

# AST4600 Vented Gauge Pressure Transducer



**Explosionproof CSA Approved For Hazardous Locations**

## Overview

AST4600 Explosionproof Pressure Transducer/Transmitter is CSA approved for use in hazardous areas including:

- ✓ CSA 30 (UL1203/FM3615) Class 1 Zone 1 Group IIC
- ✓ CSA 30 Class 1 Div 1 Groups A, B, C, D Explosionproof

Constructed with a simple-yet-rugged design, the AST4600 stands up to a variety of Explosionproof applications where price and performance are critical.

## Benefits

- ANSI/ISA-12.27.01.2003 Certified "Single Seal" (no secondary seal required)
- ABS (American Bureau of Shipping) Approved
- All Stainless Steel Construction
- Wide Operating Temperature Range
- Ranges from 2.5 to 1,000 PSI Gauge\*
- Low Static and Thermal Errors
- Rugged Design Withstands Harsh Environments
- Suitable for High Shock and Vibration Applications
- Available in Exotic Alloys (Consult Factory for Inconel 718 or Hastelloy C276)

## Applications

- Industrial OEM & Hydrogen Equipment
- Natural Gas Compressors
- Refrigeration
- Pipe Line Instrumentation
- Marine & Offshore
- Pressure Instrumentation
- Oil Platforms
- Well Head Pressure
- Power Generation
- Energy & Water Management

\* For pressures over 1,000 PSI, see **AST4600 Factory Sealed Gauge** data sheet.

## Performance @ 25°C (77°F)

Accuracy**	<±0.25% BFSL
Stability (1 year)	±0.25% FS, typical
Over Range Protection	2X Rated Pressure
Burst Pressure	5X Rated Pressure
Pressure Cycles	>100 Million

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



## Environmental Data

### Temperature

Operating	-40 to 85°C (-40 to 185°F)
Storage	-55 to 105°C (-67 to 221°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-65

## Electrical Data

Output	4-20mA	1-5VDC, 1-6VDC
Excitation	10-28VDC	10-28VDC
Output Impedance	>10k Ohms	<100 Ohms, Nominal
Current Consumption:	25mA, typical	5mA, typical
Bandwidth	(-3dB): DC to 1kHz	(-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    G 0500    P    3    T    1    000**

**Series Type**

**Process Connection**  
(for other ports contact factory)  
A= 1/4" NPT Male  
I= 1/4" NPT Female  
P= 1/2" NPT Male

**Pressure Reference**  
G= Gauge Pressure  
V= Gauge Pressure (Vacuum Calibrated)

**Pressure Range (Vented Gauge)**  
Insert 4 digit pressure range code from chart

**Pressure Unit**  
B= Bar    H= Inches H<sub>2</sub>O    K= kg/cm<sup>2</sup>    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= 2ft. 18 AWG wires    U= 4ft. 18 AWG wires    W= 2 Meter 18 AWG wires

**Wetted Material**  
0= 17-4PH    2= Inconel 718\*  
1= 316 L    4= Hastelloy C276\*

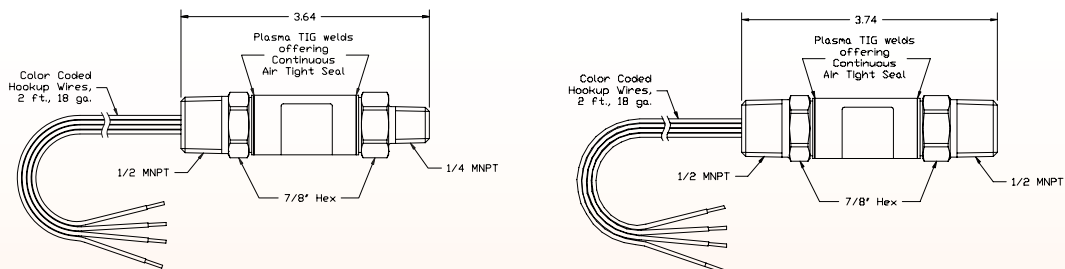
**Options:** Use 000 for no options

Pressure Ranges*	
Pressure in PSIG	Pressure Range Code
0-2.5	0069**
0-5	0005
0-7.5	0208*
0-10	0010
0-15	0015
0-25	0025
0-50	0050
0-100	0100
0-200	0200
0-500	0500
0-1,000	1000

\* For sealed pressure units, see **AST4600 Factory Sealed Gauge** data sheet. \*\*2.5 and 7.5 PSI sensor must be ordered in inches of H<sub>2</sub>O.

\*Consult factory on availability

## Dimensional Data



Output	Red	Black	White	Green	For U.S. installations, sensor case ground (green wire) must be bonded to ground according to Article 501 & 505 of the NEC.
Voltage	+V Supply	-V Supply	Output	Case Ground	
4-20mA	+V Supply	-V Supply	Not Used	Case Ground	

## 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.