

OEM Pressure Sensors & Transducers



AST4000

AST4100

AST4200



▪ 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.

▪ 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.

▪ The **AST4200** series offers the same features as the AST4000, but uses a unique pressure port design that enables direct mounting to panels without the use of an adapter.

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

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: 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:	<±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



Ordering Information

AST4000

A

00500

P

4

E

0

000

Series Type

- AST4000= Industrial Grade ■
- AST4100= Compact ●
- AST4200= Panel Mount ◆

Process Connection*

- A= 1/4" NPT Male ■◆
- J= 1/8" NPT Female ◆
- B= 1/8" NPT Male ■●
- K= SAE4 Female ■
- C= 1/4" BSPP Male ■●
- P= 1/2" NPT Male ■
- F= 7/16" - 20 UNF Male ■●
- V= 1/8" BSP Female ◆

* "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)

Pressure Unit ■◆

- B= Bar
- K= kg/cm²
- P= PSI

Outputs ■◆

- 1= 0.5-4.5V ratiometric
- 4= 4-20mA (2 wire loop powered)
- A= 10mV/V
- 3= 1-5V
- 6= 1-6V

Electrical (for wiring information visit: <http://www.astensors.com/wiring.php>)

- A= 2 ft. (0.6m) ■◆
- E= Mini DIN 43650 ■◆
- K= Deutsch DT04-3 Pin ■◆
- B= 4 ft. (1.2m) ■◆
- F= Packard Metripack 150 3-Pin ■◆
- R= 6- Pin Bendix ■
- C= 6 ft. (1.8m) ■◆
- G= 4-pin Molex (no housing) ■◆
- Y= M12x1 Eurofast ■
- D= 10 ft. (3.0m) ■◆
- I= DIN 43650A ■◆
- Z= Deutsch DT04-4 Pin ■◆

Wetted Material

- 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") ■

Pressure Ranges⁺

PSIG Measurement Range	-14.7 to 25**	V0025**
	0-25	00025
	0-50	00050
	0-100	00100
	0-150	00150
	0-200	00200
	0-250	00250
	0-500	00500
	0-1,000	01000
	0-2,500	02500
	0-5,000	05000
	0-7,500	07500
0-10,000	10000	
Pressure Range Code		

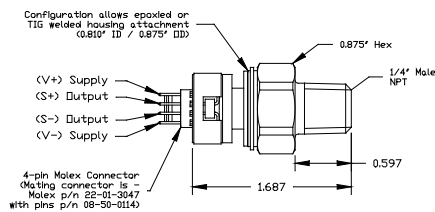
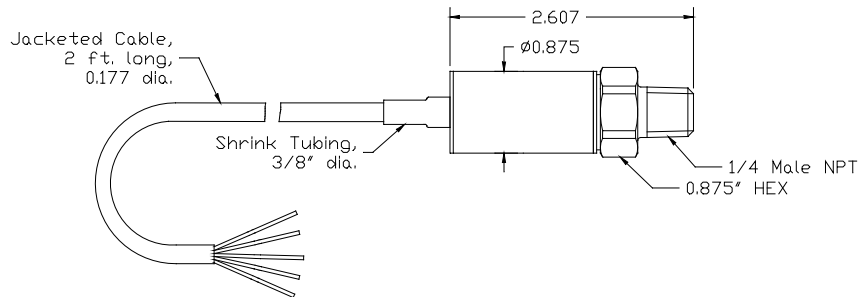
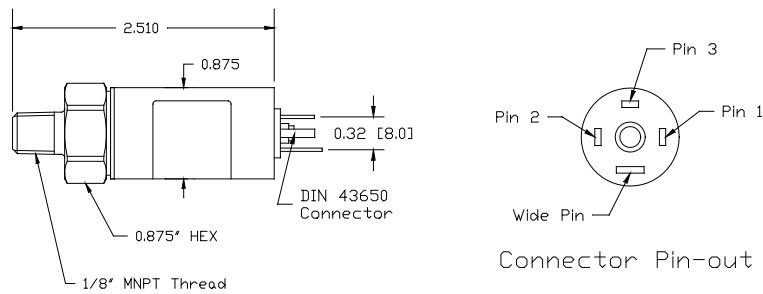
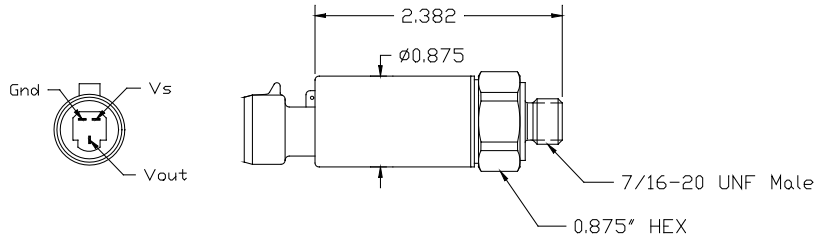
BARG Measurement Range	-1 to 2**	V0002**
	0-2	00002
	0-5	00005
	0-7	00007
	0-10	00010
	0-20	00020
	0-35	00035
	0-50	00050
	0-100	00100
	0-250	00250
	0-350	00350
	0-500	00500
0-700	00700	
Pressure Range Code		

⁺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.

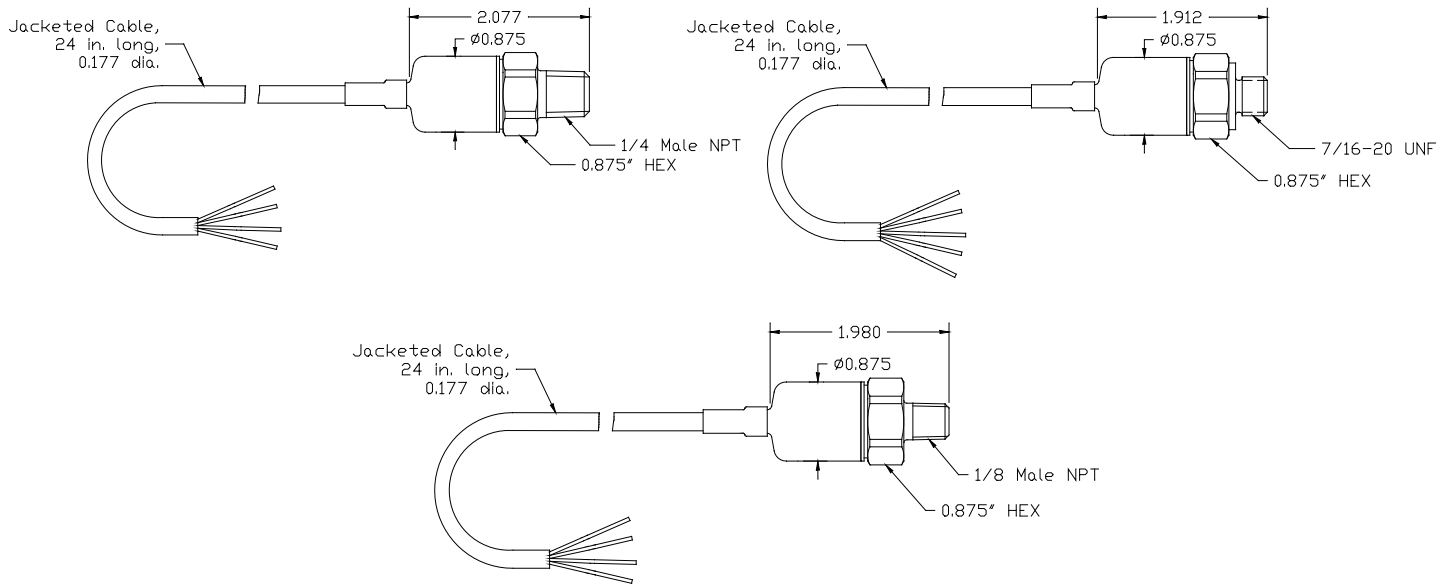
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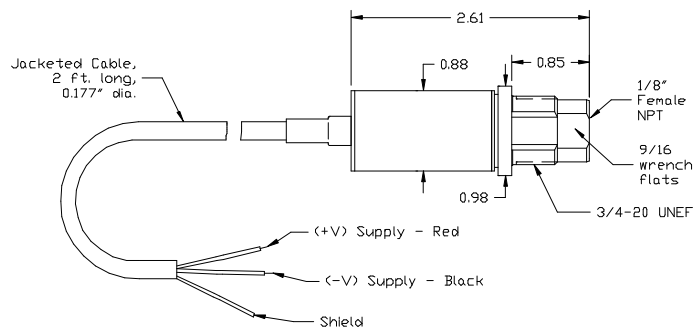


AST4100



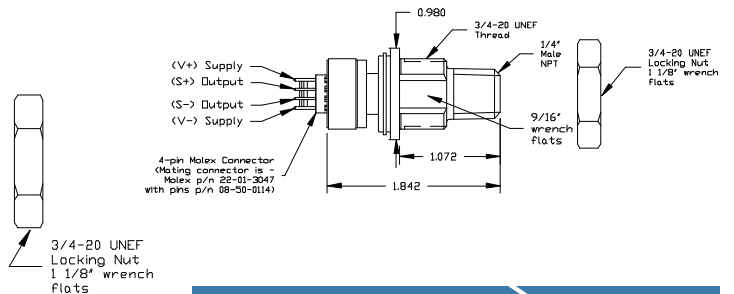
AST4200

AST4200 with housing



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

AST4200 without housing



Panel Mount Solution

