



EXPLOSION-PROOF Pressure Transducer with Display AST46DS

Overview

AST46DS explosion proof pressure transducer 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.

Benefits

- Explosion Proof: Class I & II Division 1 / 2 Groups A, B, C, D, E, F, G
- Class III Division 1 & 2
- ATEX and IECEx Ex d IIC
- ANSI/ISA 12.27.01-2003 Single Seal Approved
- ABS (American Bureau of Shipping) Approved
- Display Units: PSI | Bar | kpa | Mpa | kg/cm² | in WC | Volts | mA

EXPLOSION-PROOF

AST46DS Pressure Transducer with Display

Applications

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

Performance @ 25°C (77°F)

Error Tolerance	< ±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

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)

0-100% relative humidity, non-condensing

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 Outdoors; Type 4X Rated

Pollution Degree 2 (interior of enclosure)

Measurement (Installation) Category I

Altitude 2000m

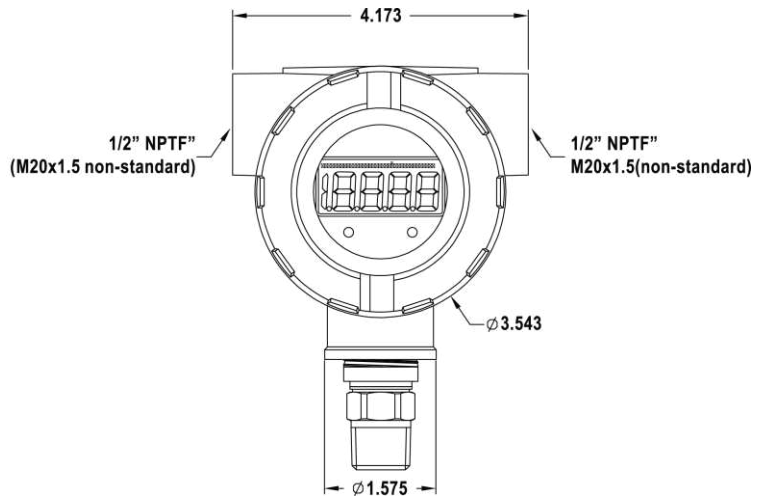
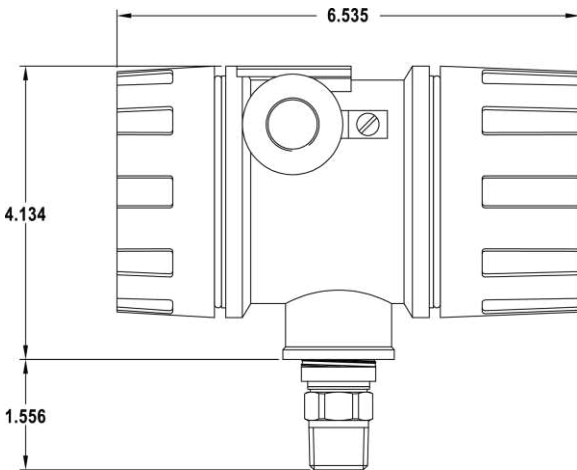
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Electrical Data

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

Dimensions



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Ordering Information

AST46DS	P	G	0500	P	3	2	1	000	-Z
Series Type									
Process Connection A= 1/4" NPT Male (up to 10,000 PSI) I= 1/4" NPT Female (up to 15,000 PSI) P= 1/2" NPT Male (up to 15,000 PSI) W= F250C Female Autoclave (10,000 to 20,000 PSI)									
Pressure Range G= Gauge Pressure* V= Gauge Pressure (Vacuum Calibrated)* 0= Sealed Gauge up to 9,999 PSI 1= Sealed Gauge up to 10,000 to 19,999 PSI 2= Sealed Gauge 20,000 PSI									
Insert Pressure Code									
PSIG Measurement	0-1	Pressure Code	G	0001	PSIG Measurement	-14.7 to 25	Pressure Code Vented	V	0025
	0-2.5+		G	0069		-14.7 to 30		V	0030
	0-5		G	0005		-14.7 to 50		V	0050
	0-7.5+		G	0208		0-25		G	0025
	0-10		G	0010		0-50		G	0050
	0-15		G	0015		0-100		G	0100
PSIG Measurement	Pressure Code	G	0000	PSIG Measurement	0-200	Pressure Code Vented	G	0200	
					0-500		0	0500	
					0-1,000		0	1000	
					0-3000		0	3000	
					0-5,000		0	5000	
					0-7,500		0	7500	
					0-10,000		1	0000	
					0-15,000		1	5000	
					0-20,000		2	0000	

Pressure Unit
B= Bar K= kg/cm² P= PSI H= Inches H₂O

Outputs
3= 1-5V 4= 4-20mA (2 wire loop powered)

Electrical
2= Terminal Blocks (1/2" FNPT Conduit Connections - standard)

Wetted Material (consult factory on availability of Inconel 718 and Hastelloy C276)
0= 17-4PH 1= 316L** 2= Inconel 718** 4= Hastelloy C276**

Options
000= No Options

Approval
-Z= Add "-Z" for CRN Registered to ANSI/ASME B31.3. Contact factory for material, pressure, and process connection options.

*Not suitable for Class II; Sensing element corrects for barometric pressure through base sensor assembly. **NACE MR0175/ISO 15156 compatible material

联系方式



深圳市亿为测控电子有限公司
Shenzhen Bill-Well Measurement & Control Electronics Co., Ltd.

地址: 深圳市南山区创业路怡海广场东座 2408 邮编: 518000
电话: (+86) 0755 2641 9890 传真: (+86) 0755 2641 9680
电子邮箱: sales@bill-well.com