



INDUSTRIAL Pressure Transducer AST2000

OVERVIEW

The AST2000 is an ASIC-compensated, high quality, stainless steel industrial pressure transducer designed for use in the measurement of liquids and gases. Intended for mid to high volume applications requiring excellent performance, the AST2000 succeeds by offering highly competitive pricing.

BENEFITS

- Fully Welded Stainless Steel Housing
- No Oil Fill, Welds, or Internal O-rings
- Wide Operating Temperature
- Compatible with Liquids and Gases
- Rugged, Compact Design
- Pressures up to 10,000 PSI
- High Shock and Vibration
- EMI/RFI Protection

APPLICATIONS

- Industrial OEM Equipment
- Hydraulic Systems
- HVAC Equipment
- Refrigeration Equipment
- Automotive
- Energy / Water Management
- Test Stands
- Off-Road / Construction Equipment
- Railways (Braking, Compressor & Engine Controls)

PERFORMANCE @ 25°C (77°F)

Accuracy	< ±0.25% BFSL (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 125°C (-40 to 250°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	< ±1.0% of FS
TC Span	< ±1.0% of FS

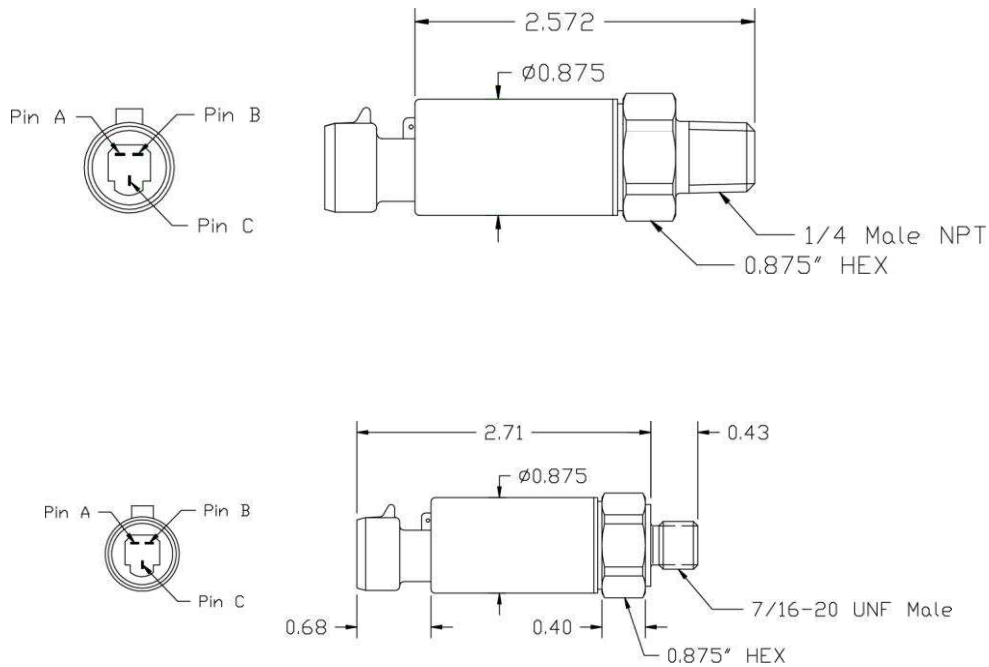
Other

Shock	100G, 11 msec, 1/2 sine
Vibration	20G peak, 20 to 2400 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66, (optional IP-67)

ELECTRICAL DATA

Output	Voltage (.25-5V, 1-5V, 1-6V)	0.5-4.5V Ratiometric	4-20mA
Excitation	10-30V _{DC}	5V _{DC}	10-30V _{DC}
Output Impedance	< 100Ω _{NOMINAL}	< 100Ω _{NOMINAL}	< 10kΩ
Current Consumption:	< 10mA	< 10mA	20mA, typical
Bandwidth	(-3dB): DC to 3kHz	(3dB): DC to 3kHz	(-3dB): DC to 250Hz
Output Noise	< 2mV RMS	< 2mV RMS	-
Zero Offset:	±0.5% of FS	±0.5% of FS	< ±1% of FS
Span Tolerance:	±1.0% of FS	±1.0% of FS	< ±1% of FS
Output Load:	10kΩ _{MIN.}	10kΩ _{MIN}	0-800Ω @10-28V _{DC}
Reverse Polarity Protection	Yes	Yes	Yes

DIMENSIONS



ORDERING INFORMATION

AST2000 – A 00500 P 1 E 0 000

Process Connection	
A	1/4" NPT Male
B	1/8" NPT Male*
C	1/4" BSPP Male
F	7/16"-20 UNF Male*
K	SAE4 Female

Pressure Range [psi]	
Insert 5-digit pressure range code (Ex: 0-100psi = 00100).	

Compound pressure range is -14.7 to 500 psi
Ranges between 0-25psi and 0-10,000psi available

Pressure Unit	
B	bar
K	kg/cm ²
P	psi

Output	
Code	Output Signal
1	0.5 – 4.5V Ratiometric
3	1 – 5V
4	4 – 20mA (2-wire loop powered)
6	1 – 6V

Options	
000	No Options

Contact factory for additional options

Wetted Material	
0	17-4PH
1	316L

Electrical	
E	Mini-DIN 43650
F	Packard Metripack 150 3-pin
K	Deutsch DT04-3 pin
R	6-pin Bendix
Y	M12x1 Eurofast
Z	Deutsch DT04-4 pin

NORTH AMERICA

American Sensor Technologies, Inc. (AST),
a TE Connectivity Company
Tel: +1 800-522-6752
Email: customercare.molive@te.com

ASIA

Hong Kong Sensor Technologies (HKST),
a TE Connectivity Company
Tel: +86 0400-820-6015
Email: customercare.shzn@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.