

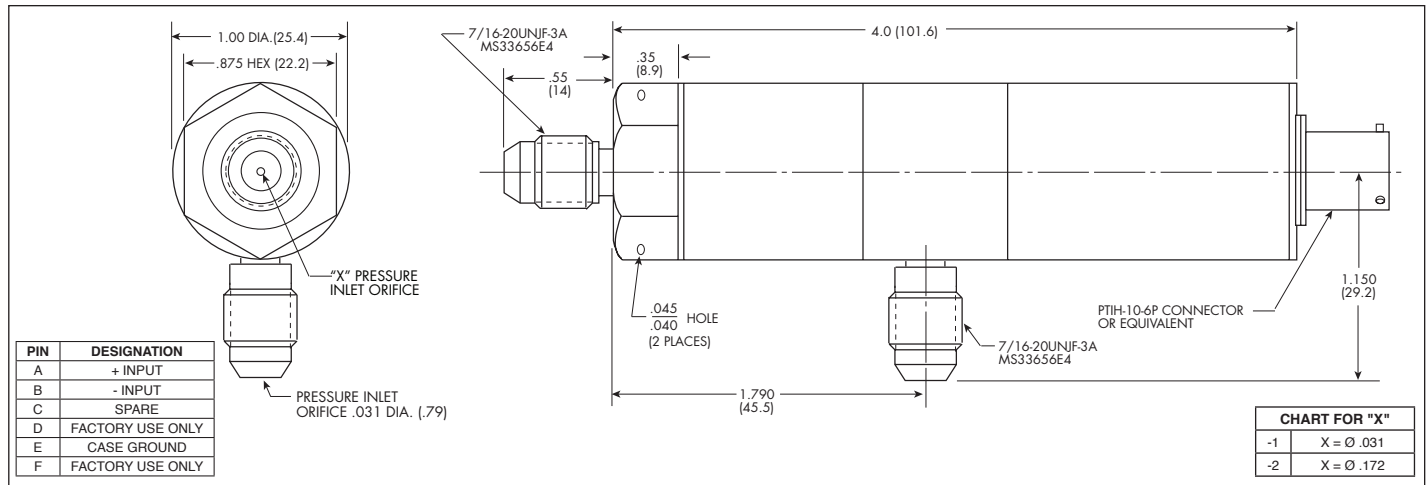


# 4-20mA OUTPUT DIGITALLY CORRECTED DIFFERENTIAL PRESSURE TRANSMITTER

## BMDE-70I-1000 SERIES

- Robust Construction
- Digitally Corrected
- High Accuracy
- Silicon on Silicon Integrated Sensor **VIS**<sup>®</sup>

The BMDE-70I-1000 digitally corrected transmitter 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-70I-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.



INPUT	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	5 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)								
	Line Pressure	4 Times Rated Pressure								
	Pressure Media	Any Media Compatible With 316 SS and 15-5 PH Stainless Steel								
	Rated Electrical Excitation	8 - 32 VDC								
OUTPUT	Output	4 mA - 20 mA Current Output ("0" D Set at 12mA)								
	Total Error Band (Excluding End Points)	± 0.5% FSO (Max.)				± 0.25% FSO (Max.)				
	Residual Unbalance	3.0 VDC ± 0.025 (12 mA ± 0.1 Shunted by a 250 Ω Resistor)								
	Sensitivity (Net)	± 2.0 VDC ± 0.025 (± 8 mA ± 0.1 Shunted by a 250 Ω Resistor)								
	Bandwidth (-3dB)	DC to 1 kHz								
	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>
ENVIRONMENTAL	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								
	Humidity	100% Relative Humidity								
PHYSICAL	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. (I) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.