



PRECISION

Pressure Transducer / Transmitter AST20HA

Overview

The AST20HA is a digitally compensated precision pressure transducer / pressure transmitter that offers high performance over temperature. Krystal Bond™ Technology alone offers excellent non-linearity and non-repeatability performance. When it is combined with the advanced electronics, the AST20HA steps into its own league of high performance pressure sensing at an affordable price.

Benefits

- Digital ASIC Compensation
- Superb Temperature Performance
- Real Time Thermal Compensation
- Real Time Linearity Correction
- Turndown Capability
- Pressures up to 45,000 PSI
- ABS (American Bureau of Shipping) Approved

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Applications

- Aerospace
- Analytical Instruments
- Hydraulics
- Hydrogen (Consult factory for media compatibility)
- Labs / Metrology
- Medical
- Military
- Test Stands

Performance @ 25°C (77°F)

| | |
|---------------------------|--|
| Accuracy | < ±0.1% BFSL (< ±0.2% BFSL over 15,000 PSI) (Accuracy includes non-linearity, hysteresis & non-repeatability) |
| Stability (1 year) | ±0.1% FS, typical |
| Proof Pressure | 2X Rated Pressure, Standard (For higher proof pressures, contact factory) |
| Burst Pressure | 5X or 50,000 PSI (whichever is less) |
| Pressure Cycles | > 100 Million |

Environmental Data

Temperature

| | |
|------------------|-----------------------------|
| Operating | -40 to 85°C (-40 to 185°F) |
| Storage | -50 to 125°C (-58 to 257°F) |

0-100% relative humidity, non-condensing

Thermal Limits

Compensated Range 0-70°C (30 to 158°F)

| | |
|----------------|---------------|
| TC Zero | < ±0.5% of FS |
| TC Span | < ±0.5% of FS |

Other

| | |
|----------------------------|-------------------------|
| Shock | 100G, 11 msec, 1/2 sine |
| Vibration | 10G peak, 20 to 2000Hz |
| EMI/RFI Protection: | Yes |
| Rating: | IP-66, min |

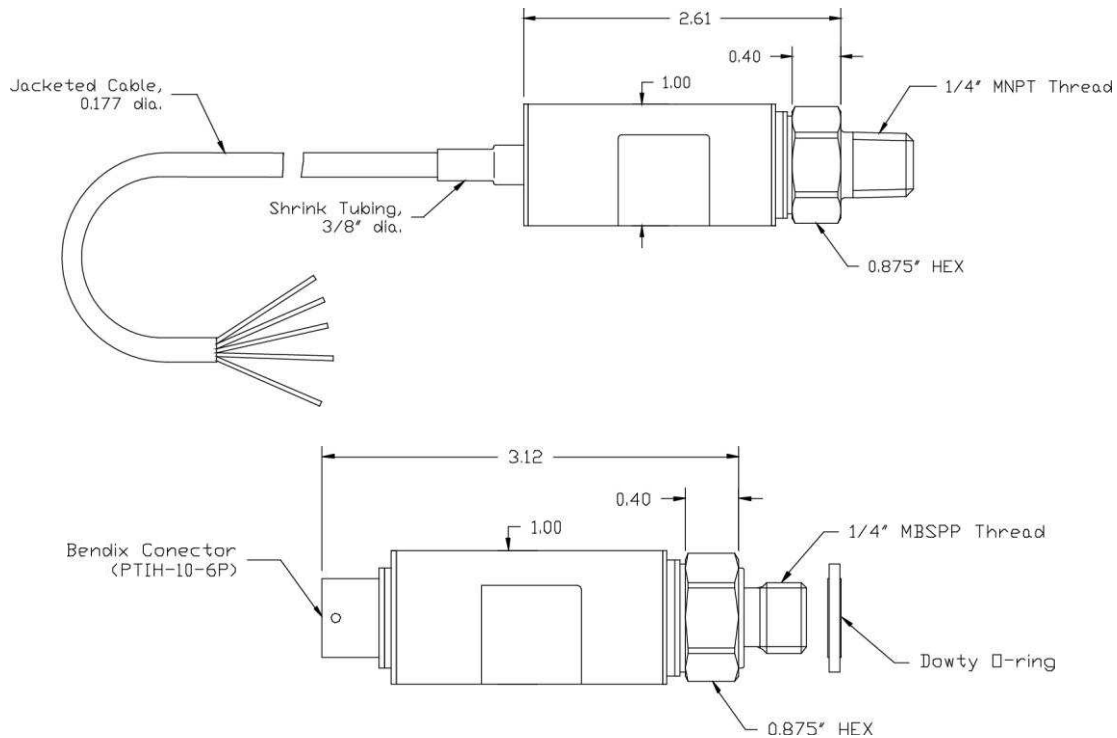
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Electrical Data

| | | | | |
|------------------------------------|---------------------|---------------|---------------|----------------------|
| Output | 4-20mA+ | 0-5V, 1-5V | 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 | 400 Hz | 400 Hz | 400 Hz | 400 Hz |
| Output Noise | < 1mV, RMS | < 1mV, RMS | < 1mV, RMS | < 1mV, RMS |
| Zero Offset: | < ±0.5% of FS | < ±0.5% of FS | < ±0.5% of FS | < ±0.5% of FS |
| Span Tolerance: | < ±0.5% of FS | < ±0.5% of FS | < ±0.5% of FS | < ±0.5% of FS |
| Output Load: | 0-800 Ohms@10-28VDC | 5k Ohms, Min. | 5k Ohms, Min. | 5K Ohms, Min. |
| Reverse Polarity Protection | Yes | Yes | Yes | Yes |

Dimensions



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Ordering Information

| | | | | | | | | |
|--|----------|--------------|----------|----------|----------|----------|----------|------------|
| AST20HA | A | 05000 | P | 4 | E | 0 | H | 000 |
| Series Type | | | | | | | | |
| Process Connection A = 1/4" NPT Male B = 1/8" NPT Male** C = 1/4" BSPP Male E = 9/16"-18 UNF Male [SAE6] F = 7/16"-20 UNF Male [SAE4]** P = 1/2" NPT Male*** W = F250C Female Autoclave**** ** Not available under 50PSI (1/8" NPT Male not available in 316L) *** Pressures up to 15,000 PSI **** Pressures from 10,000 to 45,000 PSI, not available in 316L | | | | | | | | |
| Pressure Range Insert 5-digit pressure range code (example: 0-100 PSI = 00100) Ranges between 0-25 PSI and 0-45,000 PSI available. Compound pressure up to -14.7 to 500 PSI. | | | | | | | | |
| Pressure Unit B= Bar K= kg/cm2 P= PSI | | | | | | | | |
| Outputs 1= 0.5-4.5V ratiometric 2= 0-5V(3 wire) 3= 1-5V 4= 4-20mA 5= 0-10V(3 wire) G= 1-10V | | | | | | | | |
| Electrical A= 2 ft.(0.6m) B= 4 ft.(1.2m) C= 6 ft.(1.8m) D= 10 ft.(3.0m) E= Mini DIN 43650C I= DIN 43650A R= 6- Pin Bendix Y= M12x1 | | | | | | | | |
| Wetted Material 0=17-4PH 1=316 L (available up to 10,000 PSI) 2= Inconel 718 (consult factory on availability) | | | | | | | | |
| Fail Condition N= Not Specified H= Fail High L= Fail Low | | | | | | | | |
| Options (contact factory for additional options) 000= No Options | | | | | | | | |

联系方式



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