



NON-INCENDIVE Pressure Transducer / Transmitter AST4300

Overview

The AST4300 is a stainless steel pressure transducer / transmitter 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

- Class I Div 2 Groups A, B, C, D
- ATEX / IECEx: Ex nA IIC T4 Gc (Ta = -40°C to 85°C) for conduit electrical connections
- High Strength Stainless Steel Construction
- No Oil, Welds or Internal O-rings
- Wide Operating Temperature
- Pressures from Vacuum to 20,000 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Compatible with Wide Variety of Liquids and Gases
- EMI/RFI Protection

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Applications

- Refrigeration
- Water Management
- Industrial OEM Equipment
- Oil & Gas Platforms
- Pressure Instrumentation
- Process Control
- Gas Compression & Storage
- Test Stands
- Oxygen Delivery Systems
- Hydrogen Fuel (316L)

Performance @ 25°C (77°F)

Accuracy	< ±0.25% BFSL (<±0.5% from 7,500 up to 20,000 PSI)
Stability (1 year)	±0.25% FS, typical
Over Range Protection	2X Rated Pressure, Minimum
Burst Pressure	5X or 40,000 PSI (whichever is less)
Pressure Cycles	>100 Million

Environmental Data

Temperature

Operating	-40 to 80°C (-40 to 176°F)
Storage	-40 to 100°C (-40 to 212°F)

0-100% relative humidity, non-condensing

Thermal Limits

Compensated Range 0 to 55°C (32 to 132°F)

TC Zero	<±1.5% of FS
TC Span	<±1.5% of FS

Other

Shock	EN 60068-2-27
Vibration	EN 60068-2-6, 60068-2-64, and IEC 68-2-32
EMI/RFI Protection:	Yes
Rating:	IP-66, min

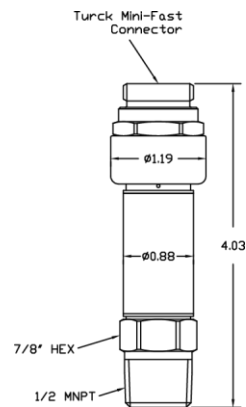
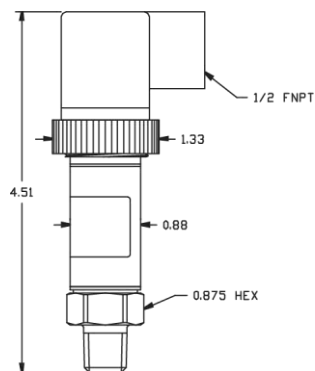
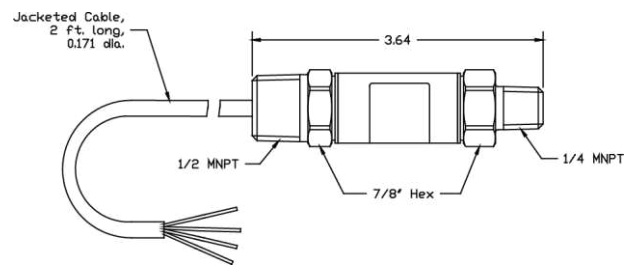
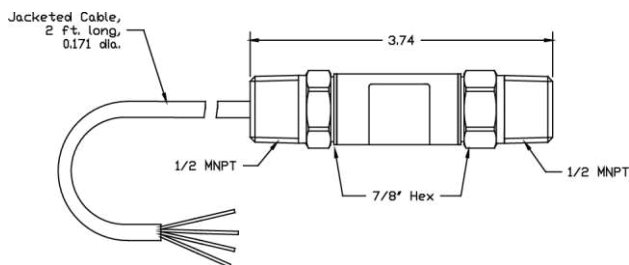
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Electrical Data

Output	4-20mA	1-5VDC, 1-6VDC	0.5-4.5V Ratiometric
Excitation	10-28VDC	10-28VDC	5VDC, regulated
Output Impedance	>10k Ohms	<100 Ohms, Nominal	<100 Ohms, Nominal
Current Consumption:	20mA, typical	5mA, typical	5mA, typical
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 1kHz
Output Noise	-	<2mV RMS	<2mV RMS
Zero Offset:	<±1% of FS	<±1% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±1.5% of FS	<±1.5% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, Min.	10K Ohms, Min.
Reverse Polarity Protection	Yes	Yes	Yes

Dimensions



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Ordering Information

AST4300	A	00500	P	4	L	1	000	-SS
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 W= F250C Female Autoclave*** <i>*Not available under 50PSI (not available in 316L) **Pressures up to 15,000 PSI ***Pressures from 10,000 to 20,000 PSI, not available in 316L</i>								
Pressure Range Insert 5-digit pressure range code (example: 0-100 PSI = 00100) Ranges between 0-25 PSI and 0-20,000 PSI available. Compound pressure up to -14.7 to 500 PSI.								
Pressure Unit B= Bar K= kg/cm2 P= PSI								
Outputs 1= 0.5-4.5V ratiometric 4= 4-20mA (2 wire loop powered) 3= 1-5V 6= 1-6V								
Electrical I= DIN 43650A 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) 4 = Mini-Fast (CSA Only)								
Wetted Material 0= 17-4PH 1= 316L 2= Inconel 718 4= Hastelloy C276								
Options 000= No Options								
Approval (Left Blank)= UL ANSI/ISA 12.12.01 Class I Div 2 Non-Incendive Groups A, B, C, D (formerly UL1604)								
-SL	IEC 61508 - SIL2 (4-20mA only)							
-SS	CSA213 Class I Div 2 Non-Incendive Groups A, B, C, D and ANSI/ISA 12.27.01 Single Seal Approval							
-Y	IEC 61508 - SIL2 (4-20mA only) + CRN							
-Z	CRN Registered to ANSI/ASME B31.3. Contact factory for material, pressure, and process connection options (includes -SS approvals)							

Note: CSA approved products require case/earth ground electrical connection. See wiring installation sheet for further details

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