



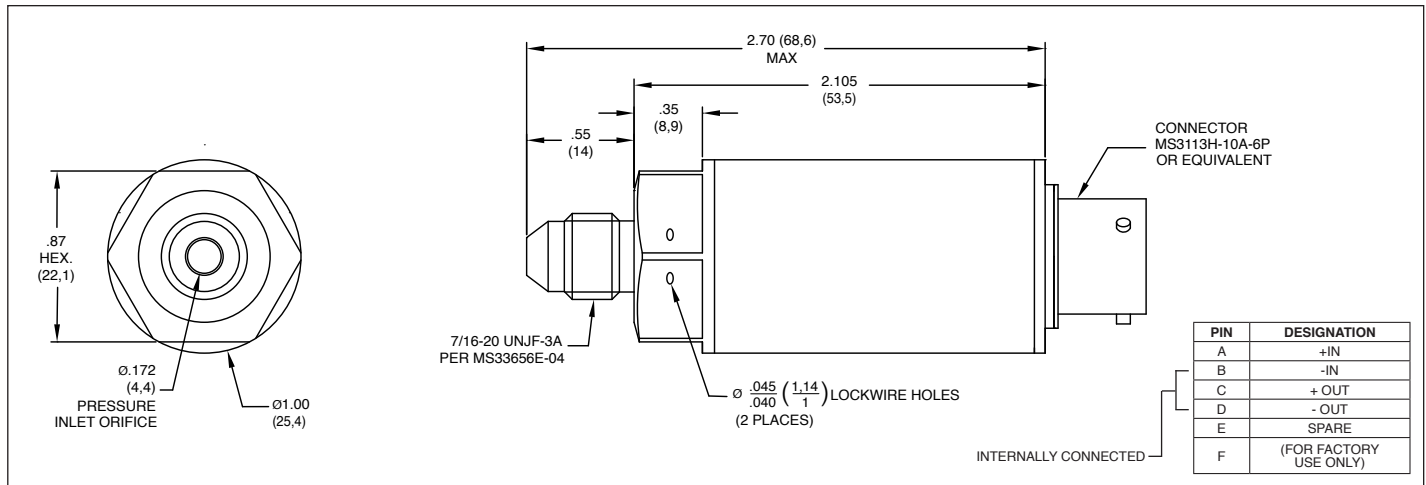
# VOLTAGE OUTPUT DIGITALLY CORRECTED PRESSURE TRANSDUCER

## BME-88-1000 Series

- Robust Construction
- High Accuracy
- Digitally Corrected
- Silicon on Silicon Integrated Sensor **VIS<sup>®</sup>**
- Intrinsically Safe Applications Available (i.e. IS-BME-88-1000)



The BME-88-1000 offers a high accuracy voltage output with a total error band of  $\pm 0.25\%$  FSO across the ultra-wide temperature range of  $-40^{\circ}\text{F}$  to  $+284^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  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.



	15	30	50	100	200 PSI	
<b>INPUT</b>	Pressure Range (Note 1)					
	Operational Mode	Absolute				
	Over Pressure	2 Times Rated Pressure				
	Burst Pressure	3 Times Rated Pressure				
	Pressure Media	Any Media Compatible With 316 SS Stainless Steel				
	Rated Electrical Excitation	8 - 30 VDC (8-24 VDC For IS)				
	Maximum Electrical Current	3.5 mA (Max.)				
<b>OUTPUT</b>	Output Impedance	250 Ohms (Max.)				
	Full Scale Output (FSO)	5 VDC $\pm 0.025$ VDC				
	Total Error Band (Including 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				
	Residual Unbalance	0.5 VDC $\pm 0.025$ VDC				
	Insulation Resistance	100 Megohm Min. @ 50 VDC				
<b>ENVIRONMENTAL</b>	Operating Temperature Range	$-40^{\circ}\text{F}$ to $+284^{\circ}\text{F}$ ( $-40^{\circ}\text{C}$ to $+140^{\circ}\text{C}$ )				
	Compensated Temperature Range	$-40^{\circ}\text{F}$ to $+284^{\circ}\text{F}$ ( $-40^{\circ}\text{C}$ to $+140^{\circ}\text{C}$ )				
	Humidity	100% Relative Humidity				
<b>PHYSICAL</b>	Electrical Connection	MS3113H-10A-6P Connector or Equivalent				
	Weight	100 Grams (Nom)				
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon				
	Mounting Torque	75 Inch-Pounds (Max.) (8.5 Nm)				

Note 1: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2020 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.