



# **INDUSTRIAL OEM**

# Pressure Transducer AST4000

#### Overview

The AST4000 OEM pressure transducer / transmitter remains the most popular configuration. With its welded stainless steel housing and various electrical connections, the AST4000 can be packaged for virtually any OEM pressure transducer application. Voltage and current output signals are available and all products.

#### Benefits

- High Strength Stainless Steel Construction
- No Oil, Welds or Internal O-rings
- Wide Operating Temperature
- Pressures up to 10,000 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Compatible with Wide Variety of Liquids and Gases
- EMI/RFI Protection
- UL/cUL 508 Approved (with housing)

# **Applications**

- Industrial OEM Equipment
- Water Management
- Pneumatics
- Hydrogen Storage
- Sub Sea Pressure
- HVAC/R Equipment
- Control Panels
- Hydraulic Systems
- Data Loggers

# Performance @ 25°C (77°F)

Accuracy < ±0.5% BFSL

Stability (1 year) ±0.25% FS, typical

Over Range

2X Rated Pressure, Minimum

Protection

**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 100°C (-40 to 212°F)

#### **Thermal Limits**

Compensated Range 0 to 55°C (32 to 132°F)

TC Zero  $<\pm 1.5\%$  of FS TC Span  $<\pm 1.5\%$  of FS

Other

**Shock** EN 60068-2-27

**Vibration** EN 60068-2-6, 60068-2-64, and IEC 68-2-32

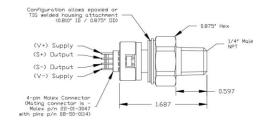
EMI/RFI Protection: Yes

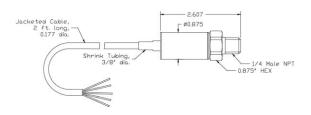
Rating: IP-66 (housing only)

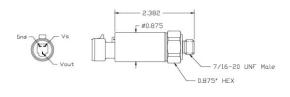
# **Electrical Data**

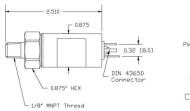
Output	4-20mA	1-5VDC, 1-6VDC	0-50mV (10mV/V)	0.5-4.5V Ratiometric	
Excitation	10-28VDC	10-28VDC	5VDC, typical	5VDC, regulated	
Output Impedance	>10k Ohms	<100 Ohms, Nominal	1100 Ohms, Nominal	<100 Ohms, Nominal	
Current Consumption:	20mA, typical	<10mA	<5mA	<10mA	
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 5kHz, min	(-3dB): DC to 1kHz	
<b>Output Noise</b>	-	<2mV RMS	-	<2mV RMS	
Zero Offset:	<±1% of FS	<±1% of FS	< ±2% of FS	<±1% of FS	
Span Tolerance: <±1.5% of FS		<±1.5% of FS	< ±2% of FS	<±1.5% of FS	
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, min	>1M Ohms	10K Ohms, min	
Reverse Polarity Yes Protection		Yes	-	Yes	

# **Dimensions**









#### Ordering Information

AST4000	Α	00500	Р	4	E	0	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* K= SAE4 Female P= 1/2" NPT 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 <sup>2</sup> P= PSI							
Outputs 1= 0.5-4.5V ratiometric 3= 1-5V 4= 4-20mA (2 wire loop powered) 6= 1-6V							
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 F= Packard Metripack 150 3-Pin G= 4-pin Molex (no housing) I= DIN 43650A K= Deutsch DT04-3 Pin R= 6- Pin Bendix Y= M12x1 Eurofast Z= Deutsch DT04-4 Pin							
<b>Wetted Material</b> 0= 17-4PH 1= 316L 2= Inconel 718							
Options							

(contact factory for additional options)
000= No Options
006= Schrader Depressor Pin (only available with process connection "K")
143= Schrader Depressor Pin & Sealed Gauge References (only available with process connection "K")

#### **NORTH AMERICA**

American Sensor Technologies, Inc. (AST), a TE Connectivity company 450 Clark Drive Mount Olive, NJ 07828 USA Tel +1 973 448 1901 Fax +1 973 448 1905 info@astsensors.com

#### ASIA

Hong Kong Sensor Technologies (HKST), a TE Connectivity company Unit No. 2 on 24/F., Perfect Industrial Building, No. 31 Tai Yau Street, San Po Kong, Kln., Hong Kong Tel 852 2242 5048 info@hkstsensors.com

#### TE.com/sensorsolutions

American Sensor Technologies, Inc., a TE Connectivity company.

American Sensor Technologies, 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.

AST4000 10/01/15