



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



*See page 2 for ordering information

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*			
INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI
	Operational Mode	Absolute, Sealed Gage, 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)		500 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							
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.) (± 1.5% FS/100°F Max.)							
	Thermal Sensitivity Shift	± 1% /100°F (Typ.) (± 1.5% /100°F Max.)							
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz							
	Humidity	100% Relative Humidity							
PHYSICAL	Mechanical Shock	20g half Sine Wave 11 msec. Duration							
	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. (J) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.

ORDERING INFORMATION

3 WIRE:

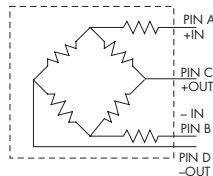
- BME-1100-XXXXA-3
- BME-1100-XXXSG-3
- BME-1100-XXXG-3

4 Wire:

- BME-1100-XXXXA-4
- BME-1100-XXXSG-4
- BME-1100-XXXG-4

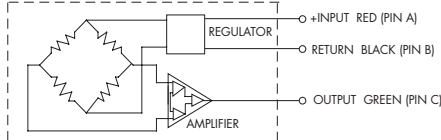
WIRING

0 - 100 mV OUTPUT



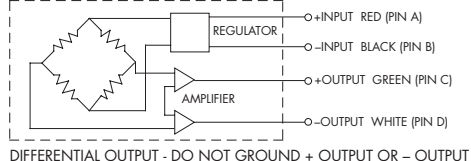
- BM-1100-XXXXA
- BM-1100-XXXSG
- BM-1100-XXXG

3 WIRE 0.5 - 5V OUTPUT



- BME-1100-XXXXA-3
- BME-1100-XXXSG-3
- BME-1100-XXXG-3

4 WIRE 0 - 5V OUTPUT

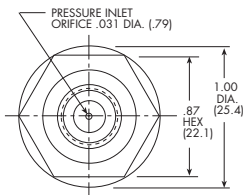


- BME-1100-XXXXA-4
- BME-1100-XXXSG-4
- BME-1100-XXXG-4

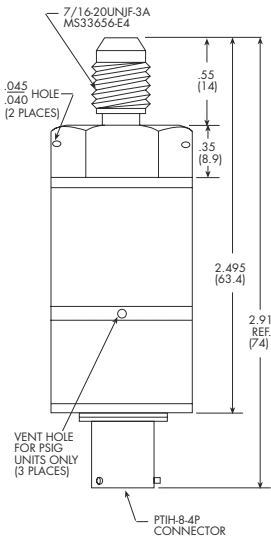
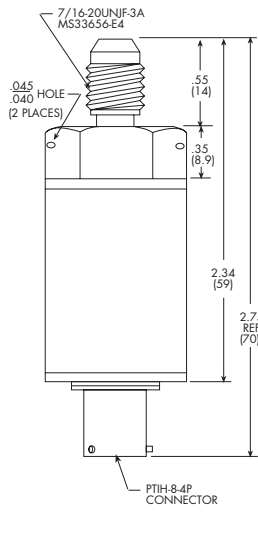
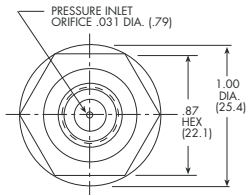
DIFFERENTIAL OUTPUT - DO NOT GROUND + OUTPUT OR - OUTPUT

BM-1100-XXXXA
BM-1100-XXXSG
BM-1100-XXXG
TYPICAL UNAMPLIFIED VERSION

ABSOLUTE, SEALED GAGE



VENTED GAGE

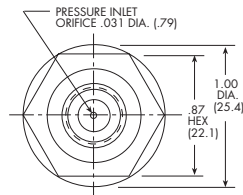


ALL DIMENSIONS TYPICAL

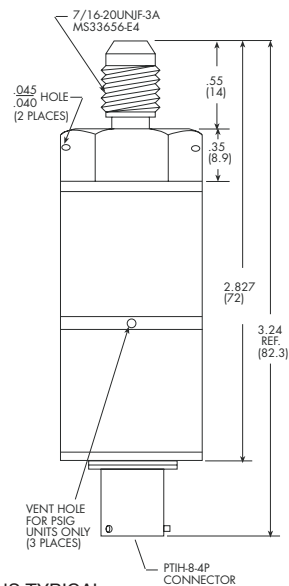
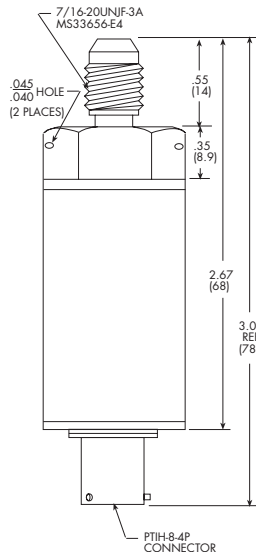
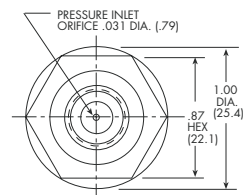
CONSULT FACTORY FOR SPECS. ON SEALED GAGE

BME-1100-XXXXA-3
BME-1100-XXXSG-3
BME-1100-XXXG-3
BME-1100-XXXXA-4
BME-1100-XXXSG-4
BME-1100-XXXG-4
TYPICAL AMPLIFIED/REGULATED VERSION

ABSOLUTE, SEALED GAGE



VENTED GAGE



ALL DIMENSIONS TYPICAL

CONSULT FACTORY FOR SPECS. ON SEALED GAGE

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