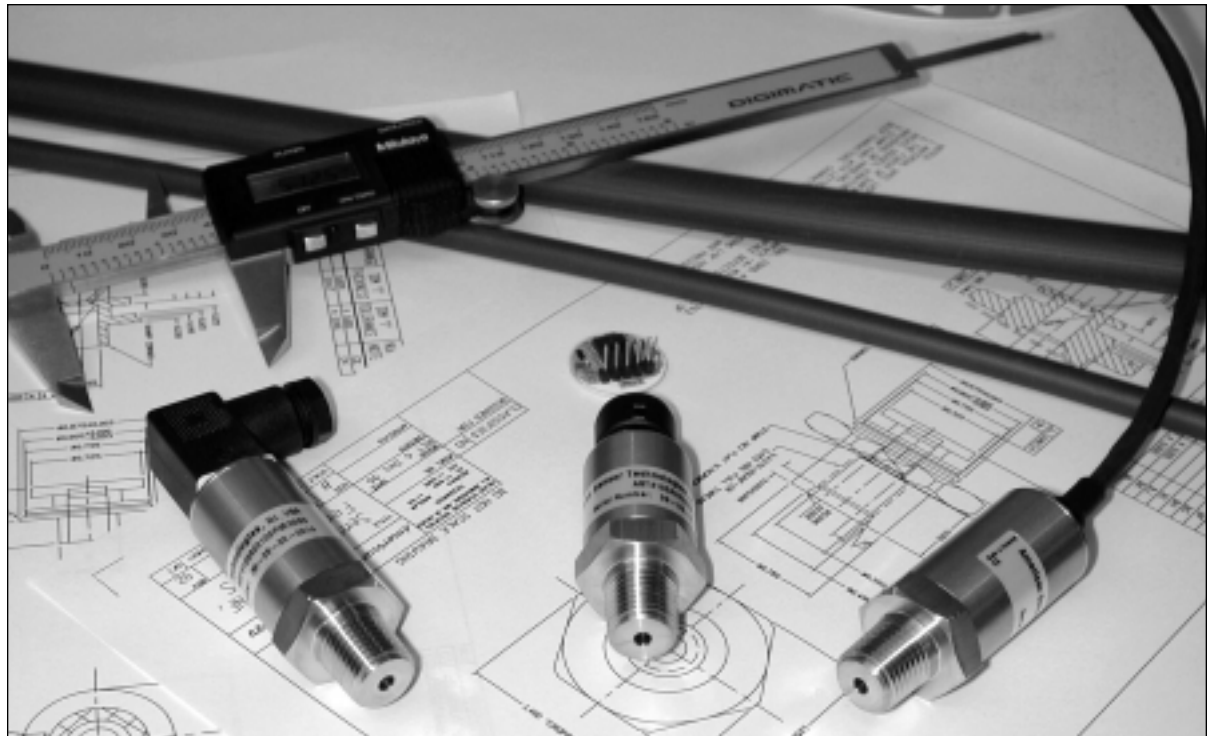


Model AST3100



Media Isolated Pressure Transmitter



The AST3100 is a low cost, high quality all stainless steel media isolated Pressure Transmitter intended for use in the measurement of gases and liquids compatible with stainless steel. The AST3100 is suitable for automotive, industrial, refrigeration, hydraulics, offroad, construction and agriculture applications. The AST3100 has been designed specifically for the applications with demanding price and performance requirements.

The competitively priced AST3100 offers a choice of high level outputs. The high strength stainless steel construction contains no silicone oil and no internal "O" rings. Measurements are available in gauge pressure covering ranges up to 10,000 PSI.

The AST3100 is ideal for applications needing high accuracy, excellent long-term stability, trouble free operation, long life and high performance. The AST3100 is backed by AST's one-year warranty.

 **American
Sensor
Technologies, Inc.**

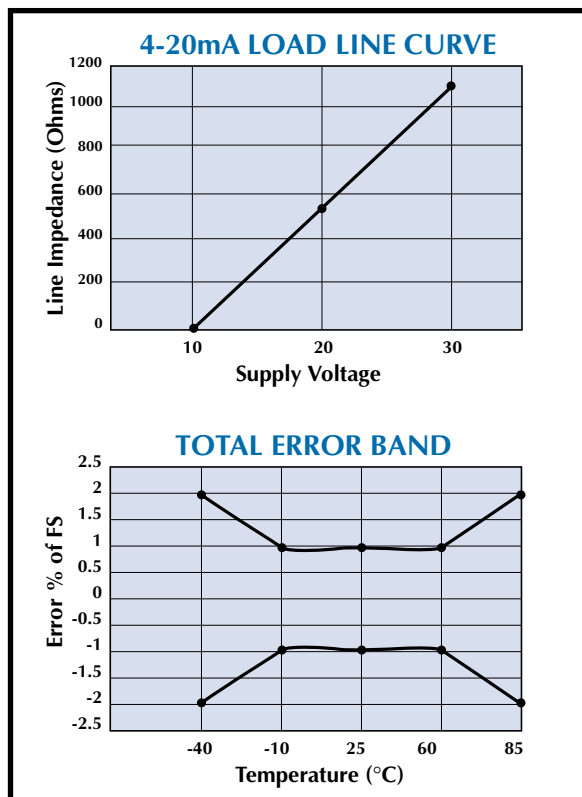
Model AST3100 SPECIFICATIONS

Applications

- Industrial OEM Equipment
- Hydraulic Systems
- Train Braking Circuits
- HVAC/R Equipment
- Refrigeration
- Offroad
- Test Stands
- Data Loggers
- Construction and Agricultural Equipment
- Energy and Water Management
- Pressure Instrumentation

Benefits

- High Strength Stainless Steel Construction
- No Silicone Oil or Internal “O” rings
- Wide Operating Temperature Range
- Ranges up to 10,000 psi
- Low Static and Thermal Errors
- EMI/RFI Protected
- Unparalleled Price and Performance
- Rugged Design Survives Harsh Environments
- Compatible with Wide Range of Gases and Liquids
- Suitable for High Shock and Vibration Applications



Performance @ 25°C (77°F)	
Accuracy ¹	<±0.5% BFSL
Stability (1 Year)	±0.25%FS, typ.
Overrange Protection	2X Rated Pressure
Burst Pressure	5X or 20,000 psi, whichever is less
Total Error Band	±1% FS, from -10° to 60°C ±2% FS, from -10° to -40°C, 60 to 85°C
Pressure Cycles	>10 Million

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

Environmental Data	
Temperature	
Operating	-40 to 85°C (-40 to 185°F)
[Optional]	-40 to 125°C (-40 to 250°F)]
Storage	-40 to 125°C (-40 to 250°F)
Thermal Limits	
Compensated Range	-40 to 85°C (-40 to 185°F)
Other	
Shock	100G, 11msec, 1/2 sine
Vibration	10G peak, 20 to 2000 Hz
EMI/RFI Protection	EN50082, part 2 (Heavy Industrial)
Rating	Nema 4 or IP66

Electrical Data		
Excitation	5 VDC	10-32 VDC
Output	0.5-4.5 V	1-5 V, 4-20mA
Output Impedance	<100 Ω	<100 Ω
Current Consumption	<8mA	<10mA (All Vout Models)
Bandwidth (-3dB)	DC to 1 kHz (Voltage) DC to 250 Hz (Current)	
Output Noise	<2mV RMS	<2mV RMS
Reverse Voltage Protection	YES	YES

Physical Description	
Case	304 Stainless Steel
Sensor	17-4 PH Stainless Steel
Pressure Fittings	1/8" MNPT, 1/4" MNPT, 7/16"-20 MUNF Others available, consult Factory
Vent (<500 psi)	Through Cable or Connector
Electrical Connection	2ft. Cable (STD), Packard Metripak, DIN 43650 Conn, others (consult Factory)

Pressure Ranges			
Gage psig	Proof psig	Burst psig	Pressure Range Code
0-30	60	150	00030
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	7,500	20,000	05000
0-7500	10,000	20,000	07500
0-10,000	12,500	20,000	10000

Other ranges available, please consult Factory

Electrical Connections-Wire Color Codes		
Outputs	0.5-4.5 V and 1-5 V	4-20 mA
Red	+Supply	+Supply
Black	-Supply	Current Output
White	+Output	N/A

Specifications are subject to change without notice.

ORDERING INFORMATION

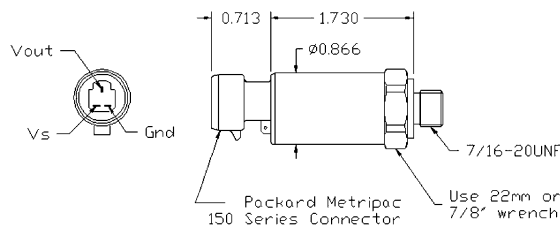
How to Order

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

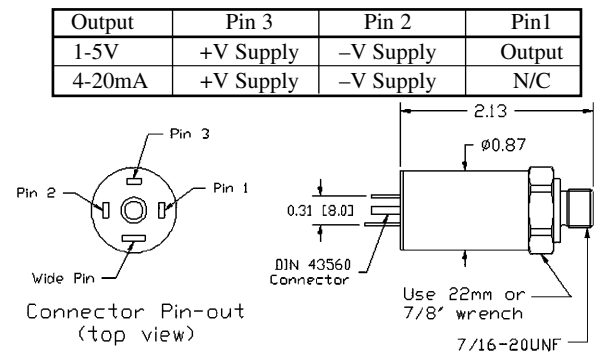
AST3100-A-05000-P-4-A-0000

Series Type	Port Configuration	Pressure Range	Pressure Unit	Outputs	Electrical Interface	Options
	A=1/4" NPT Male B=1/8" NPT Male C=1/4" BSP Male D=G1/4" Male E=9/16"-18 UNF Male F=7/16"-20 UNF G=M14x1.5 Male H=M20x1.5 Male K=1/4" SAE Female	Insert Pressure Range from Chart on Page 3	B=BAR K=kg/cm ² P=PSI	1=0.5-4.5V ratiometric to Vs 2=0-5V 3=1-5V 4=4-20mA, two wire 5=0-10V Others Available, Consult AST	A=2ft. Cable B=4ft. Cable C=6ft. Cable D=10ft. Cable E= Miniature DIN43650 Connector F=Packard Metripac 150, 3 Pin Connector	

DIMENSIONAL DATA



Packard Connection Dimensions



DIN Connection Dimensions

Output	Red	Black	White
1-5V	+V Supply	-V Supply	Output
4-20mA	+V Supply	-V Supply	N/C

Cable Connection Dimensions

