



# **INTRINSICALLY SAFE** Pressure Transducer / Transmitter AST4401

## Overview

The AST4401 is a stainless steel pressure transducer with a wide variety of options. With its rugged construction and best price-to-performance ratio in the industry, the AST4401 is the solution for pressure measurement in Intrinsically Safe areas.

## **Benefits**

- Class I Division 1 Groups A, B, C, D Intrinsically Safe when installed with approved barrier (UL / CSA)
- ATEX / IECEx: Class I Zone 0 Exia IIC T4 Ga (Ta = -40°C to +80°C)
- Leading sensor technology available in 316L stainless steel, Hastelloy C276 or Inconel 718
- 4-20mA or voltage outputs

## **Applications**

- Industrial OEM Equipment
- Water Management
- Pneumatics
- Hydrogen Storage
- Sub Sea Pressure
- HVAC/R Equipment
- Control Panels
- Hydraulic Systems
- Data Loggers

# **Environmental Data**

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

Operating Ambient	-40 to 80°C (-40 to 176°F)
Storage	-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
		±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	±0.5 kV, ±1 kV, ±2 kV on DC Mains
	Immunity	±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
		10V rms, 0.15-80 MHz, I/O Ports
		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-66	Ingress Protection	Dust-tight, protected against powerful water jets

## Performance

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

Parameters	MIN	ТҮР	MAX	UNITS	NOTES
Accuracy	-0.25		+0.25	%Span	1
Accuracy (Range ≥ 7.5 kPSI)	-0.5		+0.5	%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 40,000 (whichever is less)		PSI	7
Compensated Temp. Range		0 - 55° (32 to 132°)		°C (°F)	

## **Electrical Data**

Model		AST4401	
Output	4-20mA	1-5V, 1-6V	0.5-4.5V Ratiometric
Excitation	10-14.5VDC	10-14.5VDC	5.0 ± 0.50VDC
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.
<b>Reverse Polarity Protection</b>	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.

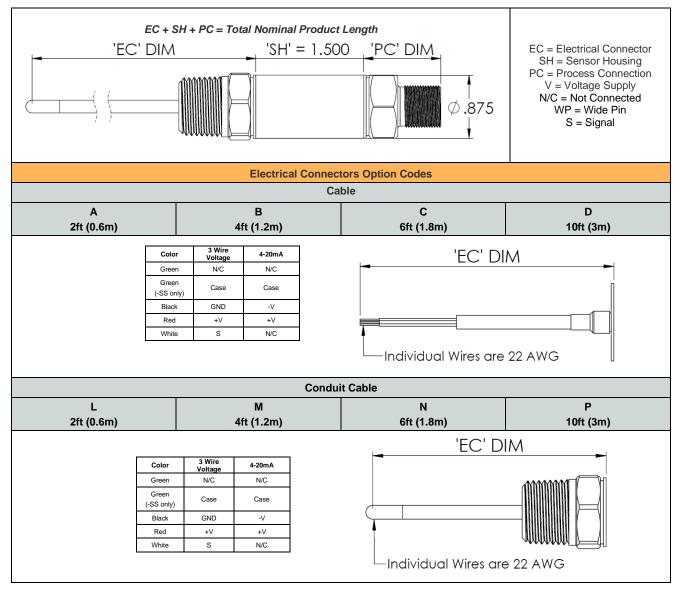
5. The maximum variation of full-scale span within the compensated temperature range relative to 25°C.

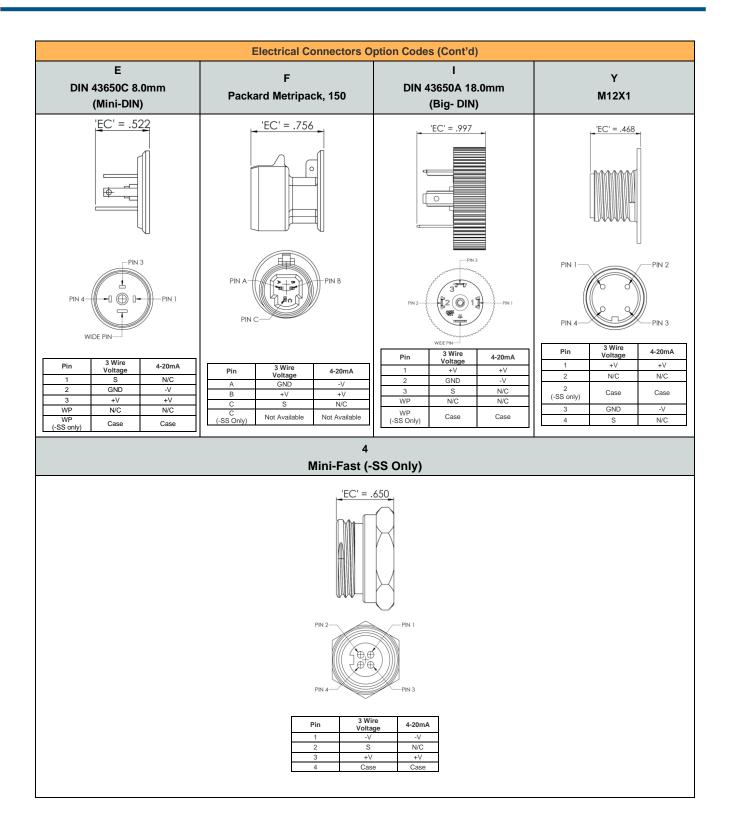
6. The maximum pressure that can be safely applied to the product tor it to remain in specification once pressure is returned to the operating pressure range.

7. The maximum pressure that can be applied without causing escape of the pressure media.

## **Dimensions & Electrical Connection**

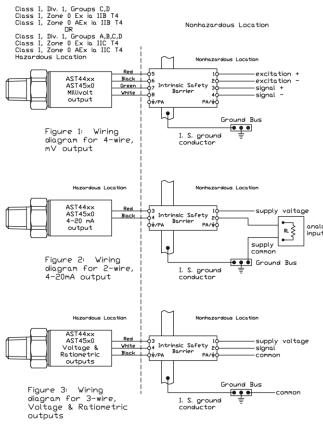
Unless otherwise specified, all dimensions are in inches





	Pressure Port	Option Codes	
A 1/4 NPT Male	B 1/8 NPT Male	C 1/4 BSPP Male	F 7/16 – 20 UNF Male
'PC' = 1.069	'PC' = .975	'PC' = .987	'PC' = .978
I 1/4 NPT Female	P 1/2 NPT Male	W F250C Female Autoclave	
'PC' = .669	'PC' = 1.172	'PC' = 1.870	

## **UL Approved Barrier Installation / A01657**



The transducers listed below are designed for installation in EITHER Class I, Division I, Groups C,D; Class I, Zone 0 Group IIB DR Class I, Division 1, Groups A,B,C,D; Class I, Zone 0 Group IIC hazardous locations when connected to Associated Apparatus as described in note 1.

Entity Parameters

Models AST4400, AST44LP, AST4500, AST4510, AST4520 Class I, Div. 1, Groups C,D; Class I, Zone O Ex la IIB T4; Class I, Zone O AEx la IIB T4 Vmax = 28V

Model AST4401 Class I, Div. 1, Groups A,B,C,D; Class I, Zone 0 Ex ia IIC T4; Class I, Zone 0 AEx ia IIC T4 Vmax = 14.5V

4-20mA with	4-20mA with	All EXCEPT 4-20mA	All EXCEPT 4-20mA
integral	upto 1000ft of	with integral	with upto 150ft of
connector	integral cable	connector	integral cable
Pmax = 651 mW		Pmax = 651 mW	Pmax = 651 mW
Imax = 93 mA		Imax = 93 mA	Imax = 93 mA
Ci = 0.391 uF		Ci = 0.643 uF	Ci = 0.649 uF
Li = 0 uH		Li = 0 uH	Li = 0 uH

Isc or Io is the total current available from the Associated Apparatus under any conc

1. The following conditions must be satisfied:

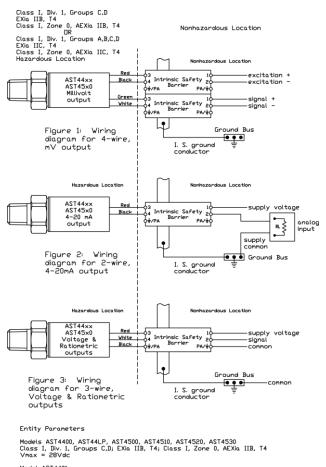
Voc or Uo <= Vmax	Ca or Co >= Ci + Ccable	
Isc or Io <= Imax	La or Lo >= Li + Lcable	

Isc or Io (= Inax La or Lo >= Li + Lcable Po (= Pi (if applicable) Total customer cable length for 4-20mA transmitters not to exceed 4000ft. Total customer cable length for all other transmitters not to exceed 150ft. Where the cable capacitance and inductance per foot are not known, the following values shall be used Ccable = 60pF/ft, Lcable = 0.2uH/ft

2. Control Room aparatus shall not generate in excess of 250V (Umax).

3. Canadian installations should be in accordance with Canadian Electrical Code, Part I. U.S. installations should be in accordance with Article 504 in the National Electrical Code, ANSI/NFA 70.

## **CSA Approved Barrier Installation / A08949**



Model AST4401 Class J, Div. J, Groups A,B,C,Dj EXia IIC, T4; Class I, Zone O, AEXia IIC, T4 Vrax = 14.5Vdc

4-20mA with	4-20mA with	All EXCEPT 4-20mA	All EXCEPT 4-20mA
integral	upto 1000ft of	with integral	with upto 150ft of
connector	integral cable	connector	integral cable
Pmax = 625 mW	Pmax = 625 mW	Pmax = 625 mW	Pmax = 625 mW
Imax = 93 mA	Imax = 93 mA	Imax = 93 mA	Imax = 93 mA
Cl = 0.391 uF	CI = 0.434 uF	Ci = 0.643 uF	Cl = 0.649 uF
Li = 0	Li = 155 uH	Li = 0	Li = 23.3 uH

- For installation in accordance with Fig 2, barrier must be a CSA Single Channel grounded Shunt-Diode Zener Barrier or a Single CI Isolating Barrier. Certified,
- 2. For installations in accordance with Figs. 1 and 3, one dual-channel or two single-channel barriers may be used, where in either case, both channels have been Certified for use together with combined entity parameters.

3. The following conditions must be satisfied: Voc or Uo <= Vmax Isc or Io <= Imax Po <= Pi (if applicable) Ca or Co >= Ci + Ccable La or Lo >= Li + Lcable

4. Maximum non-hazardous area voltage must not exceed 250 V.

- Canadian installations should be in accordance with Canadian Electrical Code, Part I. U.S. installations should be in accordance with Article 504 in the National Electrical Code, ANSI/NFPA 70.
- 6. A grounding method is not provided by the manufacturer as part of the integral design of the Transducer. For units which are connected through a grounded shout diode safety barrier, ensure that the transducer is mounted to a surface which is at the same potential as the barrier ground.

7. See user manual for installation conditions

Note: Float unused wires in cable. Insure that these wires are electrically isolated from other conductors

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

#### 17-4PH PSI

	Pressure Range	PSI Unit			Process Connection Code				
Pressure Range	Code	P31 Unit	Α	В	С	F	l I	Р	W
-14.7 - 25	V0025	Р	✓	Х	✓	Х	1	✓	Х
-14.7 - 50	V0050	Р	✓	✓	✓	✓	1	✓	Х
-14.7 - 100	V0100	Р	✓	✓	✓	✓	1	✓	Х
-14.7 - 150	V0150	Р	✓	✓	✓	✓	✓	✓	Х
-14.7 - 200	V0200	Р	✓	✓	✓	✓	✓	✓	Х
-14.7 - 250	V0250	Р	✓	✓	✓	✓	✓	✓	Х
-14.7 - 500	V0500	Р	✓	✓	✓	✓	✓	✓	Х
0 - 25	00025	Р	✓	Х	✓	Х	✓	✓	Х
0 - 50	00050	Р	✓	✓	✓	✓	✓	✓	Х
0 - 100	00100	Р	✓	✓	✓	✓	1	✓	Х
0 - 150	00150	Р	✓	✓	✓	✓	1	✓	Х
0 - 200	00200	Р	✓	✓	✓	✓	✓	✓	Х
0 - 250	00250	Р	✓	✓	✓	✓	✓	✓	Х
0 - 500	00500	Р	√	✓	✓	✓	√	✓	Х
0 - 1,000	01000	Р	✓	✓	✓	✓	✓	✓	Х
0 - 2,500	02500	Р	✓	✓	✓	✓	✓	✓	Х
0 - 5,000	05000	Р	✓	✓	✓	✓	1	✓	Х
0 - 7,500	07500	Р	✓	✓	✓	✓	1	✓	Х
0 - 10,000	10000	Р	✓	✓	✓	✓	1	✓	Х
0 - 15,000	10001	Р	Х	Х	✓	✓	1	✓	Х
0 - 20,000	10002	Р	Х	Х	Х	Х	Х	Х	✓

#### 17-4PH Bar

Dressource Devices	Pressure Range	BAR			Process	s Connectio	on Code		
Pressure Range	Code	Unit	Α	В	С	F	- I	Р	W
-1 to 2	V0002	В	✓	✓	✓	✓	✓	✓	Х
-1 to 5	V0005	В	✓	✓	✓	✓	✓	✓	Х
-1 to 7	V0007	В	✓	✓	✓	✓	✓	✓	Х
-1 to 10	V0010	В	✓	✓	✓	✓	✓	✓	Х
-1 to 20	V0020	В	1	✓	✓	✓	✓	✓	Х
0-2	00002	В	1	✓	✓	✓	✓	✓	Х
0-5	00005	В	✓	✓	✓	✓	✓	✓	Х
0-7	00007	В	✓	✓	✓	✓	✓	✓	Х
0-10	00010	В	✓	✓	✓	✓	✓	✓	Х
0-20	00020	В	✓	✓	✓	✓	✓	✓	Х
0-35	00035	В	✓	✓	✓	✓	✓	✓	Х
0-50	00050	В	✓	✓	✓	✓	✓	✓	Х
0-100	00100	В	✓	✓	✓	✓	✓	✓	Х
0-250	00250	В	✓	✓	✓	✓	✓	✓	Х
0-350	00350	В	✓	✓	✓	✓	✓	✓	Х
0-500	00500	В	✓	✓	✓	✓	✓	✓	Х
0-700	00700	В	✓	✓	✓	✓	✓	✓	Х

## **INDUSTRIAL OEM**

AST4401 Pressure Transmitter

## 316L PSI

	Pressure Range	DCI II.		Process Connection Code					
Pressure Range	Code	PSI Unit	Α	В	С	F	1	Р	W
-14.7 - 25	V0025	Р	✓	Х	✓	Х	✓	✓	Х
-14.7 - 50	V0050	Р	✓	Х	✓	✓	1	✓	Х
-14.7 - 100	V0100	Ρ	✓	Х	✓	✓	✓	✓	Х
-14.7 - 150	V0150	Р	✓	Х	✓	✓	✓	✓	Х
-14.7 - 200	V0200	Р	✓	Х	✓	✓	✓	✓	Х
-14.7 - 250	V0250	Р	✓	Х	✓	✓	✓	✓	Х
-14.7 - 500	V0500	Р	✓	Х	✓	✓	✓	✓	Х
0 - 25	00025	Р	✓	Х	✓	Х	✓	✓	Х
0 - 50	00050	Р	✓	Х	✓	✓	✓	✓	Х
0 - 100	00100	Р	✓	Х	✓	✓	✓	✓	Х
0 - 150	00150	Р	✓	Х	✓	✓	✓	✓	Х
0 - 200	00200	Р	✓	Х	✓	✓	1	✓	Х
0 - 250	00250	Р	✓	Х	✓	✓	✓	✓	Х
0 - 500	00500	Р	✓	Х	✓	✓	✓	✓	Х
0 - 1,000	01000	Р	✓	Х	✓	✓	✓	✓	Х
0 - 2,500	02500	Р	✓	Х	✓	✓	✓	✓	Х
0 - 5,000	05000	Р	✓	Х	✓	✓	✓	✓	Х
0 - 7,500	07500	Ρ	✓	Х	✓	✓	✓	✓	Х
0 - 10,000	10000	Ρ	✓	Х	✓	✓	✓	✓	Х
0 - 15,000	15000	Ρ	Х	Х	Х	✓	✓	Х	Х
0 - 20,000	20000	Р	Х	Х	Х	Х	Х	Х	✓

## 316L Bar

	Pressure Range	BAR			Process	S Connectio	on Code		
Pressure Range	Code	Unit	Α	В	С	F	- I	Р	W
-1 to 2	V0002	В	✓	Х	✓	✓	✓	✓	Х
-1 to 5	V0005	В	✓	Х	✓	✓	✓	✓	Х
-1 to 7	V0007	В	✓	Х	✓	✓	✓	✓	Х
-1 to 10	V0010	В	✓	Х	✓	✓	✓	✓	Х
-1 to 20	V0020	В	✓	Х	✓	✓	✓	✓	Х
0-2	00002	В	✓	Х	~	✓	✓	✓	Х
0-5	00005	В	✓	Х	✓	✓	✓	✓	Х
0-7	00007	В	✓	Х	✓	✓	✓	✓	Х
0-10	00010	В	✓	Х	✓	✓	✓	✓	Х
0-20	00020	В	✓	Х	✓	✓	✓	✓	Х
0-35	00035	В	✓	Х	✓	✓	✓	✓	Х
0-50	00050	В	✓	Х	✓	✓	✓	✓	Х
0-100	00100	В	✓	Х	✓	✓	✓	✓	Х
0-250	00250	В	✓	Х	✓	✓	✓	✓	Х
0-350	00350	В	✓	Х	√	✓	✓	✓	Х
0-500	00500	В	✓	Х	✓	✓	✓	✓	Х
0-700	00700	В	✓	Х	√	✓	✓	✓	Х

## **INDUSTRIAL OEM**

AST4401 Pressure Transmitter

## **Inconel PSI**

D	Pressure Range	DCI II.	Process Connection Code						
Pressure Range	Code	PSI Unit	Α	В	С	F	l I	Р	W
-14.7 - 25	V0025	Р	✓	Х	Х	Х	Х	✓	Х
-14.7 - 50	V0050	Р	✓	Х	Х	Х	Х	✓	Х
-14.7 - 100	V0100	Р	✓	Х	Х	Х	Х	✓	Х
-14.7 - 150	V0150	Р	✓	Х	Х	Х	Х	✓	Х
-14.7 - 200	V0200	Р	✓	Х	Х	Х	Х	✓	Х
-14.7 - 250	V0250	Р	✓	Х	Х	Х	Х	✓	Х
-14.7 - 500	V0500	Р	✓	Х	Х	Х	Х	✓	Х
0 - 25	00025	Р	✓	Х	Х	Х	Х	✓	Х
0 - 50	00050	Р	✓	Х	Х	Х	Х	✓	Х
0 - 100	00100	Р	✓	Х	Х	Х	Х	✓	Х
0 - 150	00150	Р	✓	Х	Х	Х	Х	✓	Х
0 - 200	00200	Р	✓	Х	Х	Х	Х	✓	Х
0 - 250	00250	Р	✓	Х	Х	Х	Х	✓	Х
0 - 500	00500	Р	✓	Х	Х	Х	Х	✓	Х
0 - 1,000	01000	Р	✓	Х	Х	Х	Х	✓	Х
0 - 2,500	02500	Р	✓	Х	Х	Х	Х	✓	Х
0 - 5,000	05000	Р	✓	Х	Х	Х	Х	✓	Х
0 - 7,500	07500	Р	✓	Х	Х	Х	Х	✓	Х
0 - 10,000	10000	Р	1	Х	Х	Х	Х	✓	Х
0 - 15,000	15000	Р	Х	Х	Х	Х	✓	✓	Х
0 - 20,000	20000	Р	Х	Х	Х	Х	Х	Х	✓

## **Inconel Bar**

Dressure Denge	Pressure Range	BAR			Process	s Connectio	on Code		
Pressure Range	Code	Unit	А	В	С	F	- I	Р	W
-1 to 2	V0002	В	✓	Х	Х	Х	Х	✓	Х
-1 to 5	V0005	В	✓	Х	Х	Х	Х	✓	Х
-1 to 7	V0007	В	✓	Х	Х	Х	Х	✓	Х
-1 to 10	V0010	В	✓	Х	Х	Х	Х	✓	Х
-1 to 20	V0020	В	✓	Х	Х	Х	Х	✓	Х
0-2	00002	В	~	Х	Х	Х	Х	✓	Х
0-5	00005	В	~	Х	Х	Х	Х	✓	Х
0-7	00007	В	~	Х	Х	Х	Х	✓	Х
0-10	00010	В	✓	Х	Х	Х	Х	✓	Х
0-20	00020	В	✓	Х	Х	Х	Х	✓	Х
0-35	00035	В	✓	Х	Х	Х	Х	✓	Х
0-50	00050	В	✓	Х	Х	Х	Х	✓	Х
0-100	00100	В	✓	Х	Х	Х	Х	✓	Х
0-250	00250	В	✓	Х	Х	Х	Х	✓	Х
0-350	00350	В	✓	Х	Х	Х	Х	✓	Х
0-500	00500	В	✓	Х	Х	Х	Х	✓	Х
0-700	00700	В	✓	Х	Х	Х	Х	✓	Х

## **INDUSTRIAL OEM**

AST4401 Pressure Transmitter

## Hastelloy PSI

Pressure Range	Pressure Range	DCI II.			Process	Connectio	on Code		
	Code	PSI Unit	Α	В	С	F	l I	Р	W
-14.7 - 25	V0025	Р	✓	Х	✓	Х	Х	~	Х
-14.7 - 50	V0050	Р	✓	Х	✓	Х	Х	~	Х
-14.7 - 100	V0100	Р	✓	Х	✓	Х	Х	~	Х
-14.7 - 150	V0150	Р	✓	Х	✓	Х	Х	~	Х
-14.7 - 200	V0200	Р	✓	Х	✓	Х	Х	~	Х
-14.7 - 250	V0250	Р	✓	Х	✓	Х	Х	~	Х
-14.7 - 500	V0500	Р	✓	Х	✓	Х	Х	~	Х
0 - 25	00025	Р	✓	Х	✓	Х	Х	✓	Х
0 - 50	00050	Р	✓	Х	✓	Х	Х	✓	Х
0 - 100	00100	Р	✓	Х	✓	Х	Х	✓	Х
0 - 150	00150	Р	✓	Х	✓	Х	Х	✓	Х
0 - 200	00200	Р	✓	Х	✓	Х	Х	~	Х
0 - 250	00250	Р	✓	Х	✓	Х	Х	~	Х
0 - 500	00500	Р	✓	Х	✓	Х	Х	✓	Х
0 - 1,000	01000	Р	✓	Х	✓	Х	Х	✓	Х
0 - 2,500	02500	Р	✓	Х	✓	Х	Х	✓	Х
0 - 5,000	05000	Р	✓	Х	✓	Х	Х	~	Х
0 - 7,500	07500	Ρ	✓	Х	✓	Х	Х	~	Х
0 - 10,000	10000	Ρ	✓	Х	✓	Х	Х	~	Х
0 - 15,000	15000	Ρ	Х	Х	✓	Х	Х	~	Х
0 - 20,000	20000	Ρ	Х	Х	Х	Х	Х	Х	Х

# Hastelloy Bar

Drossuro Pongo	Pressure Range	BAR			Process	s Connectio	on Code		
Pressure Range	Code	Unit	А	В	С	F	- I	Р	W
-1 to 2	V0002	В	✓	Х	✓	Х	Х	✓	Х
-1 to 5	V0005	В	✓	Х	✓	Х	Х	✓	Х
-1 to 7	V0007	В	✓	Х	✓	Х	Х	✓	Х
-1 to 10	V0010	В	✓	Х	✓	Х	Х	✓	Х
-1 to 20	V0020	В	✓	Х	✓	Х	Х	✓	Х
0-2	00002	В	✓	Х	✓	Х	Х	✓	Х
0-5	00005	В	✓	Х	✓	Х	Х	✓	Х
0-7	00007	В	✓	Х	✓	Х	Х	✓	Х
0-10	00010	В	✓	Х	✓	Х	Х	✓	Х
0-20	00020	В	✓	Х	✓	Х	Х	✓	Х
0-35	00035	В	✓	Х	✓	Х	Х	✓	Х
0-50	00050	В	✓	Х	✓	Х	Х	✓	Х
0-100	00100	В	✓	Х	✓	Х	Х	✓	Х
0-250	00250	В	✓	Х	✓	Х	Х	✓	Х
0-350	00350	В	✓	Х	✓	Х	Х	✓	Х
0-500	00500	В	✓	Х	✓	Х	Х	✓	Х
0-700	00700	В	√	Х	✓	Х	Х	√	Х
0-1,000	01000	В	Х	Х	✓	Х	Х	✓	Х

\*See Ordering Information for list of options.

# **Ordering Information**

AST4401	A	00500	Р	4	L	1	000	-SS
Process Connection           A= 1/4" NPT Male         I= 1/4" NPT Fema           B= 1/8" NPT Male*         P= 1/2" NPT Male           C= 1/4" BSPP Male         W= F250C Femal           F= 7/16"-20 UNF Male*         V								
Pressure Range Insert Pressure Range Code (see table for availability)								
Pressure Unit B= Bar P= PSI								
Output           1= 0.5-4.5V ratiometric         4= 4-20mA (2 wire loop product of the second seco	owered)							
Electrical Connection           A= 2 ft. (0.6m)         L= Conduit, Cable           B= 4 ft. (1.2m)         M= Conduit, Cable           C= 6 ft. (1.8m)         N= Conduit, Cable           D= 10 ft. (3.0m)         P= Conduit, Cable           E= Mini DIN 43650C         Y= M12x1           F= Packard Metripack 150 3-Pin         4 = Mini-Fast (-SS)           I= DIN 43650A         X= SS	e 4 ft. (1.2 m) e 6 ft. (1.8 m) e 10 ft. (3 m)							
Wetted Material0= 17-4PH1= 316L2= Inconel 7184= Hast	elloy C276							
Option Codes 000= No Options								
Approval Type								
-SS CSA157 Class I Div 1 Grps A, B, C, D Intrinsically S with approved barrier, ANSI/ISA 12.27.01 Single Ser Ex ia IIC Class I, Zone 0, T4 Electrical Connection F not available								
-Z CRN Registered to ANSI/ASME B31.3. Contact fact pressure, and process connection options (includes Electrical Connection F not available								
UL ANSI/ISA 12.12.01 Class I Div 1 Intrinsically Safe (formerly UL913)] Blank Not available for Electrical Connection 4	Groups A, B, C, D							

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

#### **NORTH AMERICA**

American Sensor Technologies, Inc. (AST), a TE Connectivity Company Tel: 800-522-6752 Email: <u>customercare.molive@te.com</u>

#### ASIA

Hong Kong Sensor Technologies (HKST), a TE Connectivity Company Tel: 0400-820-6015 Email: <u>customercare.shzn@te.com</u>

#### TE.com/sensors

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.