

AST47SM Steel / Aluminum Mill



Stainless Steel Media Isolated Pressure Sensor

Overview

The AST47SM steel mill package is able to perform in rugged environments as well as meet the high demands of the steel and aluminum industry. The pressure port design is compatible with the high pressure spikes when the slab is entering and exiting the rolling mill.

Benefits

- ✓ No Silicone Oil, Welds, or Internal O-rings
- ✓ High Proof and Burst Pressure Ratings
- ✓ Special Internal Restrictor Maintains High Frequency Response ~1kHz
- ✓ Internal Protection Against Pressure Spikes
- ✓ 1/4" BSPP Male Process Connection Available (contact factory for other options)

Applications

- ✓ Roll Forming
- ✓ Stamping
- ✓ Coolant Systems
- ✓ Rolling Mill
- ✓ Pumps



Performance @ 25°C (77°F)

Accuracy ¹	< ± 0.25% BFSL (± 0.1% Optional)
Stability (1 year)	±0.25% FS, typical
Over Range Protection*	5X Rated Pressure
Burst Pressure	10X or 20,000 PSI whichever is less
Pressure Cycles	>100 Million

¹ Accuracy includes: Non-linearity, Hysteresis and Non-repeatability * All orders over 10K PSI must consult factory

Environmental Data

Temperature

Operating	-40 to 85°C (-40 to 185°F)
Storage	-40 to 125°C (-40 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, 11 msec, 1/2 sine
Vibration	20G peak, 20 to 2400 Hz
EMI/RFI Protection:	Yes-100 V/m
Rating:	IP-69

Electrical Data

Output	4-20mA	1-5VDC, 1-6VDC
Excitation	10-28VDC	10-28VDC
Output Impedance	>10k Ohms	<100 Ohms, Nominal
Current Consumption:	20mA, typical	<10mA
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz
Output Noise:	-	<2mV RMS
Zero Offset:	<±1% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±1.5% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, min
Reverse Polarity Protection	Yes	Yes

Ordering Information

AST47SM C 00350 B 4 R 0 000

Series Type

Process Connection
 A=1/4" NPT Male
 C=1/4" BSP Male

Pressure Range
 Insert 5-digit pressure range code

Pressure Unit
 B=BAR
 K=kg/cm2
 P=PSI

Outputs
 2=0-5V (3-Wire)
 4=4-20mA (Loop Powered)
 5=0-10V (3-Wire)

Electrical*
 D=10 ft.
 R=Bendix 6 Pin

Wetted Material
 0=17-4PH

Pressure Ranges

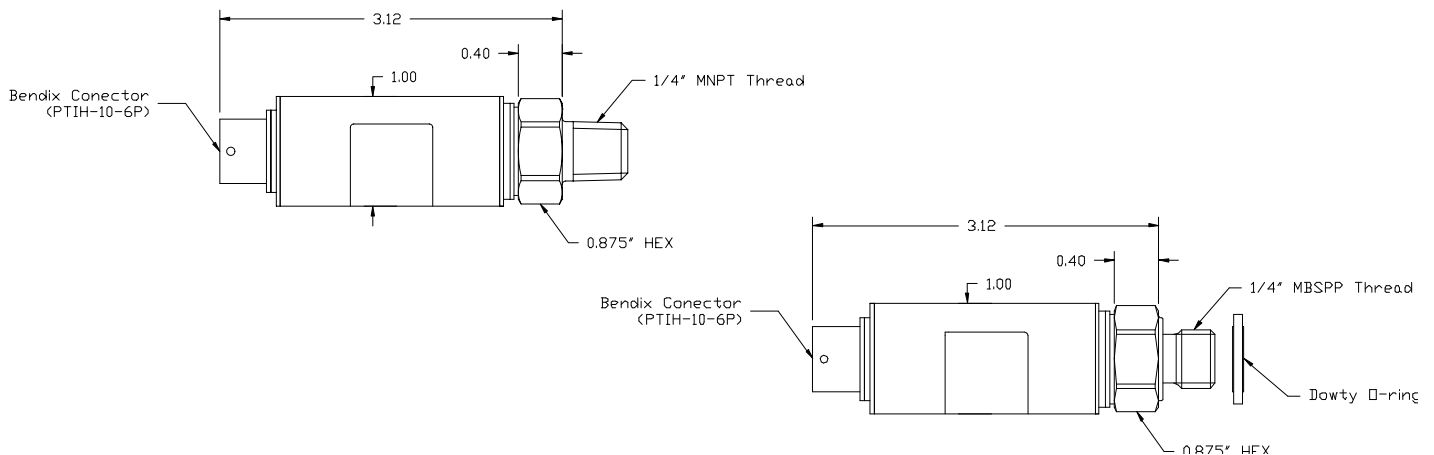
PSI Measurement Range	Pressure Range Code
0-1,000	01000
0-2,500	02500
0-5,000	05000
0-7,500	07500
0-10,000	10000

BARG Measurement Range	Pressure Range Code
0-100	00100
0-210	00210
0-350	00350
0-500	00500
0-700	00700

Options
 000= No Special Options

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

Dimensional Data



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.