

AST4600 *Factory Sealed Pressure Transducer*



Explosionproof CSA Approved For Hazardous Locations

Overview

AST4600 Explosionproof Pressure Transducer / Transmitter is approved to CSA 30 (UL1203 / FM3615) Class 1 Div 1 and Zone 1 Group IIC Explosionproof - Groups A, B, C, D for use in Hazardous Areas Constructed with a simple, yet rugged design, the factory-sealed AST4600 stands up to a variety of Explosionproof applications where price and performance are critical.

Benefits

- ANSI/ISA - 12.27.01.2003 Compliant "Single Seal" (No need for expensive secondary seal)
- All Stainless Steel Construction
- No Oil, Welds or Internal O-rings
- Wide Operating Temperature Range
- Ranges from 50 to 10,000 PSIS (Factory Leak Checked)
- Low Static and Thermal Errors
- Rugged Design Withstands Harsh Environments
- Wide Media Compatibility
- Suitable for High Shock and Vibration Applications

Applications

- Industrial OEM & Hydrogen Equipment (316L SS Wetted Material Available)
- Natural Gas Compressors
- Pipe Line Instrumentation
- Oil Platforms
- Power Generation
- Refrigeration
- Pressure Instrumentation
- Well Head Pressure
- Energy & Water Management

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 or 25,000 psi (whichever is less)
Pressure Cycles	> 100 Million

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



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

Ordering Information

AST4600 A 00500 P 3 T 1 000

Series Type

Process Connection

A=1/4" NPT Male
I=1/4" NPT Female
P=1/2" NPT Male

Pressure Range

Insert pressure range code from chart.
Vxxxx = Vacuum reference for ranges
up to 2500 psi

Pressure Unit, Sealed

B=BAR, K=kg/cm2, P=PSI

Outputs

3 = 1-5V (3 Wire + Case Connection)
4 = 4-20mA (Loop Powered + Case Connection)
6 = 1-6V (3 Wire + Case Connection)

Electrical Interface

T=2 ft. 18 AWG wires
U=4 ft. 18 AWG wires
W=2 Meter 18 AWG wires

Wetted Material

0=17-4PH
1=316 L
2=Inconel 718

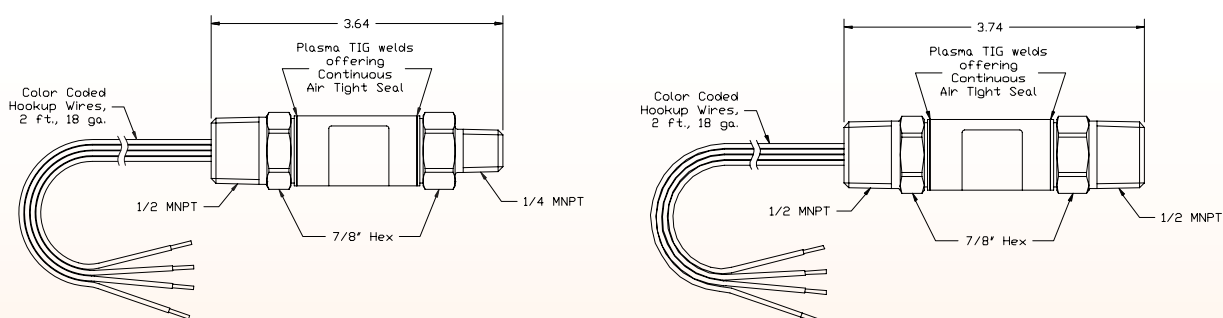
Options

Use 000 for no options

PRESSURE RANGES

Pressure in PSI, Sealed	Pressure Range Code
0-50	00050
0-100	00100
0-200	00200
0-500	00500
0-1,000	01000
0-1500	01500
0-2,500	02500
0-3000	03000
0-5000	05000
0-7500	07500
0-10,000	10000

Dimensional Data



Output	Red	Black	White	Green
Voltage	+V Supply	-V Supply	Output	Common
4-20mA	+V Supply	-V Supply	Not Used	Common

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.