



## DIFFERENTIAL PRESSURE TRANSDUCERS

### BMD-1100 SERIES BMDE-1100 SERIES (AMPLIFIED)\*

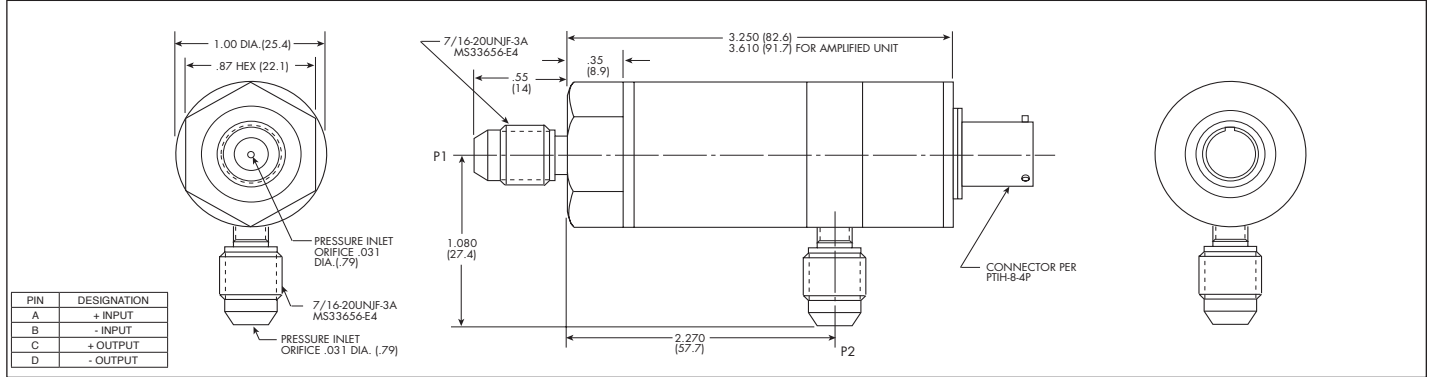
- High Natural Output
- Unprecedented Stability And Reliability
- Ruggedized Internal Construction
- Utmost in Safety
- Leakproof, All Welded Construction
- Fully Qualified
- Passed Extensive Environmental Tests
- Intrinsically Safe Applications Available (i.e. IS-BMD-1100 or IS-BMDE-1100)



The Kulite BMD/BMDE-1100 Series pressure transducers are designed for the measurement of pressure drop across air and oil filters, engine torque and similar applications. Available either unamplified (100mV output) or amplified (5 volt output), these units are all stainless steel construction with weld sealing offering maximum accuracy and performance for industrial and aircraft applications.

#### \* Ordering Information

3 Wire: BMDE-1100-XXXD-3 / 4 Wire: BMDE-1100-XXXD-4



	BMD-1100	BMDE-1100	
INPUT	Pressure Range	1.7 25      3.5 50      7 100      17 BAR 250 PSI	
	Operational Mode	Differential	
	Over Pressure	2 Times Rated Pressure Main Port (P1) 2 Times Rated Pressure Reference Port (P2)	
	Burst Pressure	3 Times Rated Pressure (P1 and P2)	
	Line Pressure	4 Times Rated Pressure, 1000 PSI Max. (69 Bar)	
	Pressure Media	(P1, P2) Any Liquid or Gas Compatible With 17-4 PH or 316 SS	
	Rated Electrical Excitation	10 VDC/AC (RMS)	28 VDC ± 4 VDC
	Maximum Electrical Excitation	15 VDC	N.A.
	Input Impedance	1000 Ohm (Min.)	N.A.
	Output Impedance	1000 Ohm (Nom.)	200 Ohm (4 Wire) (Max.)    50 Ohm (3 Wire) (Max.)
OUTPUT	Full Scale Output (FSO)	100 mV (Nom.)      5 VDC ± 3%	
	Bandwidth (-3dB)	DC to 5 KHz	
	Residual Unbalance	± 5 mV (Typ.)	0 ± 100 mV (4 Wire)    200 mV ± 100 mV (3 Wire)
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)	
	Resolution	Infinitesimal	
	Natural Frequency (KHz) (Typ.)	120      210      285      425	
	Insulation Resistance	100 Megohm Min. @ 50 VDC	
ENVIRONMENTAL	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)	
	Compensated Temperature Range	0°F to +180°F (-18°C to +80°C) Other Ranges Quoted on Request	
	Thermal Zero Shift	± 1% FS/100°F (Typ.)	
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)	
	Linear Vibration	50g Peak, Sine 10 to 2000 Hz	
Humidity	100% Relative Humidity		
Mechanical Shock	100g half Sine Wave 11 msec. Duration		
PHYSICAL	Pressure Port	MS33656-E4 7/16-20 UNJF-3A	
	Electrical Connection	PTIH-8-4P Connector or Equivalent	
	Weight	200 Grams Approx.	270 Grams Approx.
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon	
Mounting Torque	100 Inch-Pounds		

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (J) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.