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

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

- High Natural Output
- Unprecedented Stability And Reliability Ruggedized Internal Construction
- Utmost in Safety Secondary Containment Of Pressure Media

and aircraft applications.

- Leakproof, All Welded Construction
 Fully Qualified Passed Extensive
- Environmental Tests
 Intrinsically Safe Applications Available (i.e. IS-BMD-1100 or
 - IS-BMDE-1100)





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

3.250 (82.6) 3.610 (91.7) FOR AMPLIFIED UNIT - 1.00 DIA.(25.4) 7/16-20UNJF-3A — .87 HEX (22.1) — .35 (8.9) .55 (14) Å P1 PRESSURE INLET ORIFICE .031 DIA.(.79) 1.080 (27.4) CONNECTOR PER PTIH-8-4P PIN DESIGNATION 7/16-20UNJF-3A MS33656-E4 + INPUT PRESSURE INLET ORIFICE .031 DIA. (.79) 2.270 (57.7) + OUTPU - OUTPU

	Pressure Range	BMD-1100		BMDE-1100		
		1.7 25	3.5 50	7 100	17 BAR 250 PSI	
	Operational Mode	Differential				
E	Over Pressure	2 Times Rated Pressure Main Port (P1) 2 Times Rated Pressure Reference Port (P2)				
INPUT	Burst Pressure	3 Times Rated Pressure (P1 and P2)				
1	Pressure Media	(P1, P2) Any Liquid or Gas Compatible With 17-4 PH or 316 SS				
	Rated Electrical Excitation	10 VDC/AC (RMS)		28 VE	28 VDC ± 4 VDC	
	Maximum Electrical Excitation	15 VI	DC	N.A.		
	Input Impedance	1000 Ohr	1000 Ohm (Min.)		N.A.	
	Output Impedance	1000 Ohm	n (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				
5	Residual Unbalance	± 5 mV	(Тур.)	0 ± 100 mV (4 Wire)	200 mV ± 100 mV (3 Wire)	
ΟΠΤΡΟΤ	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				
	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)				
TAL	Compensated Temperature Range	0°F to +180°F (-18°C to +80°C) Other Ranges Quoted on Request				
ENVIRONMENTAL	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. (I) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.