

*Typical ranges. All ranges between 0-25 psi and 0-10,000 psi available. **Compound ranges up to -14.7 to 2500 psi available. Please consult factory.



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. 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.

www.astensors.com