

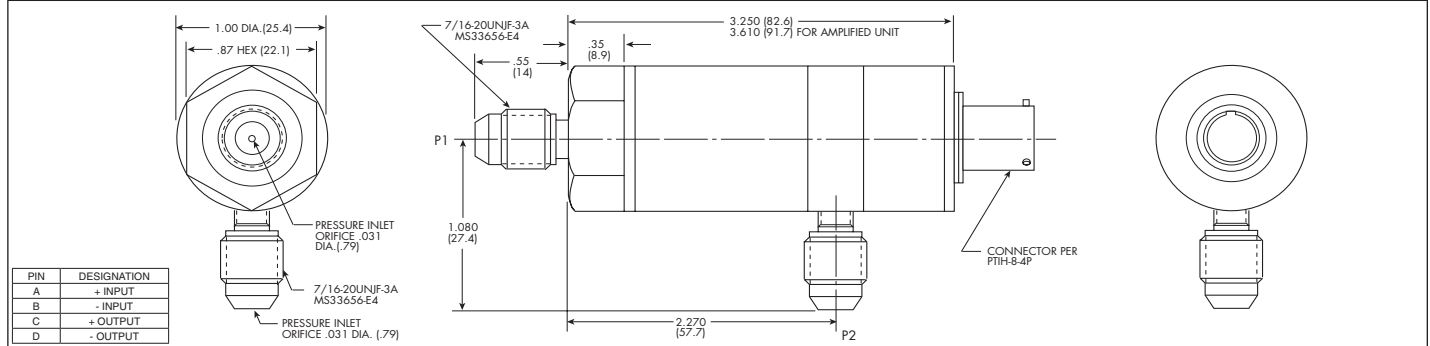


**DIFFERENTIAL IS® PRESSURE TRANSDUCERS**  
**BMD-1100 SERIES BMDE-1100 SERIES (AMPLIFIED)**

- 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.



	BMD-1100		BMDE-1100	
	Pressure Range	1.7 25	3.5 50	7 100
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)			
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.	
<b>OUTPUT</b>				
Output Impedance	1000 Ohm (Nom.)		200 Ohm (4 Wire) (Max.)	50 Ohm (3 Wire) (Max.)
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)	120	210	285	425
Insulation Resistance	100 Megohm Min. @ 50 VDC			
<b>ENVIRONMENTAL</b>				
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			
Altitude	-150 ft. to + 70,000 ft. Will Not Damage Sensor			
Humidity	100% Relative Humidity			
Mechanical Shock	100g half Sine Wave 11 msec. Duration			
<b>PHYSICAL</b>				
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. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (F)