



0-5V / 0-10V / 1-6KHZ Pressure Transducer AST4700

Overview

The AST4700 is a competitively priced, high quality stainless steel pressure transducer intended for the use of measurement of liquids and gases. Utilizing Krystal Bond™ Technology. Offering a one piece stainless steel sensing element the AST4700 is free of welds, internal o-rings, and oil fill. This translates into rugged construction, high cycle life, and wide range of media compatibility, along with all of the benefits of MEMs technology.

The AST4700 can be packaged with a variety of process connections including NPT, SAE(UNF), and BSP. Zero-based voltage and frequency output signals are all standard choices when selecting this product. Electrical connection options include cable, Hirschmann, and Bendix.

Benefits

- ◆ High Strength Stainless Steel Construction
- ◆ Pressures up to 10,000 PSI
- ◆ Wide Variety of Configurations
- ◆ Suitable for High Shock and Vibration
- ◆ CE Certified

Applications

- ◆ Test Stands & Lab Equipment
- ◆ Data Loggers
- ◆ Pressure Instrumentation
- ◆ Hydraulic Systems
- ◆ HVAC/R Systems
- ◆ Water Management

Performance @ 25°C (77°F)

Accuracy	< ±0.5% BFSL (0.25% and 0.1% optional - some configurations) (Accuracy includes non-linearity, hysteresis & non-repeatability)
Stability (1 year)	±0.25% FS, typical
Over Range Protection	2X Rated Pressure
Burst Pressure	5X or 20,000 PSI (whichever is less)
Pressure Cycles	> 100 Million

Environmental Data

Temperature

Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 to 250°F)

0-100% relative humidity, non-condensing

Thermal Limits

Compensated Range	0 to 55°C (32 to 131°F)
TC Zero	< ±1.5% of FS
TC Span	< ±1.5% of FS

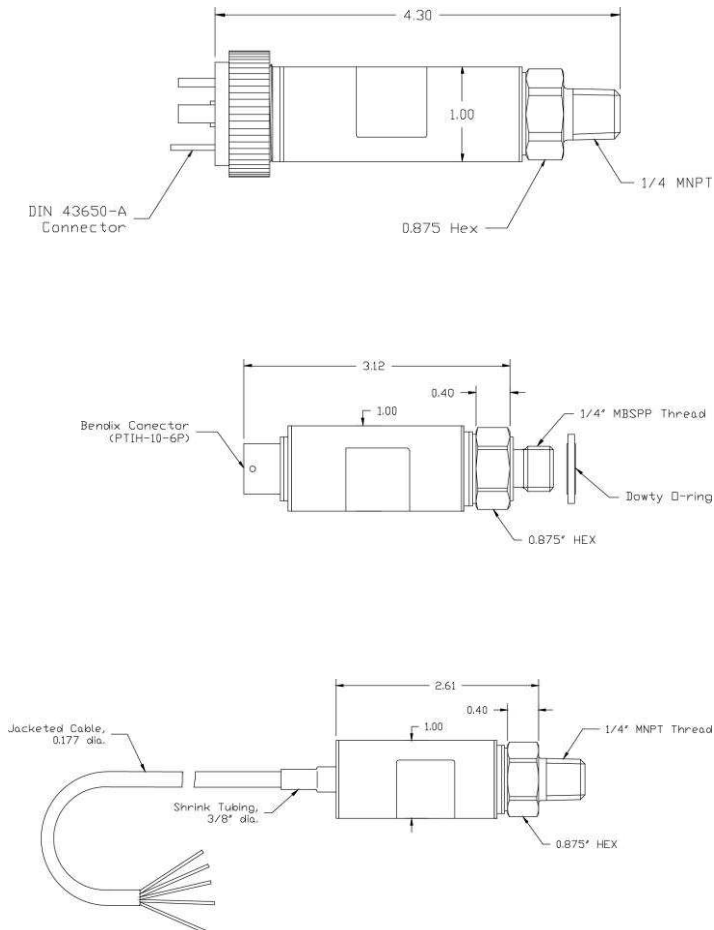
Other

Shock	EN 60068-2-27
Vibration	EN 60068-2-6, 60068-2-64, and IEC 68-2-32
EMI/RFI Protection:	Yes
Rating:	IP-66

Electrical Data

Output	0-5V (3 or 4 Wire)	0-10V (3 or 4 wire)	Frequency (1-6KHz)
Excitation	10-28VDC	15-28VDC	10-28VDC
Output Impedance	< 100 Ohms, Nominal	< 100 Ohms, Nominal	10k pull-up
Current Consumption:	< 10mA	< 10mA	< 15mA
Bandwidth	(-3dB): DC to 1kHz	(-3dB): DC to 1kHz	(-3dB): DC to 250Hz
Output Noise	< 2mV RMS	< 2mV RMS	< 2mV RMS
Zero Offset:	< ±1% of FS	< ±1% of FS	< ±1% of FS
Span Tolerance:	< ±1.5% of FS	< ±1.5% of FS	< ±1.5% of FS
Output Load:	10k Ohms, Min.	10k Ohms, Min.	10k Ohms, Min.
Reverse Polarity Protection	Yes	Yes	Yes

Dimensions



Ordering Information

AST4700	A	00100	P	5	A	1	000
Series Type							
Process Connection A= 1/4" NPT Male B= 1/8" NPT Male* C= 1/4" BSPP Male F= 7/16" - 20 UNF Male* * "B" and "F" not available under 50PSI ("B" not available in 316L)							
Pressure Range Insert 5-digit pressure range code (example: 0-100 PSI = 00100) Ranges between 0-25 PSI and 0-10,000 PSI available. Compound pressure up to -14.7 to 500 PSI.							
Pressure Unit B= Bar K= kg/cm ² P= PSI							
Outputs 2= 0-5V (3-Wire) 5= 0-10V (3-Wire) H= 1-6kHz K= 0-5V (4-Wire) L= 0-10V (4-Wire)							
Electrical A= 2 ft. (0.6m) B= 4 ft. (1.2m) C= 6 ft. (1.8m) D= 10 ft. (3.0m) E= Mini DIN 43650 I= DIN 43650A R= 6- Pin Bendix							
Wetted Material 0= 17-4PH 1= 316L							
Options (contact factory for additional options) 000= No Options							

NORTH AMERICA

American Sensor Technologies, Inc. (AST),
a TE Connectivity Company
Tel: 800-522-6752
Email: customercare.molive@te.com

ASIA

Hong Kong Sensor Technologies (HKST),
a TE Connectivity Company
Tel: 0400-820-6015
Email: customercare.shzn@te.com

TE.com/sensorsolutions

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