



## EXPLOSION-PROOF

### Standard Pressure Transducer AST4600

#### Overview

Constructed with a simple-yet-rugged design, the AST4600 Explosion-Proof Pressure Transducer/Transmitter stands up to a variety of applications where price and performance are critical.

- CSA approved for use in hazardous areas including:
  - Explosion-proof – Sealed & Vented Gauge Pressure Transducer (1 – 1,000 and 100 to 20,000 PSI respectively)
    - ✓ Class I Div. 1 Groups A, B, C, D
    - ✓ Class I Zone 1 Group IIC
    - ✓ ATEX/IECEX: Ex db IIC T5 Gb
  - Dust Ignition-proof – Sealed Gauge Pressure Transducer (100 to 20,000 PSI)
    - ✓ Class II Div. 1 Groups E, F, G: Type 4
    - ✓ Zone 21, group IIIC
    - ✓ ATEX/IECEX: Ex tb IIIC T100°C Db (Ta = -40°C to 85°C)

#### Applications

- Industrial OEM & Hydrogen Equipment
- Natural Gas Compressors
- Refrigeration
- Pipe Line Instrumentation
- Marine & Offshore
- Pressure Instrumentation
- Oil Platforms
- Well Head Pressure
- Power Generation
- Mining Applications
- Energy & Water Management

#### Benefits

- ANSI/ISA-12.27.01.2003 Certified “Single Seal” (no secondary seal required)
- ABS (American Bureau of Shipping) Approved
- All Stainless-Steel Construction | Rugged Design Withstands Harsh Environments
- Wide Operating Temperature | Low Static and Thermal Errors
- Suitable for High Shock and Vibration Applications
- Available in Exotic Alloys (Hastelloy, Inconel)

**Environmental Data****Ambient Temperature: 25°C (77°F) (Unless otherwise specified)**

|                          |                             |
|--------------------------|-----------------------------|
| <b>Operating Ambient</b> | -40 to 85°C (-40 to 185°F)  |
| <b>Operating Media</b>   | -40 to 125°C (-40 to 257°F) |
| <b>Storage</b>           | -40 to 100°C (-40 to 212°F) |

**Electromagnetic Compatibility (EMC)**

| Standard    | Description                                  | Test Value  |
|-------------|--|---|
| EN55011     | Radiated Emissions                           | Class A, 30-1000 MHz  |
| EN61000-4-2 | Electrostatic Discharge Immunity             | ±8 kV Air Discharge<br>±4 kV Contact Discharge, VCP, HCP                                    |
| EN61000-4-3 | Radiated Electromagnetic Field Immunity      | 10V/m, 80-2700 MHz 80% 1kHz AM Modulation   |
| EN61000-4-4 | Electrical Fast Transient/Burst Immunity     | ±0.5 kV, ±1 kV, ±2 kV on DC Mains<br>±0.5 kV, ±1 kV on I/O Ports                            |
| EN61000-4-5 | Surge Immunity                               | ±0.5 kV, ±1 kV, on I/O Ports & DC Lines   |
| EN61000-4-6 | Conducted immunity                           | 10V rms, 0.15-80 MHz, DC Mains<br>10V rms, 0.15-80 MHz, I/O Ports<br>80% 1kHz AM Modulation |
| EN61000-4-8 | Power Frequency Magnetic Field Immunity Test | 30 A/m @ (50Hz, 60Hz) 3 orthogonal orientations   |

**Shock, Vibration & Ingress Protection (IP)**

| Standard             | Description          | Test Value  |
|----------------------|----------------------|---|
| EN 60067-2-27        | Shock Test           | 500m/s <sup>2</sup> , 6ms, half sine-wave, 6 shocks (3/direction), horizontal and vertical axis, 12 total shocks                            |
| EN 60068-2-6         | Sinusoidal Vibration | 5-25 Hz, 2mm, 25-150 Hz, 50m/s, Sweep rate: 1 octave/min, Duration: 24 hours/axis (48 hours total), horizontal and vertical axis            |
| EN 60068-2-64        | Random Vibration     | 10-2000 Hz, vibration level: 0.0314 (m/s <sup>2</sup> ) <sup>2</sup> /Hz, 24 hrs/axis (48 hrs total), 2 directions: horizontal and vertical |
| IEC 60068-2-32       | Drop Test            | Drop of 1 meter to floor made of concrete. Dropped twice on the threaded end and two times perpendicular to the threaded end.               |
| IP-65 (Gauge)        | Ingress Protection   | Dust-tight, protected against water jets  |
| IP-66 (Sealed Gauge) | Ingress Protection   | Dust-tight, protected against powerful water jets   |

**Performance**

**Ambient Temperature: 25°C (77°F) (Unless otherwise specified)**

| Parameters                  | MIN   | TYP  | MAX   | UNITS   | NOTES |
|-----------------------------|-------|--|-------|---------|-------|
| Accuracy                    | -0.25 |  | +0.25 | %Span   | 1     |
| Accuracy (Range ≥ 7.5 kPSI) | -0.50 |  | +0.50 | %Span   | 1     |
| Zero Error                  | -1.0  |  | +1.0  | %Span   | 2     |
| Span Error                  | -1.5  |  | +1.5  | %Span   | 3     |
| Span Error (4-20mA)         | -2.0  |  | +2.0  | %Span   | 3     |
| Thermal Error, Zero         | -1.5  |  | +1.5  | %Span   | 4     |
| Thermal Error, Span         | -1.5  |  | +1.5  | %Span   | 5     |
| Stability (1 year)          |       | ±0.25  |       | %Span   |       |
| Proof Pressure              |       | 2X Rated Pressure                                  |       | PSI     | 6     |
| Burst Pressure              |       | 5X Rated Pressure or<br>50,000 (whichever is less) |       | PSI     | 7     |
| Compensated Temp. Range     |       | 0 - 55° (32 to 132°)                               |       | °C (°F) |       |

**Electrical Data**

| Model                       | AST4600   |            |                      |
|-----------------------------|-----------|------------|----------------------|
| Output                      | 4-20mA    | 1-5V, 1-6V | 0.5-4.5V Ratiometric |
| Excitation                  | 10-28VDC  | 10-28VDC   | 5.0 ± 0.5VDC         |
| Output Impedance            | > 10k Ω   | < 100 Ω    | < 100 Ω              |
| Current Consumption         | -         | <10mA      | <10mA                |
| Output Noise                | -         | <2mV RMS   | <2mV RMS             |
| Output Load                 | 0-800Ω    | 10k Ω Min. | 10k Ω Min.           |
| Reverse Polarity Protection | Yes       | Yes        | Yes                  |
| Bandwidth                   | DC-250 Hz | DC-1kHz    | DC-1kHz              |

**Notes**

1. The maximum deviation from a best fit straight line (BFSL) fitted to the output measured over the pressure range at 25°C. Includes all errors due to pressure non-linearity, hysteresis, and non-repeatability. Span is the algebraic difference between full scale output and zero pressure offset.
2. The maximum variation from the ideal offset measured at 25°C.
3. The maximum variation from the ideal full-scale span measured at 25°C.
4. The maximum variation of offset within the compensated temperature range relative to 25°C.
5. The maximum variation of full-scale span within the compensated temperature range relative to 25°C.
6. The maximum pressure that can be safely applied to the product for it to remain in specification once pressure is returned to the operating pressure range.
7. The maximum pressure that can be applied without causing escape of the pressure media

**Dimensions & Electrical Connection**

Unless otherwise specified, all dimensions are in inches

| <p><b>EC + SH + PC = Total Nominal Product Length</b></p>   | <p><b>Ranges 25 PSI and Above</b></p> <p>EC = Electrical Connector<br/>                 SH = Sensor Housing<br/>                 PC = Process Connection<br/>                 V = Voltage Supply<br/>                 N/C = Not Connected<br/>                 WP = Wide Pin<br/>                 S = Signal</p> |                      |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
|---|--|----------------------|--------|-------|------|------|-------|-----|----|-----|----|----|-------|---|-----|--|--|
| <p><b>EC + SH + PC = Total Nominal Product Length</b></p>   | <p><b>Ranges Below 25 PSI</b></p> <p>EC = Electrical Connector<br/>                 SH = Sensor Housing<br/>                 PC = Process Connection<br/>                 V = Voltage Supply<br/>                 N/C = Not Connected<br/>                 WP = Wide Pin<br/>                 S = Signal</p>     |                      |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| <b>Electrical Connectors Option Codes</b>   |  |                      |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| <b>Cable</b>  |  |                      |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| <b>T</b><br>2ft (0.6m)  | <b>U</b><br>4ft (1.2m)   | <b>W</b><br>6ft (2m) |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| <table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th>Color</th> <th>3 Wire Voltage</th> <th>4-20mA</th> </tr> </thead> <tbody> <tr> <td>Green</td> <td>Case</td> <td>Case</td> </tr> <tr> <td>Black</td> <td>GND</td> <td>-V</td> </tr> <tr> <td>Red</td> <td>+V</td> <td>+V</td> </tr> <tr> <td>White</td> <td>S</td> <td>N/C</td> </tr> </tbody> </table> | Color  | 3 Wire Voltage       | 4-20mA | Green | Case | Case | Black | GND | -V | Red | +V | +V | White | S | N/C |  |  |
| Color   | 3 Wire Voltage   | 4-20mA               |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| Green   | Case   | Case                 |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| Black   | GND  | -V                   |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| Red   | +V   | +V                   |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |
| White   | S  | N/C                  |        |       |      |      |       |     |    |     |    |    |       |   |     |  |  |

| Pressure Port Option Codes                   |                                |                            |                          |                                    |
|--|--------------------------------|----------------------------|--------------------------|------------------------------------|
| <b>A</b><br>1/4 NPT Male                     | <b>F</b><br>7/16 – 20 UNF Male | <b>I</b><br>1/4 NPT Female | <b>P</b><br>1/2 NPT Male |                                    |
| <p>'PC' = 1.069</p>                          | <p>'PC' = .978</p>             | <p>'PC' = .669</p>         | <p>'PC' = 1.172</p>      |                                    |
| <th><b>W</b><br/>F250C Female Autoclave</th> |                                |                            |                          | <b>W</b><br>F250C Female Autoclave |
| <p>'PC' = 1.870</p>                          |                                |                            |                          |                                    |

| Legend |                    |
|--------|--------------------|
| ✓      | Standard Available |
| X      | Not Available      |

**Available Process Connection, Material Configurations & Pressure Codes**

**17-4PH PSI**

| Pressure Range | Pressure Reference | Pressure Range Code | PSI Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| -14.7 - 25     | V                  | 0025                | P        | ✓                       | X | ✓ | ✓ | X |
| -14.7 - 50     | V                  | 0050                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 100    | V                  | 0100                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 150    | V                  | 0150                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 200    | V                  | 0200                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 250    | V                  | 0250                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 500    | V                  | 0500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 25         | G                  | 0025                | P        | ✓                       | X | ✓ | ✓ | X |
| 0 - 50         | G                  | 0050                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 100        | G                  | 0100                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 150        | G                  | 0150                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 200        | G                  | 0200                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 250        | G                  | 0250                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 500        | G                  | 0500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 1,000      | 0                  | 1000                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 2,500      | 0                  | 2500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 5,000      | 0                  | 5000                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 7,500      | 0                  | 7500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 10,000     | 1                  | 0000                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 15,000     | 1                  | 5000                | P        | X                       | ✓ | ✓ | ✓ | X |
| 0 - 20,000     | 2                  | 0000                | P        | X                       | X | X | X | ✓ |

**17-4PH Bar**

| Pressure Range | Pressure Reference | Pressure Range Code | BAR Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| -1 to 2        | V                  | 0002                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 5        | V                  | 0005                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 7        | V                  | 0007                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 10       | V                  | 0010                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 20       | V                  | 0020                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 2          | G                  | 0002                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 5          | G                  | 0005                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 7          | G                  | 0007                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 10         | G                  | 0010                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 20         | G                  | 0020                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 35         | G                  | 0035                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 50         | G                  | 0050                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 100        | 0                  | 0100                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 250        | 0                  | 0250                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 350        | 0                  | 0350                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 500        | 0                  | 0500                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 700        | 0                  | 0700                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 1,000      | 0                  | 0000                | B        | X                       | X | ✓ | ✓ | X |

# INDUSTRIAL OEM

AST4600 Pressure Transmitter

## 316L PSI

| Pressure Range | Pressure Reference | Pressure Range Code | PSI Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| 0 - 1          | G                  | 0001                | P        | ✓                       | X | X | ✓ | X |
| 0 - 2.5**      | G                  | 0069                | H        | ✓                       | X | X | ✓ | X |
| 0 - 5          | G                  | 0005                | P        | ✓                       | X | X | ✓ | X |
| 0 - 7.5**      | G                  | 0208                | H        | ✓                       | X | X | ✓ | X |
| 0 - 10         | G                  | 0010                | P        | ✓                       | X | X | ✓ | X |
| 0 - 15         | G                  | 0015                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 25     | V                  | 0025                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 50     | V                  | 0050                | P        | ✓                       | X | ✓ | ✓ | X |
| -14.7 - 100    | V                  | 0100                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 150    | V                  | 0150                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 200    | V                  | 0200                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 250    | V                  | 0250                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| -14.7 - 500    | V                  | 0500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 25         | G                  | 0025                | P        | ✓                       | X | ✓ | ✓ | X |
| 0 - 50         | G                  | 0050                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 100        | G                  | 0100                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 150        | G                  | 0150                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 200        | G                  | 0200                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 250        | G                  | 0250                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 500        | G                  | 0500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 1,000      | 0                  | 1000                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 2,500      | 0                  | 2500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 5,000      | 0                  | 5000                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 7,500      | 0                  | 7500                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 10,000     | 1                  | 0000                | P        | ✓                       | ✓ | ✓ | ✓ | X |
| 0 - 15,000     | 1                  | 5000                | P        | X                       | ✓ | ✓ | X | X |
| 0 - 20,000     | 2                  | 0000                | P        | X                       | X | X | X | ✓ |

## 316L Bar

| Pressure Range | Pressure Reference | Pressure Range Code | BAR Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| -1 to 2        | V                  | 0002                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 5        | V                  | 0005                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 7        | V                  | 0007                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 10       | V                  | 0010                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| -1 to 20       | V                  | 0020                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-2            | G                  | 0002                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-5            | G                  | 0005                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-7            | G                  | 0007                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-10           | G                  | 0010                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-20           | G                  | 0020                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-35           | G                  | 0035                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-50           | G                  | 0050                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-100          | 0                  | 0100                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-250          | 0                  | 0250                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-350          | 0                  | 0350                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-500          | 0                  | 0500                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-700          | 0                  | 0700                | B        | ✓                       | ✓ | ✓ | ✓ | X |
| 0-1000         | 0                  | 0000                | B        | X                       | ✓ | ✓ | X | X |

# INDUSTRIAL OEM

AST4600 Pressure Transmitter

## Inconel PSI

| Pressure Range | Pressure Reference | Pressure Range Code | PSI Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| -14.7 - 25     | V                  | 0025                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 50     | V                  | 0050                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 100    | V                  | 0100                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 150    | V                  | 0150                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 200    | V                  | 0200                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 250    | V                  | 0250                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 500    | V                  | 0500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 25         | G                  | 0025                | P        | ✓                       | X | X | ✓ | X |
| 0 - 50         | G                  | 0050                | P        | ✓                       | X | X | ✓ | X |
| 0 - 100        | G                  | 0100                | P        | ✓                       | X | X | ✓ | X |
| 0 - 150        | G                  | 0150                | P        | ✓                       | X | X | ✓ | X |
| 0 - 200        | G                  | 0200                | P        | ✓                       | X | X | ✓ | X |
| 0 - 250        | G                  | 0250                | P        | ✓                       | X | X | ✓ | X |
| 0 - 500        | G                  | 0500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 1,000      | 0                  | 1000                | P        | ✓                       | X | X | ✓ | X |
| 0 - 2,500      | 0                  | 2500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 5,000      | 0                  | 5000                | P        | ✓                       | X | X | ✓ | X |
| 0 - 7,500      | 0                  | 7500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 10,000     | 1                  | 0000                | P        | ✓                       | X | X | ✓ | X |
| 0 - 15,000     | 1                  | 5000                | P        | X                       | X | ✓ | ✓ | X |
| 0 - 20,000     | 2                  | 0000                | P        | X                       | X | X | X | ✓ |

## Inconel Bar

| Pressure Range | Pressure Reference | Pressure Range Code | BAR Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| -1 to 2        | V                  | 0002                | B        | ✓                       | X | X | ✓ | X |
| -1 to 5        | V                  | 0005                | B        | ✓                       | X | X | ✓ | X |
| -1 to 7        | V                  | 0007                | B        | ✓                       | X | X | ✓ | X |
| -1 to 10       | V                  | 0010                | B        | ✓                       | X | X | ✓ | X |
| -1 to 20       | V                  | 0020                | B        | ✓                       | X | X | ✓ | X |
| 0-2            | G                  | 0002                | B        | ✓                       | X | X | ✓ | X |
| 0-5            | G                  | 0005                | B        | ✓                       | X | X | ✓ | X |
| 0-7            | G                  | 0007                | B        | ✓                       | X | X | ✓ | X |
| 0-10           | G                  | 0010                | B        | ✓                       | X | X | ✓ | X |
| 0-20           | G                  | 0020                | B        | ✓                       | X | X | ✓ | X |
| 0-35           | G                  | 0035                | B        | ✓                       | X | X | ✓ | X |
| 0-50           | G                  | 0050                | B        | ✓                       | X | X | ✓ | X |
| 0-100          | 0                  | 0100                | B        | ✓                       | X | X | ✓ | X |
| 0-250          | 0                  | 0250                | B        | ✓                       | X | X | ✓ | X |
| 0-350          | 0                  | 0350                | B        | ✓                       | X | X | ✓ | X |
| 0-500          | 0                  | 0500                | B        | ✓                       | X | X | ✓ | X |
| 0-700          | 0                  | 0700                | B        | ✓                       | X | X | ✓ | X |
| 0 - 1,000      | 0                  | 1000                | B        | X                       | X | X | ✓ | X |



# INDUSTRIAL OEM

AST4600 Pressure Transmitter

## Hastelloy PSI

| Pressure Range | Pressure Reference | Pressure Range Code | PSI Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| 0 - 1          | G                  | 0001                | P        | X                       | X | X | ✓ | X |
| 0 - 10         | G                  | 0010                | P        | X                       | X | X | ✓ | X |
| 0 - 15         | G                  | 0015                | P        | X                       | X | X | ✓ | X |
| -14.7 - 25     | V                  | 0025                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 50     | V                  | 0050                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 100    | V                  | 0100                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 150    | V                  | 0150                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 200    | V                  | 0200                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 250    | V                  | 0250                | P        | ✓                       | X | X | ✓ | X |
| -14.7 - 500    | V                  | 0500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 25         | G                  | 0025                | P        | ✓                       | X | X | ✓ | X |
| 0 - 50         | G                  | 0050                | P        | ✓                       | X | X | ✓ | X |
| 0 - 100        | G                  | 0100                | P        | ✓                       | X | X | ✓ | X |
| 0 - 150        | G                  | 0150                | P        | ✓                       | X | X | ✓ | X |
| 0 - 200        | G                  | 0200                | P        | ✓                       | X | X | ✓ | X |
| 0 - 250        | G                  | 0250                | P        | ✓                       | X | X | ✓ | X |
| 0 - 500        | G                  | 0500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 1,000      | 0                  | 1000                | P        | ✓                       | X | X | ✓ | X |
| 0 - 2,500      | 0                  | 2500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 5,000      | 0                  | 5000                | P        | ✓                       | X | X | ✓ | X |
| 0 - 7,500      | 0                  | 7500                | P        | ✓                       | X | X | ✓ | X |
| 0 - 10,000     | 1                  | 0000                | P        | ✓                       | X | X | ✓ | X |
| 0 - 15,000     | 1                  | 5000                | P        | X                       | X | X | ✓ | X |

## Hastelloy Bar

| Pressure Range | Pressure Reference | Pressure Range Code | BAR Unit | Process Connection Code |   |   |   |   |
|----------------|--------------------|---------------------|----------|-------------------------|---|---|---|---|
|                |                    |                     |          | A                       | F | I | P | W |
| -1 to 2        | V                  | 0002                | B        | ✓                       | X | X | ✓ | X |
| -1 to 5        | V                  | 0005                | B        | ✓                       | X | X | ✓ | X |
| -1 to 7        | V                  | 0007                | B        | ✓                       | X | X | ✓ | X |
| -1 to 10       | V                  | 0010                | B        | ✓                       | X | X | ✓ | X |
| -1 to 20       | V                  | 0020                | B        | ✓                       | X | X | ✓ | X |
| 0-2            | G                  | 0002                | B        | ✓                       | X | X | ✓ | X |
| 0-5            | G                  | 0005                | B        | ✓                       | X | X | ✓ | X |
| 0-7            | G                  | 0007                | B        | ✓                       | X | X | ✓ | X |
| 0-10           | G                  | 0010                | B        | ✓                       | X | X | ✓ | X |
| 0-20           | G                  | 0020                | B        | ✓                       | X | X | ✓ | X |
| 0-35           | G                  | 0035                | B        | ✓                       | X | X | ✓ | X |
| 0-50           | G                  | 0050                | B        | ✓                       | X | X | ✓ | X |
| 0-100          | 0                  | 0100                | B        | ✓                       | X | X | ✓ | X |
| 0-250          | 0                  | 0250                | B        | ✓                       | X | X | ✓ | X |
| 0-350          | 0                  | 0350                | B        | ✓                       | X | X | ✓ | X |
| 0-500          | 0                  | 0500                | B        | ✓                       | X | X | ✓ | X |
| 0-700          | 0                  | 0700                | B        | ✓                       | X | X | ✓ | X |
| 0 - 1,000      | 0                  | 1000                | B        | X                       | X | X | ✓ | X |

\*See Ordering Information for list of options  
 \*\*Must be order in inches H<sub>2</sub>O

# INDUSTRIAL OEM

AST4600 Pressure Transmitter

## Ordering Information

|  |          |          |             |          |          |          |          |            |           |
|--|----------|----------|-------------|----------|----------|----------|----------|------------|-----------|
| <b>AST4600</b>   | <b>A</b> | <b>1</b> | <b>0000</b> | <b>P</b> | <b>4</b> | <b>T</b> | <b>1</b> | <b>000</b> | <b>-Z</b> |
| <p><b>Process Connection</b><br/>         A= 1/4" NPT Male<br/>         F= 7/16"-20 UNF Male<br/>         I= 1/4" NPT Female<br/>         P= 1/2" NPT Male<br/>         W= F250C Female Autoclave</p>  |          |          |             |          |          |          |          |            |           |
| <p><b>Pressure Reference</b><br/>         G= Gauge Pressure<br/>         V= Gauge Pressure (Vacuum Calibrated)<br/>         0= Sealed Gauge (Up to 9,999 PSI)<br/>         1= Sealed Gauge (10,000 to 19,999 PSI)<br/>         2= Sealed Gauge (20,000 PSI Only)</p> |          |          |             |          |          |          |          |            |           |
| <p><b>Pressure Range</b><br/>         Insert Pressure Range Code (see table for availability)</p>  |          |          |             |          |          |          |          |            |           |
| <p><b>Pressure Unit</b><br/>         B= Bar      P= PSI      H= Inches H<sub>2</sub>O</p>  |          |          |             |          |          |          |          |            |           |
| <p><b>Output</b><br/>         1= 0.5-4.5V ratiometric      3= 1-5V      4= 4-20mA      6= 1-6V</p>   |          |          |             |          |          |          |          |            |           |
| <p><b>Electrical</b><br/>         T= 2ft. 18 AWG wires      U= 4ft. 18 AWG wires      W= 2 Meter 18 AWG wires</p>  |          |          |             |          |          |          |          |            |           |
| <p><b>Wetted Material</b><br/>         0= 17-4PH      1= 316L      2= Inconel 718      4= Hastelloy C276</p>   |          |          |             |          |          |          |          |            |           |
| <p><b>Option Codes</b><br/>         000= No Options</p>  |          |          |             |          |          |          |          |            |           |

### Approval Type

|   |  |
|---|--|
| Leave Blank   | Class I Div I, Groups A, B, C and D;<br>Ex d IIC T5 Gb<br>Class 1, Zone 1, AEx d IIC T5 Gb<br>(For Pressure Range Code 0, 1 and 2) |
|   | Class II, Div. I, Groups E, F and G<br>Ex tb IIIC T100 Db<br>Zone 21, AEx tb IIIC T100 Db<br>(For Pressure Range Code G and V)     |
| All configurations are ANSI/ISA 12.27.01 Single Seal Approved |  |
| -Z  | CRN Registered to ANSI/ASME B31.3. in addition to standard configuration approvals   |

**Notes:** CSA approved products require case/earth ground electrical connection. See Dimensions and Electrical Connection Section for wiring details.

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