Explosion-Proof



AST46HA

High Accuracy 0.1% Pressure Transducer



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) 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: Rating: IP-65 (vented), IP-66(factory sealed)

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

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

Vented Gauge Pressure Transducer

- · Pressures from 1 to 1,000 PSI Gauge
- · CSA approved for use in hazardous areas including:
 - Class I Zone 1 Group IIC
 - Class I Div 1 Groups A, B, C, D Explosionproof

Benefits

- 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

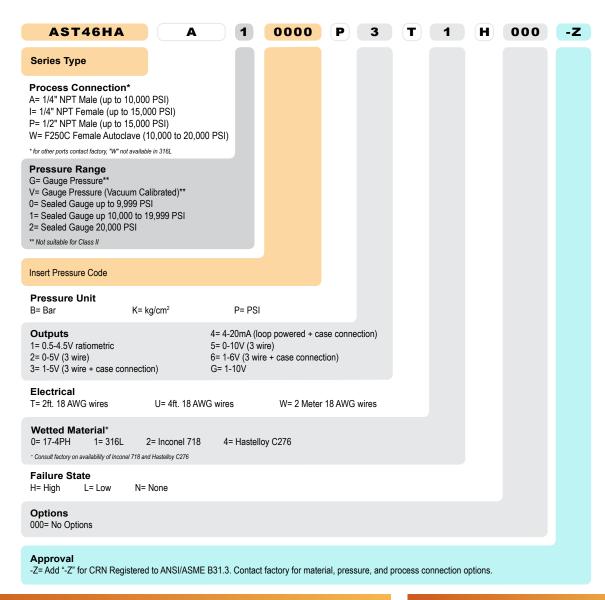
Performance @ 25°C (77°F)			
Accuracy*	<±0.1% BFSL		
Stability (1 year)	±0.1% FS, typical		
Over Range Protection⁺	2X Rated Pressure		
Burst Pressure	5X Rated Pressure		
Pressure Cycles	> 100 Million		

^{*} 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	15-30VDC	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

	0-100	þ	0	0100
	0-200	Sealed	0	0200
	0-500		0	0500
	0-1,000	Ŋ	0	1000
PSI	0-1,500	Factory	0	1500
<u>le</u>	0-2,500	Fa	0	2500
ารเ	0-3,000	qe	0	3000
Pressure	0-5,000	Code	0	5000
<u> </u>	0-7,500		0	7500
	0-10,000	ns	1	0000
	0-15,000	Pressure	1	5000
	0-20,000	P	2	0000

Wiring

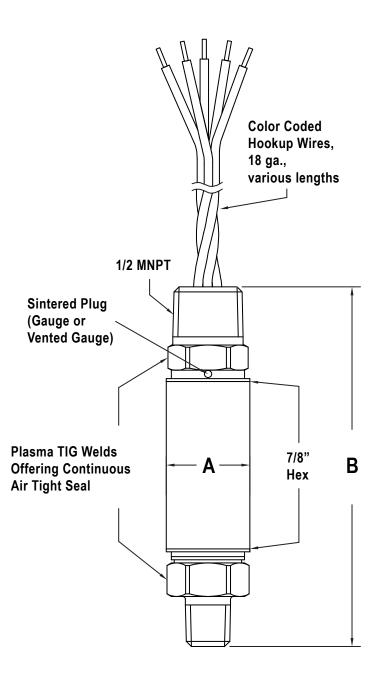
	0-1		G	0001	
	0-2.5**		G	0069	
	0-5	ted	G	0005	
	0-7.5**	en	G	0208	
PSI	0-10	>	G	0010	
ıre	0-15	bo	G	0015	
ารร	0-25	S	G	0025	
Pressure	0-50	Pressure Code Vented	G	0050	
<u>а</u>	0-100	SS	G	0100	
	0-200	Pre	G	0200	
	0-500		G	0500	
	0-1,000		G	1000	

	0-1,000		G	1000
**2.5 and	7.5 PSI units must	be ordered	l in incl	hes of H ₂ C

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.





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"

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