

Model AST4100



Media Isolated Pressure Transmitter



The AST4100 is a low cost, high quality all stainless steel media isolated Pressure Sensor intended for use in the measurement of liquids compatible with stainless steel. The AST4100 is suitable for industrial, refrigeration, hydraulics, offroad, construction and agriculture applications. The AST4100 has been designed specifically for those applications with demanding price and performance requirements.

The competitively priced AST4100 offers a choice of millivolt and high level outputs. The one piece high strength stainless steel construction contains no silicone oil, no welds and no internal "O" rings. Measurements are available in gauge pressure covering ranges up to 10,000 PSI.

The AST4100 is ideal for applications needing high accuracy, excellent long-term stability, trouble free operation, long life and high performance. The AST4100 is backed by AST's one-year warranty.

Applications

- Industrial OEM Equipment
- Hydraulic Systems
- Refrigeration
- Offroad
- Test Stands
- Data Loggers
- Energy and Water Management
- Pressure Instrumentation

Benefits

- High Strength Stainless Steel Construction
- No Silicone Oil, No Welds, No Internal "O" Rings
- Wide Operating Temperature Range
- Ranges up to 10,000 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Rugged Design Survives Harsh Environments
- Compatible with Wide Range of Liquids and Gases
- Suitable for High Shock and Vibration Applications

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.
- **Installation/Applications**
The purchaser is responsible for compatibility of the media, functional adequacy and correct installation of the transmitter.

Model AST4100 SPECIFICATIONS

Performance @ 25°C (77°F)

Accuracy ¹	<±0.5% BFSL
Stability (1 Year)	±0.25%FS, typ.
Proof Pressure	2X Rated Pressure
Burst Pressure	5X or 20,000 PSI, whichever is less
Wetted Material	17-4PH Stainless Steel (for other material consult Factory)
Pressure Cycles	>100 Million

¹ Accuracy includes: Non-linearity, Hysteresis and Non-repeatability

Environmental Data

Temperature	
Operating	-40 to 85°C (-40 to 185°F)
Storage	-55 to 125°C (-65 to 250°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, 11msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz
Rating	IP66

Electrical Data

Excitation	5VDC, typ.	10-32VDC
Output	10mV/V, 0.5-4.5V	1-5 VDC, 4-20mA
Input Impedance	1500 Ohms, typ	N/A
Output Impedance	1000 Ohms, typ	<100Ω, nom.
Current Consumption	<4mA	<10mA
Bandwidth (-3dB)	DC to 5 kHz, min.	DC to 1 kHz
Output Noise	N/A	<2mV RMS
Reverse Polarity	N/A	YES
Zero Offset	<±2% of FS	<±1% of FS
Span Tolerance	<±2% of FS	<±2% of FS
Output Load	> 1M Ohms	5k Ohms, min. for 1-5VDC, for 4-20mA, see Load Line Curve
Agency Approvals	UL/CUL 508 for all models	

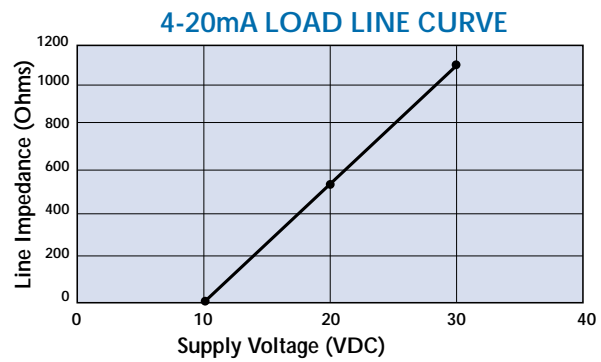
Physical Description

Case	Plated Cold Rolled Steel
Pressure Fittings	1/8" MNPT, 1/4" MNTP (for others contact Factory)
Electrical Connection	2 feet cable std. (for other lengths consult Factory)

Pressure Ranges

Gage psig	Proof psig	Burst psig	Pressure Range Code
0-25	50	250	00025
0-50	100	250	00050
0-100	200	500	00100
0-200	400	1000	00200
0-500	1000	2500	00500
0-1000	2000	5000	01000
0-2500	5000	12,500	02500
0-5000	10,000	20,000	05000
0-7500	15,000	20,000	07500
0-10,000	20,000	20,000	10000

Other ranges available, please consult Factory
Specifications are subject to change without notice.



ORDERING INFORMATION

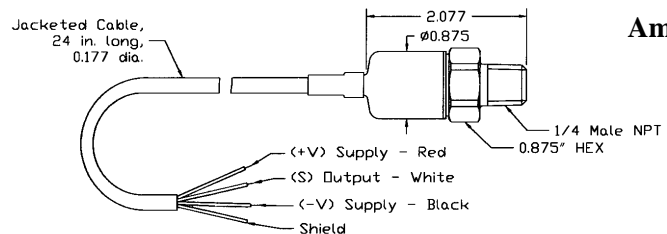
How to Order

Use the characters from the chart below to construct a product code.

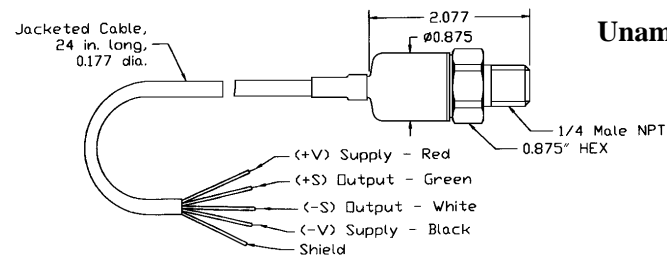
AST4100-A-00100-P-1-A-0-0000

Series Type	Port Configuration	Pressure Range	Pressure Unit	Outputs	Electrical Interface	Wetted Material	Options
	A=1/4" NPT Male B=1/8" NPT Male C=1/4" BSP Male D=G 1/4" Male E=9/16"-18 UNF Male F=7/16"-20 UNF Female G=M14x1.5 Male	Insert Pressure Range from Chart on Left Vxxxx= Vacuum Reference for Pressure Ranges up to 2500 psi	B=BAR K=kg/cm ² P=PSI	1=0.5-4.5 VDC 3=1-5VDC 4=4-20mA A=10mV/V 6=1-6V for others consult Factory	A=2ft. Cable B=4ft. Cable C=6ft. Cable D=10ft. Cable	0=17-4 PH 1=316 L	

DIMENSIONAL DATA



Amplified



Unamplified