

# Explosion-Proof Pressure Transducer / Transmitter with Display



AST46DS

CSA Certified: Class I & II Division 1 & 2 | Class III

ISO9001:2008



AST46DS explosion proof pressure transducers features the latest advances in transducer technology. With a power supply as low as an 8VDC and low current consumption, the AST46DS can operate in remote areas with minimal power. The re-zeroing function, allows for field calibration in a safe environment to further enhance well site or system readings. Pressure ranges are available up to 20,000 PSI; these explosion-proof pressure transducers and transmitters are designed for all common oil and gas pressures from shallow to deep wells.

- Explosion Proof: Class I & II Division 1 Groups A, B, C, D, E, F, G
- Non-Incendive: Class I & II Division 2 Groups A, B, C, D, E, F, G
- Class III Division 1 & 2
- ANSI/ISA 12.27.01-2003 Single Seal Approved
- Display Units: PSI | Bar | kpa | Mpa | kg/cm<sup>2</sup> | in WC | Volts | mA

## Environmental Data

Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Display Operating	-30 to 80°C (-22 to 176°F)
Storage	-55 to 105°C (-67 to 221°F)
Thermal Limits	
Compensated Range	0 to 55°C (30 to 130°F)
TC Zero	<±1.0% of FS
TC Span	<±1.0% of FS
Other	
Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Enclosure Rating:	Suitable for Outdoor Use; Type 4X Rated
Pollution Degree	2 (interior of enclosure)
Measurement (Installation) Category	I
Altitude	2000m

## Benefits

- Low current consumption voltage output
- Re-zero push-button functionality
- Display pressure units or output signal
- Accurate, repeatable sensor technology
- Rugged design withstands harsh outdoor environments
- Available in exotic alloys
- High quality, NEMA 4X case and finish withstands salt spray and outdoor environments

## Applications

- SCADA systems
- Wellhead systems
- Compressor systems and stations
- Pipeline instrumentation
- Power generation equipment
- Offshore platforms
- Oil and gas pressure monitoring
- Test systems

## 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 or 45,000 PSI, whichever is less
Pressure Cycles	> 100 Million

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

## Electrical Data

Output	4-20mA	1-5VDC
Excitation	8-28VDC	8-28VDC
Output Impedance	>10k Ohms	<100 Ohms, Nominal
Current Consumption:	25mA, typical	2mA, typical
Bandwidth	(-3dB): DC to 1kHz	(-3dB): DC to 1kHz
Output Noise:	-	<2mV RMS
Zero Offset:	<± 0.5% of FS	<± 0.5% of FS
Span Tolerance:	<± 1.0% of FS	<± 1.0% of FS
Output Load:	0-800 Ohms@8-28VDC	5k Ohms, Min.
Reverse Polarity Protection	Yes	Yes

