TM

AST46HA

High Accuracy 0.1% Pressure Transducer



Prectory Sealed Gauge Pressure Transducer
Pressures from 100 to 20,000 PSI
CSA approved for use in hazardous areas including:
UL1203/FM3615 Class I Zone 1 Group IIC
Class I Div 1 Groups A, B, C, D Explosionproof

Constructed with a simple-yet-rugged design, the AST4600 Explosionproof Pressure Transducer/Transmitter stands up to a variety of applications where price and

Vented Gauge Pressure Transducer

- Pressures from 1 to 1,000 PSI Gauge
- · CSA approved for use in hazardous areas including:

• Class II Div 1 Groups E, F, G Dust Ignition-proof

- Class I Zone 1 Group IIC
- Class I Div 1 Groups A, B, C, D Explosionproof

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- ATEX / IECEx: Class I, Zone 1, Ex d IIC T5 Gb (Ta = -40°C to 85°C)
- ANSI/ISA-12.27.01.2003 Certified "Single Seal" (no secondary seal required)
- ABS (American Bureau of Shipping) Approved
- ASIC Compensation
- Superb Temperature Performance
- Wide Operating Temperature
- Excellent Accuracy
- High Proof and Burst Pressure
- Available in Exotic Alloys (Consult Factory for Inconel 718 or Hastelloy C276)

Applications

- Well Optimization
- Oil and Gas Pipelines
- Drilling Platforms
- Marine & Offshore
- CNG / Hydrogen Fill Stations
- Paint Booths
- Remote Telemetry Unit
- Cold Climate Drilling & Mining
- Panel Instrumentation

Environmental Data				
Temperature				
Operating Ambient	-40 to 85°C (-40 to 185°F)			
Operating Media	-55 to 125°C (-65 to 250°F)			
Storage	-55 to 105°C (-67 to 221°F)			
0-100% relative humidity	, non-condensing			
Thermal Limits	Thermal Limits			
Compensated Range	-20 to 70°C (-4 to 158°F)			
TC Zero: <±0.5% FS	TC Span: <±0.5% 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-65 (vented), IP-66(factory sealed)			

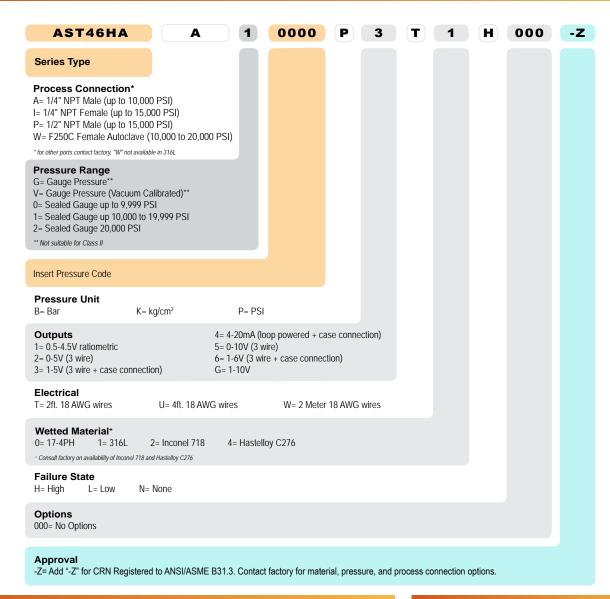
Performance @ 25°C (77°F)			
Accuracy*	<±0.1% BFSL		
Stability (1 year)	±0.1% FS, typical		
Over Range Protection ⁺	2X Rated Pressure		
Burst Pressure	5X Rated Pressure		
Pressure Cycles	> 100 Million		

^{*} Accuracy includes non-linearity, hysteresis & non-repeatability, + For higher proof pressures, contact factory

Electrical Data				
Output	4-20mA	0-5V, 1-5V, 1-6V	0-10V, 1-10V	0.5-4.5V Ratiometric
Excitation	10-28VDC	10-28VDC	15-28VDC	5VDC, Regulated
Current Consumption	-	<10mA	<10mA	<10mA
Sampling Rate	400Hz	400Hz	400Hz	400Hz
Output Noise	<1mV, RMS	<1mV, RMS	<1mV, RMS	<1mV, RMS
Zero Offset	<±0.5% FS	<±0.5% FS	<±0.5% FS	<±0.5% FS
Span Tolerance	<±0.5% FS	<±0.5% FS	<±0.5% FS	<±0.5% FS
Output Load	0-800 Ohms@10-28VDC	5k Ohms, min.	5k Ohms, min.	5k Ohms, min.
Reverse Polarity Protection	Yes	Yes	Yes	Yes



Ordering Information



Pressure Ranges

	0-1		G	0001
	0-2.5**		G	0069
	0-5	ted	G	0005
_	0-7.5**	en	G	0208
PS	0-10	>	G	0010
<u>r</u> e	0-15	bo	G	0015
Pressure PSI	0-25	S	G	0025
	0-50	nre	G	0050
	0-100	Pressure Code Vented	G	0100
	0-200		G	0200
	0-500		G	0500
	0-1,000		G	1000

	0-100	ō	0	0100
	0-200	Sealed	0	0200
	0-500	Se	0	0500
-	0-1,000	ī	0	1000
PSI	0-1,500	Factory	0	1500
Pressure	0-2,500	Fa	0	2500
ารร	0-3,000	Code	0	3000
ě	0-5,000	ပ္ပ	0	5000
<u> </u>	0-7,500		0	7500
	0-10,000	ns	1	0000
	0-15,000	Pressure	1	5000
	0-20,000	٩	2	0000

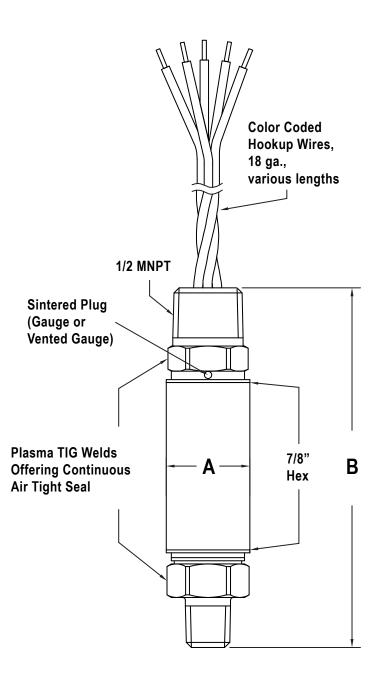
Wiring

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

For U.S. installations, sensor case ground (green wire) must be bonded to ground according to Article 501 & 505 of the NEC.

^{**2.5} and 7.5 PSI units must be ordered in inches of H₂O





Model Series	Body Diameter	Overall Length
	"A"	"B"
AST4600	0.875"	3.64"
AST46HA	1"	4.3"
AST46PT (4-20mA)	1"	4.8"
AST46PT (Voltage)	1"	4.3"
AST46SW	1"	4.8"