

HIGH PERFORMANCE, 5 VDC OUTPUT IS® PRESSURE TRANSDUCERS

BM-1100 SERIES

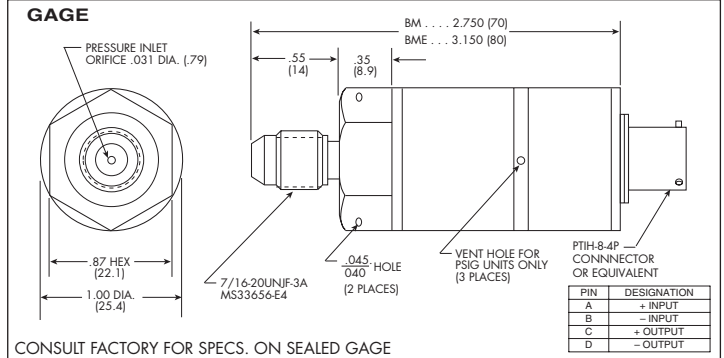
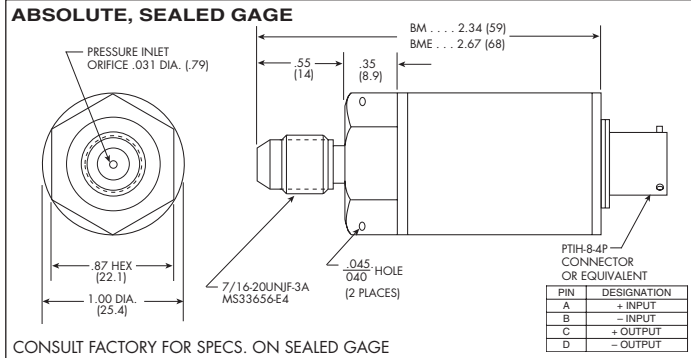
- High Unamplified Output
- Rugged All Welded Construction
- High Overload Capabilities
- Excellent Long Term Stability
- High Isolation
- Intrinsically Safe Applications Available (i.e. IS-BM-1100)

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.



INPUT	BM-1100				BME-1100			
	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI
Pressure Range								
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								
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)	120	210	285	425	550	720	910	1120
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% FS/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							
PHYSICAL								
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							