

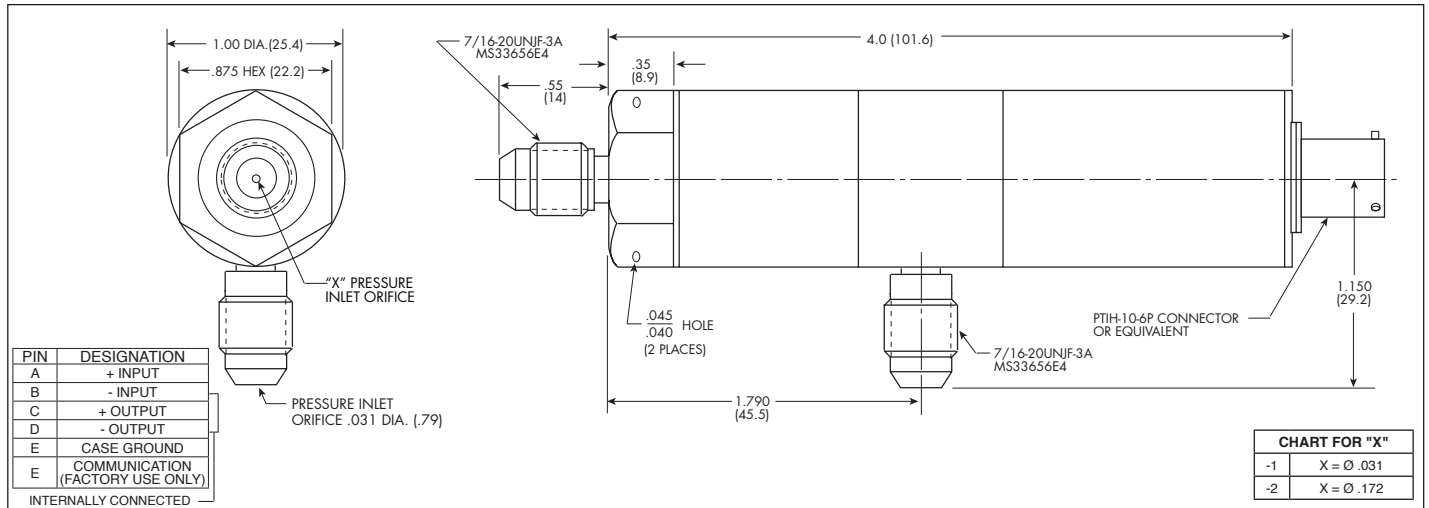


# VOLTAGE OUTPUT DIGITALLY CORRECTED DIFFERENTIAL PRESSURE TRANSDUCER

## BMDE-70-1000 SERIES

- Robust Construction
- Digitally Corrected
- High Accuracy
- Silicon on Silicon Integrated Sensor **VIS®**

The BMDE-70-1000 digitally corrected transducer offers high accuracy 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 BMDE-70-1000 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.



	0.35	1.0	1.7	3.5	7	17	35 BAR			
<b>INPUT</b>	5	15	25	50	100	250	500 PSI			
Pressure Range										
Operational Mode	Differential									
Over Pressure	2 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)									
Burst Pressure	3 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)									
Line Pressure	4 Times Rated Pressure, 2000 PSI Max. (138 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.)									
<b>OUTPUT</b>										
Output Impedance	750 Ohms (Max.)									
Full Scale Output (FSO) (Net)	± 2.0 VDC ± .025 VDC									
Total Error Band (Excluding End Points)	± 0.5% FSO (Max.)			± 0.25% FSO (Max.)						
	(Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)									
Bandwidth (-3dB)	DC to 10 KHz									
Residual Unbalance	2.5 VDC ± .025 VDC									
Resolution	Infinitesimal									
Acceleration Sensitivity % FS/g Perpendicular	1.5x10 <sup>-3</sup>	7.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	5.0x10 <sup>-5</sup>	3.0x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	1.5x10 <sup>-5</sup>	1.0x10 <sup>-5</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC									
<b>ENVIRONMENTAL</b>										
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									
Humidity	100% Relative Humidity									
Mechanical Shock	100g half Sine Wave 11 msec. Duration									
<b>PHYSICAL</b>										
Electrical Connection	PTIH-10-6P Connector or Equivalent									
Weight	270 Grams Approx.									
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon									
Mounting Torque	100 Inch-Pounds (Max.)									

