

# AST4200 Industrial Grade Panel Mount



## Stainless Steel Media Isolated Pressure Sensor

### Overview

In order to simplify installation of pressure sensors for control panel applications, American Sensor Technologies offers the AST4200 Panel Mount Pressure Sensor. This innovative sensor is mounted directly through the panel without the need for additional adaptors, eliminating potential leak paths.

### Benefits

- High Strength Stainless Steel Construction
- No Oil, Welds or Internal O-rings
- Wide Operating Temperature Range
- Ranges up to 10,000 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Compatible with Wide Range of Liquids and Gases
- EMI/RFI Protection
- Simple Installation for Panel Builders
- UL/cUL 508 Approved

### Applications

- Control Panels
- Hydraulic Systems
- Data Loggers
- Industrial OEM Equipment
- HVAC/R Equipment
- Pneumatics



### 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 (30 to 130°F)
TC Zero	<±1.5% of FS
TC Span	<±1.5% of FS

#### Other

Shock	100G, 11 msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz.
EMI/RFI Protection:	Yes
Rating:	IP-66 (housing only)

### Performance @ 25°C (77°F)

Accuracy*	< ±0.5% BFSL
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

\* Accuracy includes non-linearity, hysteresis & non-repeatability

### 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:	<±2% 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



## Ordering Information

**AST4200 J 00100 P 4 A 0 000**

**Panel Mount Series Type**

**Configuration Interface**

A=1/4" NPT Male  
 J=1/8" NPT Female  
 V=1/8" BSP Female

**Pressure Range**

Insert 5-digit pressure range code below

**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  
 A= 10mV/V

**Electrical<sup>†</sup>**

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 Conn.  
 G=4-pin Molex Conn. (No housing)  
 I=DIN 43650A  
 Z= DT04 Deutsch

**Wetted Material**

0= 17-4PH

**Options**

000=No special factory options

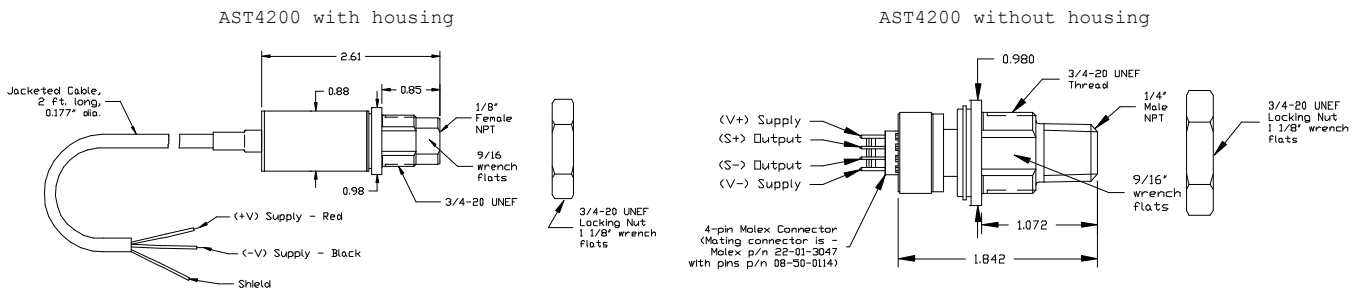
### Pressure Ranges\*

PSIG Measurement Range	Pressure Range Code	BARG Measurement Range	Pressure Range Code
-14.7 to 25**	V0025**	-1 to 2**	V0002**
0-25	00025	0-2	00002
0-50	00050	0-5	00005
0-100	00100	0-7	00007
0-150	00150	0-10	00010
0-200	00200	0-20	00020
0-250	00250	0-35	00035
0-500	00500	0-50	00050
0-1,000	01000	0-70	00070
0-2,500	02500	0-100	00100
0-5,000	05000	0-250	00250
0-7,500	07500	0-350	00350
0-10,000	10000	0-500	00500
		0-700	00700

\*Typical ranges. All ranges between 0-25 PSI and 0-10,000 PSI available.  
 \*\*Compound ranges up to -14.7 to 500 PSI available. Please consult factory.

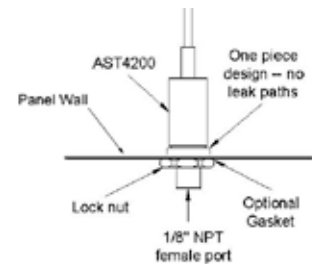
<sup>†</sup>Wiring information available at: <http://www.astensors.com/mediacenter.php>

## Dimensional Data



NOTE:  
 1. Use Greenlee Punch Unit #60086 to prepare the panel hole. Also available from McMaster-Carr as #3449A65.

## Panel Mount Solution



## Warranty

**Workmanship** - AST, Inc. pressure transmitters have a limited one-year warranty to the original purchaser. AST, Inc. will replace or repair, free of charge, any defective transmitter. This warranty does not apply to any units that have been modified; misused, neglected or installed where the application exceeds published ratings. AST's sensors are made with pride in New Jersey, USA. If in the area please feel free to stop by for a visit! **Installation/Applications** - The purchaser is responsible for media compatibility, functional adequacy, and correct installation of the transmitter.