

## VOLTAGE OUTPUT MICROPROCESSOR CORRECTED IS® PRESSURE TRANSDUCER

## **BME-76-1100 SERIES**

- Robust Construction
- High Accuracy

INPUT

- Microprocessor Corrected
- Silicon on Silicon Integrated Sensor VIS®

The BME-76-1100 microprocessor corrected transducer offers high accuracy with a total error band of  $\pm 0.25\%$  FSO, inclusive of all errors over a wide temperature range of -40°F to +250°F. The ingenious application of modern solid state technology to transducer sensing makes the BME-76-1100 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.

1.7

3.5



CHART FOR "X"	
-1 X= Ø .031	
-2 X=Ø .172	₹ 2.70 (68.5) →
PIN         DESIGNATION           A         + INPUT           B         - INPUT           C         + OUTPUT           D         - OUTPUT           E         CASE           F         FACTORY USE ONLY	7/16-20UNJF-3A MS 33656E-4

17

35

70

140

350 BAR

Pressure Range	25	50	100	250	500	1000	2000	5000 PSI		
Operational Mode	Absolute, Sealed Gage									
Over Pressure	2 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)									
Burst Pressure	5 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)									
Pressure Media	Any Media Compatible With 316 SS and 15-5 PH Stainless Steel									
Rated Electrical Excitation	8 - 32 VDC									
Maximum Electrical Current	25 mA (Max.)									
OUTPUT Output Impedance				750 Ohm	ns (Max.)					
Full Scale Output (FSO) (Net)	4.0 VDC ± .025 VDC									
Total Error Band (Excluding End Points)	± 0.25% FSO (Max.) (Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)									
Bandwidth (-3dB)	DC to 10 KHz									
Residual Unbalance	0.5 VDC ± .025 VDC									
Resolution	Infinitesimal									
Acceleration Sensitivity % FS/g Perpendicular Transverse	1.9x10 <sup>-3</sup> 5.0x10 <sup>-5</sup>	1.0x10 <sup>-3</sup> 3.1x10 <sup>-5</sup>	5.2x10 <sup>-4</sup> 2.0x10 <sup>-5</sup>	2.2x10 <sup>-4</sup> 1.0x10 <sup>-5</sup>	1.1x10 <sup>-4</sup> 7.0x10 <sup>-6</sup>	6.2x10 <sup>-5</sup> 4.3x10 <sup>-6</sup>	2.6x10 <sup>-5</sup> 2.3x10 <sup>-6</sup>	1.5x10 <sup>-5</sup> 1.5x10 <sup>-6</sup>		
Insulation Resistance	100 Megohm Min. @ 50 VDC									
ENVIRONMENTAL Operating Temperature Range	-40°F to +265°F (-40°C to +130°C)									
Compensated Temperature Range	-40°F to +250°F (-40°C to +120°C)									
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 Electrical Connection	PTIH-10-6P Connector or Equivalent									
Weight	110 Grams									
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon									
Mounting Torque	100 Inch-Pounds (Max.)									

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. (E)