NON-INCENDIVE
Pressure Transducer / Transmitter
AST4300

Overview
The AST4300 is a stainless steel pressure transducer / transmitter for use in hazardous areas. In addition to its rugged construction and best price-to-performance ratio in the industry, the AST4300 is the solution for pressure measurement for a variety of applications.

Benefits
- Class I Div 2 Groups A, B, C, D
- ATEX / IECEx: Ex nA IIC T4 Gc (Ta = -40°C to 85°C) for conduit electrical connections
- High Strength Stainless Steel Construction
- No Oil, Welds or Internal O-rings
- Wide Operating Temperature
- Pressures from Vacuum to 20,000 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Compatible with Wide Variety of Liquids and Gases
- EMI/RFI Protection
Applications
- Refrigeration
- Water Management
- Industrial OEM Equipment
- Oil & Gas Platforms
- Pressure Instrumentation
- Process Control
- Gas Compression & Storage
- Test Stands
- Oxygen Delivery Systems
- Hydrogen Fuel (316L)

Performance @ 25°C (77°F)
- Accuracy: < ±0.25% BFSL (<±0.5% from 7,500 up to 20,000 PSI)
- Stability (1 year): ±0.25% FS, typical
- Over Range Protection: 2X Rated Pressure, Minimum
- Burst Pressure: 5X or 40,000 PSI (whichever is less)
- Pressure Cycles: >100 Million

Environmental Data
- Temperature
  - Operating: -40 to 80°C (-40 to 176°F)
  - Storage: -40 to 100°C (-40 to 212°F)
- 0-100% relative humidity, non-condensing

  Thermal Limits
  - Compensated Range: 0 to 55°C (32 to 132°F)
  - TC Zero: <±1.5% of FS
  - TC Span: <±1.5% 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
  - Rating: IP-66, min
Electrical Data

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

- **Output:** 1-5VDC, 1-6VDC
- **Excitation:** 10-28VDC
- **Output Impedance:** <100 Ohms, Nominal
- **Current Consumption:** 5mA, typical
- **Bandwidth:** (-3dB): DC to 1kHz
- **Output Noise:** <2mV RMS
- **Zero Offset:** <±1% of FS
- **Span Tolerance:** <±1.5% of FS
- **Output Load:** 10k Ohms, Min.
- **Reverse Polarity Protection:** Yes

- **Output:** 0.5-4.5V Ratiometric
- **Excitation:** 5VDC, regulated
- **Output Impedance:** <100 Ohms, Nominal
- **Current Consumption:** 5mA, typical
- **Bandwidth:** (-3dB): DC to 1kHz
- **Output Noise:** <2mV RMS
- **Zero Offset:** <±1% of FS
- **Span Tolerance:** <±1.5% of FS
- **Output Load:** 10K Ohms, Min.
- **Reverse Polarity Protection:** Yes

Dimensions

![Dimensions Diagram]
## Ordering Information

<table>
<thead>
<tr>
<th>Series Type</th>
<th>A 00500</th>
<th>P 4</th>
<th>L 1</th>
<th>000</th>
<th>-SS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Process Connection</strong></td>
<td></td>
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<tr>
<td>A= 1/4” NPT Male</td>
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<tr>
<td>B= 1/8” NPT Male*</td>
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<tr>
<td>C= 1/4” BSP Male</td>
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<tr>
<td>F= 1/4” NPT Female**</td>
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<tr>
<td>P= 1/2” NPT Male</td>
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<tr>
<td>W= F200C Female Autoclave***</td>
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*Not available under 50PSI (not available in 316L) **Pressures up to 15,000 PSI ***Pressures from 10,000 to 20,000 PSI, not available in 316L

<table>
<thead>
<tr>
<th><strong>Pressure Range</strong></th>
<th>Insert 5-digit pressure range code (example: 0-100 PSI = 00100)</th>
<th>Ranges between 0-25 PSI and 0-20,000 PSI available. Compound pressure up to -14.7 to 500 PSI.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Pressure Unit</strong></th>
<th>B= Bar</th>
<th>K= kg/cm²</th>
<th>P= PSI</th>
</tr>
</thead>
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<table>
<thead>
<tr>
<th><strong>Outputs</strong></th>
<th>1= 0.5-4.5V ratiometric</th>
<th>4= 4-20mA (2 wire loop powered)</th>
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</thead>
<tbody>
<tr>
<td>3= 1-5V</td>
<td></td>
<td>6= 1-6V</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Electrical</strong></th>
<th>I= DIN 43650A</th>
<th>L= Conduit fitting, Cable 2 ft. (0.6 m)</th>
<th>M= Conduit fitting, Cable 4 ft. (1.2 m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N= Conduit fitting, Cable 6 ft. (1.8 m)</td>
<td>P= Conduit fitting, Cable 10 ft. (3.0 m)</td>
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<tr>
<td>4= Mini-Fast (CSA Only)</td>
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<thead>
<tr>
<th><strong>Wetted Material</strong></th>
<th>0= 17-4PH</th>
<th>1= 316L</th>
<th>2= Inconel 718</th>
<th>4= Hastelloy C276</th>
</tr>
</thead>
</table>

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<thead>
<tr>
<th><strong>Options</strong></th>
<th>000= No Options</th>
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<thead>
<tr>
<th><strong>Approval</strong></th>
<th>(Left Blank) UL ANSI/ISA 12.12.01 Class I Div 2 Non-Incendive Groups A, B, C, D (formerly UL1604)</th>
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<tbody>
<tr>
<td>-SS</td>
<td>CSA213 Class I Div 2 Non-Incendive Groups A, B, C, D and ANSI/ISA 12.27.01 Single Seal Approval</td>
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<tr>
<td>-Z</td>
<td>CRN Registered to ANSI/ASME B31.3. Contact factory for material, pressure, and process connection options (includes -SS approvals)</td>
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</tbody>
</table>

Note: CSA approved products require case/earth ground electrical connection. See wiring installation sheet for further details.

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