



# DIFFERENTIAL PRESSURE TRANSDUCERS

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

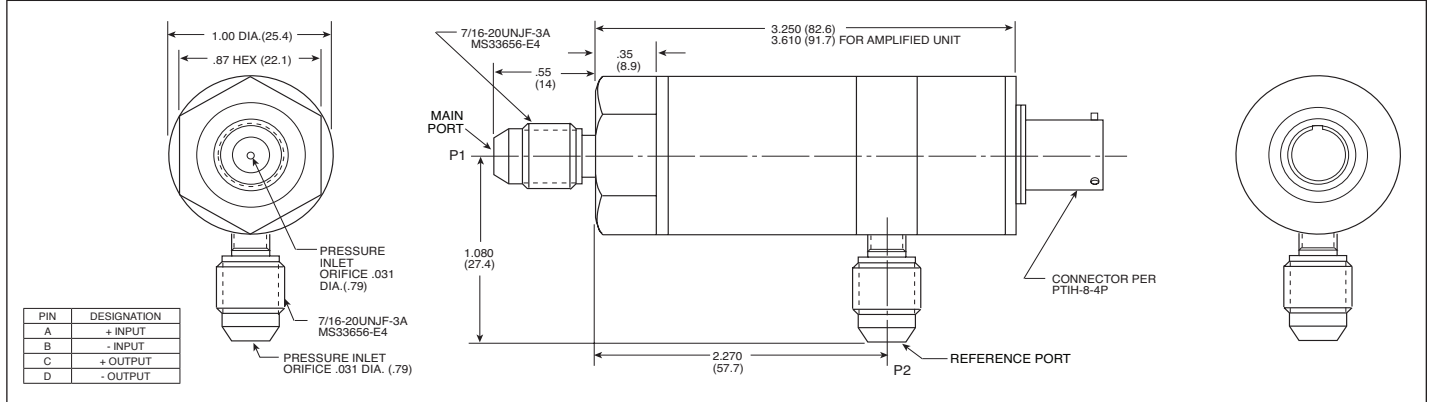
- High Natural Output
- Unprecedented Stability And Reliability
- Ruggedized Internal Construction
- Utmost in Safety
- Secondary Containment Of Pressure Media
- Leakproof, All Welded Construction
- Fully Qualified
- Passed Extensive Environmental Tests
- Intrinsically Safe Applications Available (i.e. 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 (P1 and P2)		
	Burst Pressure	3 Times Rated Pressure (P1 and P2)		
	Line Pressure	4 Times Rated Pressure		
	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	Output Impedance	1000 Ohm (Nom.)	
Full Scale Output		100 mV (Nom.)		5 VDC ± 3%
Total Error Band		± 2% FSO from 32°F (0°C) to 185°F (85°C), Increasing to ± 3% FSO at -65°F (-55°C) and +250°F (120°C)		
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		
ENVIRONMENTAL	Insulation Resistance	100 Megohm Min. @ 50 VDC		
	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		
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz		
	Humidity	100% Relative Humidity		
PHYSICAL	Mechanical Shock	20g half Sine Wave 11 msec. Duration		
	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. (L) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.