



# HIGH PERFORMANCE, 5 VDC OUTPUT PRESSURE TRANSDUCERS

## BM-1100 SERIES

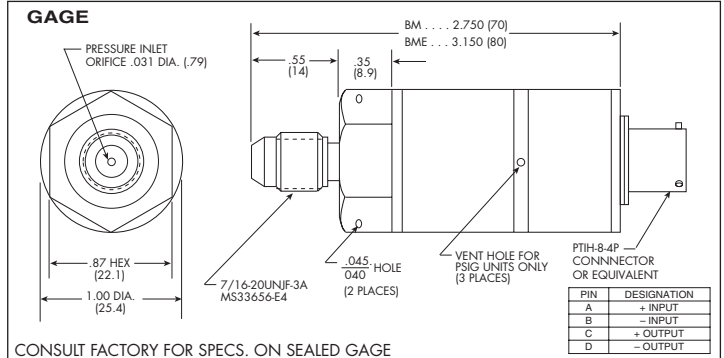
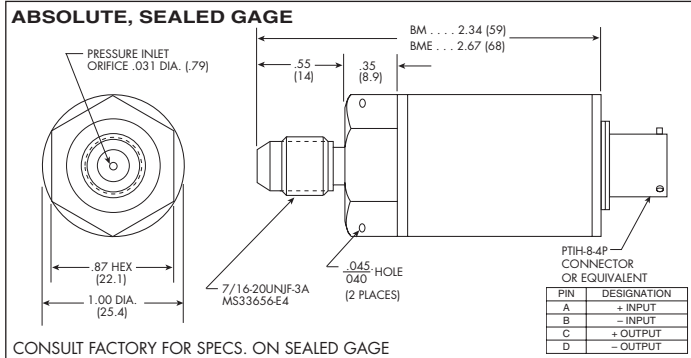
- High Unamplified Output
- Rugged All Welded Construction
- High Overload Capabilities
- Excellent Long Term Stability
- High Isolation
- Intrinsically Safe Applications Available (i.e. IS-BM-1100)

## BME-1100 SERIES (AMPLIFIED)

- 5 VDC Output
- Rugged All Welded Construction
- High Overload Capabilities
- Excellent Long Term Stability



The ingenious application of modern solid state technology to transducer sensing makes the BM-1100 Series the most advanced pressure transducer available. Designed to measure liquid or gas pressure, the transducer is of all-welded stainless steel construction, with integral pressure port and diaphragm. The BM-1100 provides an extremely rugged, accurate and inexpensive means for pressure-to-voltage conversion. The inherently high unamplified output, and the ability to withstand high voltages between leads and case make the BM-1100 Series Transducers ideally suited for a large number of applications. Similar in design to the unamplified BM-1100 Series, the BME-1100 is a 5 volt unit containing a hybrid microelectronic amplifier and regulator within the all welded case.



	BM-1100				BME-1100			
	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500
Operational Mode	Absolute, Sealed Gage, Vented Gage							
Over Pressure	2 Times Rated Pressure Range							
Burst Pressure	5 Times Rated Pressure Range to Max. of 20000 PSI (1400 BAR)							
Pressure Media	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/AC (RMS)				N.A.			
Input Impedance	1000 Ohm (Min.)				N.A.			
Output Impedance	1000 Ohm (Nom.)				200 Ohm (4 Wire) (Max.)		50 Ohm (3 Wire) (Max.)	
Full Scale Output (FSO)	100 mV (Nom.)				5V ± 3%			
Bandwidth (-3dB)	DC to 5 KHz							
Residual Unbalance	± 2% FSO				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	550	720	910	1120
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							
Thermal Zero Shift	± 1% FS/100°F (Typ.)							
Thermal Sensitivity Shift	± 1% FS/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							
Pressure Port	A. 33656/E4 7/16-20 UNJF-3A			B. 1/4"-18 NPT Male		C. Other Ports Available		
Electrical Connection	PTIH-8-4P Connector or Equivalent							
Weight	110 Grams Approx.				120 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. (G) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.