

Non-Incendive



AST43LP Low Pressure Transducer / Transmitter



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: Class I, Zone 2, Ex nA IIC T4 Gc
(Ta = -40°C to 80°C)
- 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

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

Performance @ 25°C (77°F)

Accuracy*	< ±0.25% BFSL (< ±0.5% BFSL for 0-1 PSI)
Stability (1 year)	±0.25% FS, typical
Over Range Protection	2X Rated Pressure
Burst Pressure	5X or 75 PSI (whichever is less)
Pressure Cycles	> 100 Million

* Accuracy includes non-linearity, hysteresis & non-repeatability

Electrical Data

Output	4-20mA	1-5VDC, 1-6VDC	0.5-4.5V Ratiometric
Excitation	10-28VDC	10-28VDC	5VDC, regulated
Output Impedance	>10k Ohms	<100 Ohms, Nominal	<100 Ohms, Nominal
Current Consumption:	20mA, typical	5mA, typical	5mA, typical
Bandwidth	(-3dB): DC to 250 Hz	(-3dB): DC to 1kHz	(-3dB): DC to 1kHz
Output Noise:	-	<2mV RMS	<2mV RMS
Zero Offset:	<±1% of FS	<±1% of FS	<±1% of FS
Span Tolerance:	<±2% of FS	<±1.5% of FS	<±1.5% of FS
Output Load:	0-800 Ohms@10-28VDC	10k Ohms, Min.	10K Ohms, Min.
Reverse Polarity Protection	Yes	Yes	Yes



Ordering Information

AST43LP

A

00005

P

4

L

1

000

-SS

Series Type

Process Connection

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

Pressure Measurement

Insert 5-digit pressure code

Pressure Unit

H= Inches H₂O P= PSI

Outputs

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

Electrical

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

Wetted Material

1= 316L 4= Hastelloy (consult factory on availability)

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= Add "-SS" for 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*

Pressure Ranges

PSIG Measurement	0-1	Pressure Code	00001
	0-2.5*		00069
	0-5		00005
	0-7.5*		00208
	0-10		00010
	0-15		00015

*2.5 and 7.5 PSI Sensor must be ordered in inches of H₂O.

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