

AST47SM Steel / Aluminum Mill

Stainless Steel Pressure Transmitter



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
 - Internal Protection Against Pressure Spikes
 - 1/4" BSPP Male Process Connection Available
- (contact factory for other options)
- Sealed Against Water Ingress

Applications

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



Performance @ 25°C (77°F)

| | |
|-----------------------|-------------------------------------|
| Accuracy* | < ± 0.1% BFSL |
| 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 |

* 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 | -50 to 125°C (-58 to 250°F) |

Thermal Limits

| | |
|-------------------|-------------------------|
| Compensated Range | 0 to 70°C (30 to 158°F) |
| TC Zero | <±0.5% of FS |
| TC Span | <±0.5% 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-100 V/m |
| Rating: | IP-69 |

Electrical Data

| Output | 4-20mA | 0-5V | 0-10V |
|-----------------------------|---------------------|---------------|---------------|
| Excitation | 10-28VDC | 10-28VDC | 15-30VDC |
| Current Consumption: | - | < 10mA | < 10mA |
| Sampling Rate | 400Hz | 400Hz | 400Hz |
| Output Noise: | < 1mV, RMS | < 1mV, RMS | < 1mV, RMS |
| Zero Offset | < ± 0.5% FS | < ± 0.5% FS | < ± 0.5% FS |
| Span Tolerance | < ± 0.5% FS | < ± 0.5% FS | < ± 0.5% FS |
| Output Load: | 0-800 Ohms@10-28VDC | 5k Ohms, min. | 5k Ohms, min. |
| Reverse Polarity Protection | Yes | 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
D= G1/4 Male

Pressure Range

Insert 5-digit pressure 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)
K= 0-5V (4 Wire)

Electrical*

D=10 ft. R=Bendix 6 Pin

Wetted Material

0=17-4PH

Options

000= No Special Options

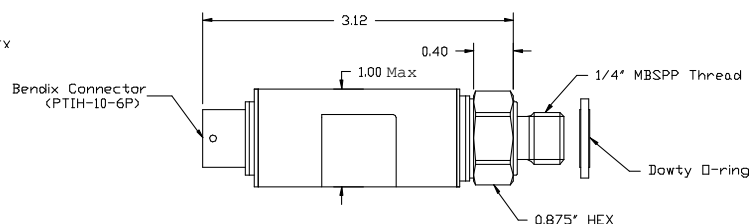
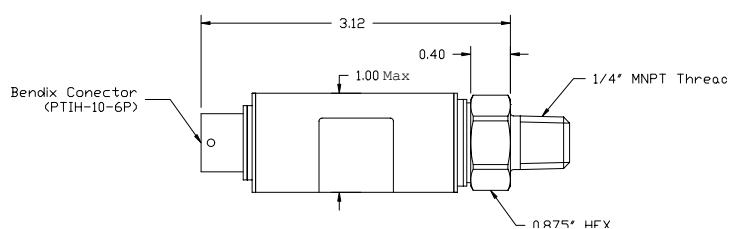
Pressure Ranges*

| PSI Measurement | Pressure Code |
|------------------|---------------|
| 0-1,000 | 01000 |
| 0-2,500 | 02500 |
| 0-5,000 | 05000 |
| 0-7,500 | 07500 |
| 0-10,000 | 10000 |
| BARG Measurement | Pressure Code |
| 0-100 | 00100 |
| 0-210 | 00210 |
| 0-350 | 00350 |
| 0-500 | 00500 |
| 0-700 | 00700 |

* For other ranges, please consult factory.

* Wiring information available at: <http://www.astensors.com/wiring.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.