

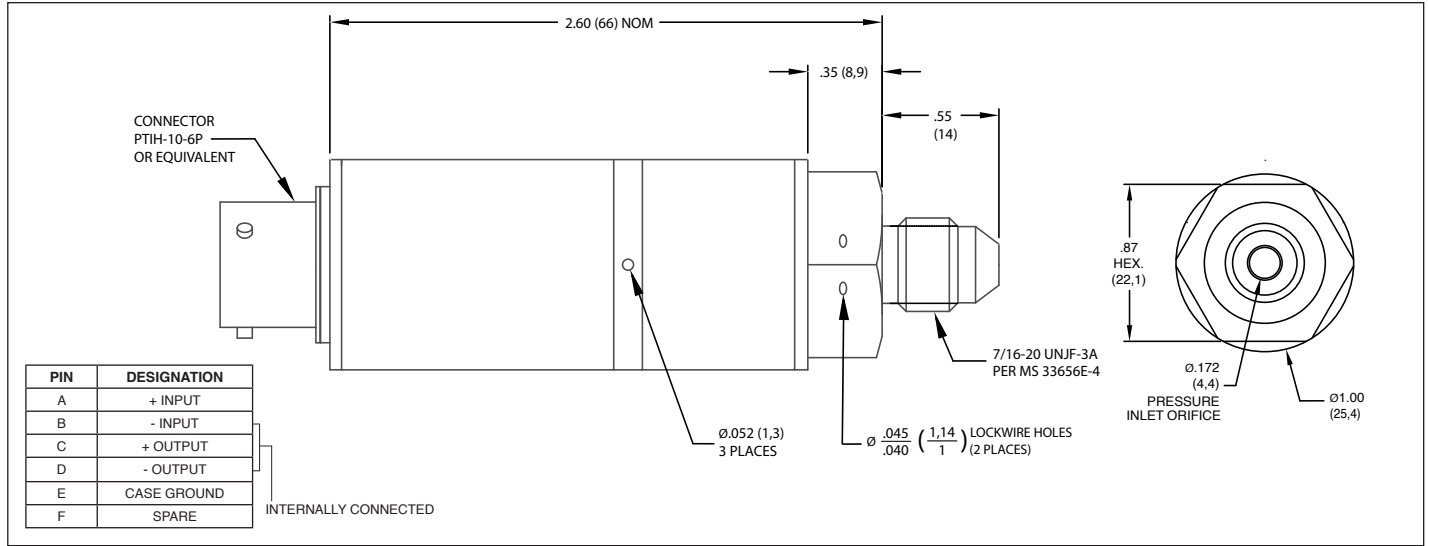


**VOLTAGE OUTPUT DIGITALLY CORRECTED GAGE
PRESSURE TRANSDUCER
BME-90-1000 GAGE SERIES**

- Robust Construction
- High Accuracy
- Digitally Corrected
- Ideal for Static Pressure Measurement
- Silicon on Silicon Integrated Sensor **VIS[®]**
- Intrinsically Safe Applications Available (i.e. IS-BME-90-1000)



The BME-90-1000 offers a high accuracy voltage output with a total error band of $\pm 0.25\%$ FSO across the ultra-wide temperature range of -40°F to $+284^{\circ}\text{F}$ (-40°C to $+140^{\circ}\text{C}$). Designed to measure liquid or gas pressure (with its all-welded, hermetic stainless steel construction), the transducer is ideal for road test, flight test and industrial sensing applications.



INPUT	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	Gage				
	Over Pressure	2 Times Rated Pressure				
	Burst Pressure	3 Times Rated Pressure				
	Pressure Media	Any Media Compatible With 316 SS				
	Rated Electrical Excitation	8 - 30 VDC (8-24 VDC For IS)				
	Maximum Electrical Current	3.5 mA (Max.)				
OUTPUT	Output Impedance	250 Ohms (Max.)				
	Full Scale Output (Net)	4.0 VDC \pm 0.025 VDC				
	Total Error Band (Excluding End Points)	$\pm 0.25\%$ FSO (Max.) (Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)				
	Response Time	2 Milliseconds (Typ.) @ 200 Hz Bandwidth				
	Bandwidth (-3dB)	750 Hz (Typ.)				
	Residual Unbalance	0.5 VDC \pm 0.025 VDC				
ENVIRONMENTAL	Insulation Resistance	100 Megohm Min. @ 50 VDC				
	Operating Temperature Range	-40°F to $+284^{\circ}\text{F}$ (-40°C to $+140^{\circ}\text{C}$)				
	Compensated Temperature Range	-40°F to $+284^{\circ}\text{F}$ (-40°C to $+140^{\circ}\text{C}$)				
PHYSICAL	Humidity	100% Relative Humidity				
	Electrical Connection	PTIH-10-6P Connector or Equivalent				
	Weight	125 Grams (Max.)				
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon				
Mounting Torque	75 Inch-Pounds (Max.) (8.5 Nm)					

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (D) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2021 Kulite Semiconductor Products, Inc. All Rights Reserved.