LOW PRESSURE
Non-Incendive Transducer / Transmitter
AST43LP

Overview
The AST43LP is a low pressure Class I Division 2 stainless steel pressure transmitter for use in hazardous areas. In addition to its rugged construction and the best price-to-performance ratio in the industry, the AST43LP is the solution for low 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 Welds or Internal O-rings
- Wide Operating Temperature
- Pressures from 0-1 to 0-15 PSI
- Low Static and Thermal Errors
- Unparalleled Price and Performance
- Compatible with Wide Variety of Liquids and Gases
- EMI/RFI Protection
Applications

- Flare Gas
- Water Management
- Industrial OEM Equipment
- Oil & Gas Platforms
- Pressure Instrumentation
- Process Control
- Gas Compression & Storage
- Test Stands
- Oxygen Delivery Systems
- External Tank Level

Performance @ 25°C (77°F)

- **Accuracy**: < ±0.25% BFSL (<±0.5% for 0-1 PSI)
- **Stability (1 year)**: ±0.25% FS, typical
- **Over Range Protection**: 2X Rated Pressure, Minimum
- **Burst Pressure**: 5X or 75 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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>4-20mA</th>
<th>1-5VDC, 1-6VDC</th>
<th>0.5-4.5V Ratiometric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>4-20mA</td>
<td>1-5VDC, 1-6VDC</td>
<td>0.5-4.5V Ratiometric</td>
</tr>
<tr>
<td>Excitation</td>
<td>10-28VDC</td>
<td>10-28VDC</td>
<td>5VDC, regulated</td>
</tr>
<tr>
<td>Output Impedance</td>
<td>&gt;10k Ohms</td>
<td>&lt;100 Ohms, Nominal</td>
<td>&lt;100 Ohms, Nominal</td>
</tr>
<tr>
<td>Current Consumption</td>
<td>20mA, typical</td>
<td>5mA, typical</td>
<td>5mA, typical</td>
</tr>
</tbody>
</table>

Bandwidth: (-3dB): DC to 250 Hz

Output Noise: <2mV RMS

Zero Offset: <±1% of FS

Span Tolerance: <±1% of FS

Output Load: 0-800 Ohms@10-28VDC

Reverse Polarity Protection: Yes

Dimensions

[Diagram of the AST43LP Pressure Transducer / Transmitter]
## Ordering Information

<table>
<thead>
<tr>
<th>传感器型号</th>
<th>A</th>
<th>00005</th>
<th>P</th>
<th>4</th>
<th>L</th>
<th>1</th>
<th>000</th>
<th>-SS</th>
</tr>
</thead>
</table>

### Process Connection

- A: 1/4" NPT Male
- C: 1/4" BSPP Male
- I: 1/4" NPT Female**
- P: 1/2" NPT Male
- T: G1/2 Male with Flush Diaphragm (see options)

### Pressure Range

Insert 5-digit pressure range code (example: 0-5 PSI = 00005)

Ranges between 0-1 PSI and 0-15 PSI available.

### Pressure Unit

- H: Inches H₂O
- P: PSI

### Outputs

- 1: 0.5-4.5V ratiometric
- 3: 1-5V
- 4: 4-20mA (2 wire loop powered)
- 6: 1-6V

### Electrical

- I: DIN 43650A
- L: Conduit fitting, Cable 2 ft. (0.6 m)
- M: Conduit fitting, Cable 4 ft. (1.2 m)
- N: Conduit fitting, Cable 6 ft. (1.8 m)
- P: Conduit fitting, Cable 10 ft. (3.0 m)
- 4: Mini-Fast (CSA Only)

### Wetted Material

- 1: 316L
- 4: Hastelloy C276

### Options

- 000: No Options

### Approval

- (Left Blank): UL ANSI/ISA 12.12.01 Class I Div 2 Non-Incendive Groups A, B, C, D (formerly UL1604)
- -SS: CSA213 Class I Div 2 Non-Incendive Groups A, B, C, D and ANSI/ISA 12.27.01 Single Seal Approval

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

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