

## Features

- Class I Div. 1, Groups C & D Intrinsically Safe
- High strength stainless steel construction
- No silicone oil, no internal o-rings, no welds
- Wide operating temperature range
- Ranges up to 10,000 psig
- Rugged design survives harsh environments
- Compatible with wide range of gases and liquids
- Suitable for high shock and vibration applications
- ABS (American Bureau of Shipping) Approved
- EMI/RFI Protection

## Specifications

Performance @ 25 °C (77 °F)	
Accuracy <sup>1</sup>	<±0.25% BFSL, <± 0.5% BFSL for 7500 and 10000 PSI
Stability (1 year)	±0.25%FS, typ.
Proof Pressure	2X Rated Pressure
Burst Pressure	5X or 20,000 psig, whichever is less
Wetted Material	17.4 PH S.S. (NACE compatible) (for other material consult factory)
Pressure Cycles	> 100 Million

<sup>1</sup> Accuracy includes: Non-linearity, Hysteresis, and Non-repeatability

Physical Description	
Case	304 stainless steel
Electrical Connection	Refer to Ordering Information
Wetted Material	Refer to Ordering Information

Environmental Data	
<b>Temperature</b>	
Operating	-40 to 85°C (-40 to 185° F)
Storage	-40 to 100°C (-40 to 212° F)
<b>Thermal Limits</b>	
Compensated Range	0 to 55°C (30 to 130° F)
TC Zero	<±1.5% of FS (2.0% for 316L)
TC Span	<±1.5% of FS (2.0% for 316L)
<b>Other</b>	
Shock	100G, 11msec, 1/2 sine
Vibration	10G Peak, 20 to 2000 Hz
EMI/RFI Protection	Yes
Rating	IP-66



Electrical Data			
Output	4-20mA	1-5VDC, 1-6VDC	0.5-4.5 V ratiometric
Excitation	10-28VDC	10-28VDC	5VDC, reg
Output Impedance	>10k Ohms	<100 Ohms, nom.	>100 Ohms, nom.
Current Consumption	20mA, typ.	5mA, typ.	5mA, typ.
Bandwidth (-3dB): DC to 250 Hz	DC to 1kHz	DC to 1kHz	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	Yes	Yes	Yes

Pressure Ranges**			
Gauge psig	Proof psig	Burst psig	Pressure Range Code
0-25	50	250	00025
0-50	100	250	00050
0-100	200	500	00100
0-200	400	1,000	00200
0-500	1,000	2,500	00500
0-1,000	2,000	5,000	01000
0-2,500	5,000	12,500	02500
0-5,000	10,000	20,000	05000
0-7,500	15,000	20,000	07500
0-10,000	20,000	20,000	10000

\* Typical Ranges. All ranges between 0-25 psig and 0-10,000 psig are available. Please consult factory.

+ Vacuum calibration available. Please consult factory. Specifications are subject to change without notice.

### Ordering Information

Construct a product code using the chart below. (Consult factory for other options)

**44-A-00500-P-3-B-1-000**

Series Type	Process Connection	Pressure Range	Pressure Unit	Outputs	Electrical Interface	Wetted Material	Options
44 Intrinsically Safe	X= Special A= 1/4" MNPT B= 1/8" MNPT** C= 1/4" BSPP Male E= 1/2" MNPT F= 7/16" - 20 UNF Male** J= 1/4" FNPT	XXXXX= Special Insert pressure range code from pressure range chart.  Vacuum = V0000 -14.7psig/-1.01bar  For vacuum replace first zero with (V) in pressure code. (Ex. V0500 = Vacuum to 500 psig)	X= Special B= BAR K= kg/cm <sup>2</sup> P= psig W= Inches of H <sub>2</sub> O column	X= Special B= 20mV/V G= 1-10V 1= 10mV/V 2= 0.5-4.5V ratiometric 3= 1-5V 4= 4-20mA 2 wire 5= 5mV/V 6= 1-6V	X= Special A= 2ft. cable B= 4ft. cable C= 6ft. cable D= 10ft. cable E= Mini DIN 43650C F= Packard Metripack 150 3-Pin connector I= Large Din 43650A (mate included, 1/2" conduit)+ J= 15ft. cable	X= Special 0= 17.4 PH 1= 316L 2= Inconel 718*	XXX= Special 000= No options A10= ±0.10 accuracy C01 Calibration 1-9 C10 Calibration 10-49 C50 Calibration 50-up C0S Cleaned for O <sub>2</sub> service

\*Consult factory on availability

\*\* Not available under 50PSI or in 316L

+ Also approved to UL/cUL ANSI 12.12.2000 Class 1 Div 2, Group A, B, C, D without requiring a barrier (conduit required)

### Dimensional Information

Class 1, Div. 1, Groups C, D  
Hazardous Location

Figure 1: Wiring diagram for 4-wire, mV output

Hazardous Location

Figure 2: Wiring diagram for 2-wire, 4-20mA output

Hazardous Location

Figure 3: Wiring diagram for 3-wire, Voltage output

The transducers listed below are designed for installation in a Class 1, Division 1, Groups C and D, Division 1 hazardous location when connected to Associated Apparatus as described in note 1.

Entity Parameters  
 $V_{max} = 28V_{dc}$   
 $I_{max} = 175mA$   $I_{max}$  is the total current available from the Associated Apparatus under any condition.  
 $C1 = 0.44\mu f$   
 $L1 = 0$

Notes:  
 1. Associated Apparatus shall provide intrinsically safe connections which meet the following parameters.  
 $V_{oc}$  or  $V_t \leq V_{max}$   $C_a$   $C1 + Cleads$   
 $I_{sc}$  or  $I_t \leq I_{max}$   $L_a$   $L1 + Lleads$

2. Control Room apparatus shall not generate in excess of 250V ( $U_{max}$ ).

3. Installation should be in accordance with Article 504 in the National Electrical Code, ANSI/NFPA 70.

**Mini DIN 43650C**

Connector Pin-out

**Standard Cable**

See page 29-32 for Standard Electrical Connections Information.