



LOW COST / COMPACT Pressure Sensor & Transducer AST4100

Overview

The AST4100 is a compact, low cost pressure transducer with a cable electrical connection. Mainly used in benign environments, the AST4100 is an economical option for pressure sensing.

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
- ◆ UL/cUL 508 Approved

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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 Protection	2X Rated Pressure, Minimum
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	<±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:	No
Rating:	IP-66

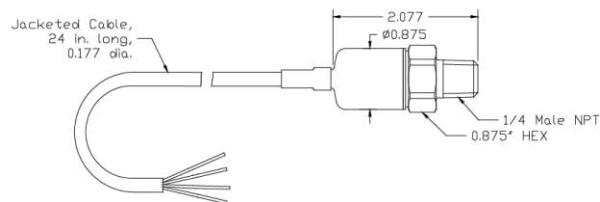
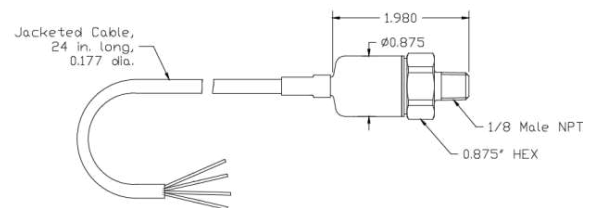
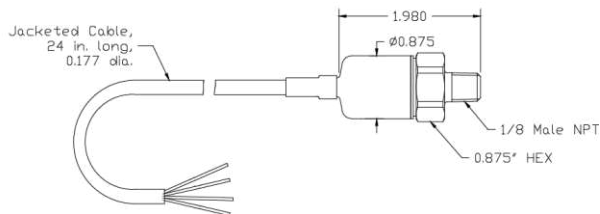
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Electrical Data

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
Output Noise	-	<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 Protection	Yes	Yes	-	Yes

Dimensions



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Ordering Information

AST4100

A

00500

P

4

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/cm² 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)

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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