



Explosion-Proof

AST46HA High Accuracy 0.1% Pressure Transducer



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

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: $\pm 0.5\% \text{ FS}$	TC Span: $\pm 0.5\% \text{ FS}$
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*	$\pm 0.1\% \text{ BFSL}$
Stability (1 year)	$\pm 0.1\% \text{ FS}$, 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

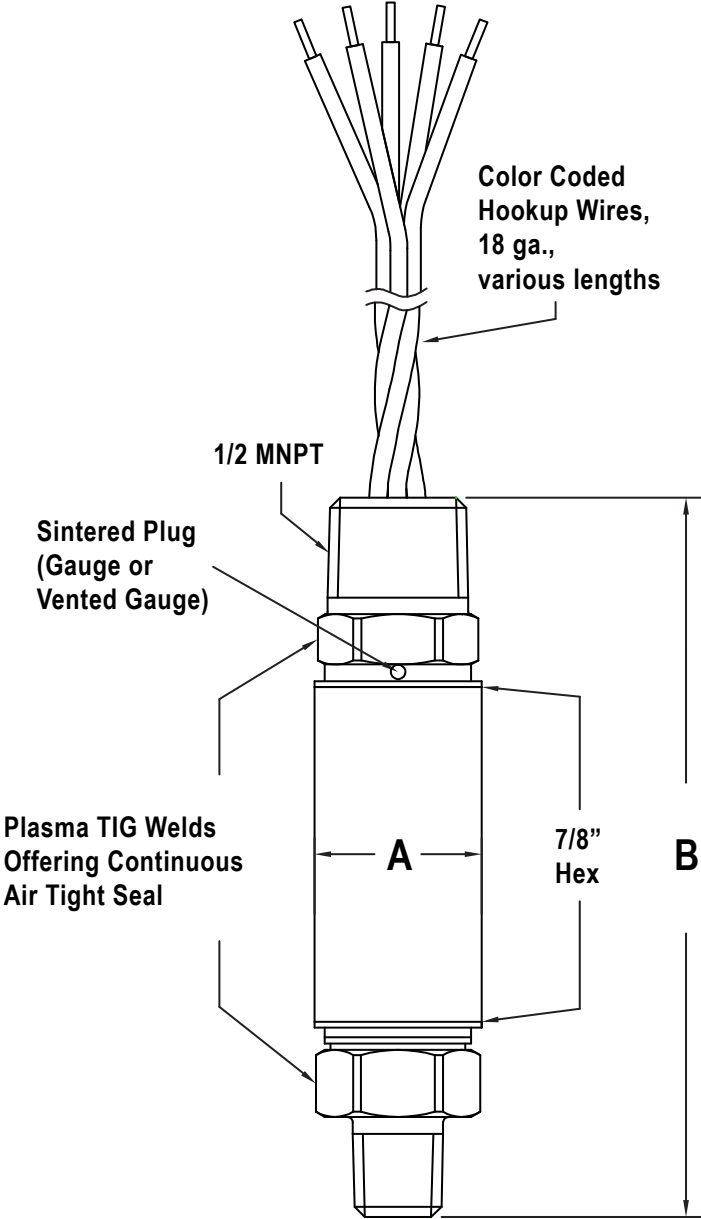
Electrical Data

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	-	<math>< 10\text{mA}</math>	<math>< 10\text{mA}</math>	<math>< 10\text{mA}</math>
Sampling Rate	400Hz	400Hz	400Hz	400Hz
Output Noise	<math>< 1\text{mV, RMS}</math>	<math>< 1\text{mV, RMS}</math>	<math>< 1\text{mV, RMS}</math>	<math>< 1\text{mV, RMS}</math>
Zero Offset	$\pm 0.5\% \text{ FS}$	$\pm 0.5\% \text{ FS}$	$\pm 0.5\% \text{ FS}$	$\pm 0.5\% \text{ FS}$
Span Tolerance	$\pm 0.5\% \text{ FS}$	$\pm 0.5\% \text{ FS}$	$\pm 0.5\% \text{ FS}$	$\pm 0.5\% \text{ FS}$
Output Load	0-800 Ohms@10-28VDC	5k Ohms, min.	5k Ohms, min.	5k Ohms, min.
Reverse Polarity Protection	Yes	Yes	Yes	Yes

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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"