

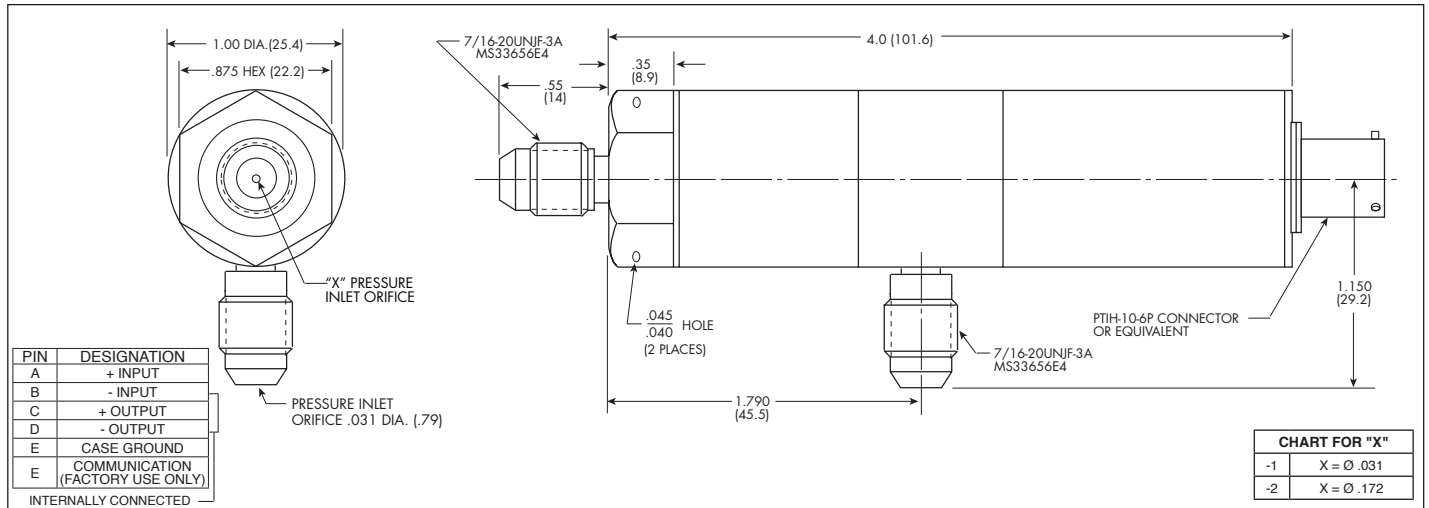


# VOLTAGE OUTPUT DIGITALLY CORRECTED DIFFERENTIAL PRESSURE TRANSDUCER

## 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.



<b>INPUT</b>	Pressure Range	0.35 5	1.0 15	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI			
	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									
<b>ENVIRONMENTAL</b>	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									
	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									
<b>PHYSICAL</b>	Humidity	100% Relative Humidity									
	Mechanical Shock	100g half Sine Wave 11 msec. Duration									
	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.)										

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (E) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.