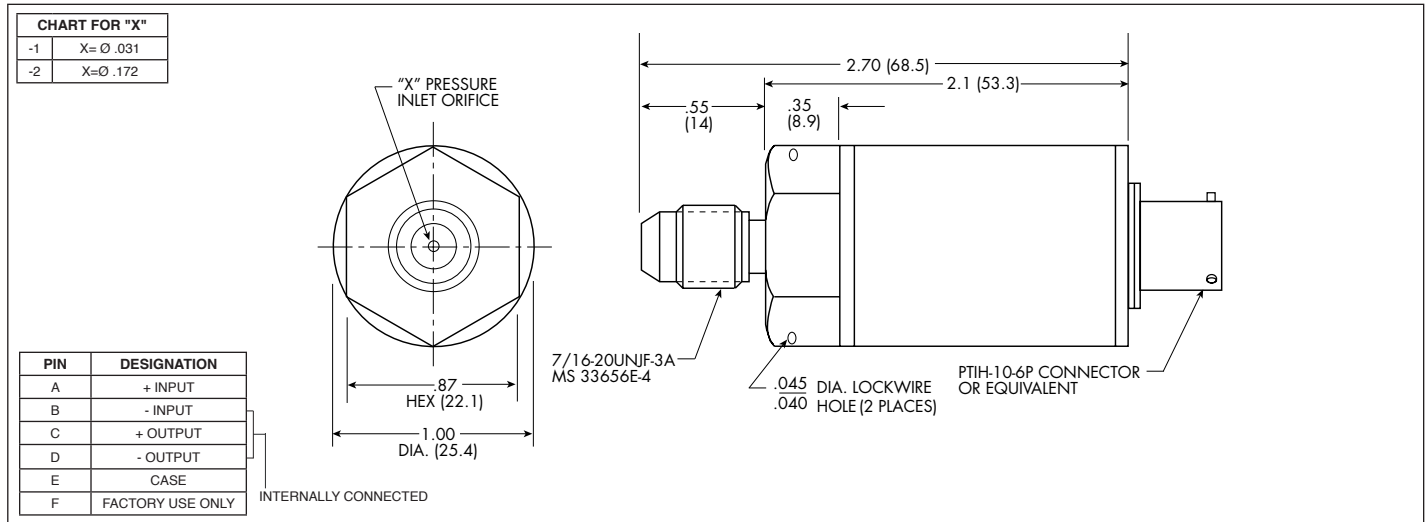




**VOLTAGE OUTPUT DIGITALLY CORRECTED  
PRESSURE TRANSDUCER  
BME-76-1100 SERIES**

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

The BME-76-1100 digitally corrected transducer offers high accuracy with a total error band of  $\pm 0.25\%$  FSO, inclusive of all errors over a wide temperature range of  $-40^{\circ}\text{F}$  to  $+250^{\circ}\text{F}$ . The ingenious application of modern solid state technology to transducer sensing makes the BME-76-1100 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                          | 1.7<br>25   | 3.5<br>50 | 7<br>100 | 17<br>250 | 35<br>500 | 70<br>1000 | 140<br>2000 | 350 BAR<br>5000 PSI |  |
|                 | Operational Mode                        | Absolute, Sealed Gage   |           |          |           |           |            |             |                     |  |
|                 | 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)   |           |          |           |           |            |             |                     |  |
|                 | 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.)  |           |          |           |           |            |             |                     |  |
| OUTPUT          | Output Impedance                        | 750 Ohms (Max.)   |           |          |           |           |            |             |                     |  |
|                 | Full Scale Output (Net)                 | 4.0 VDC $\pm$ .025 VDC  |           |          |           |           |            |             |                     |  |
|                 | Total Error Band (Excluding End Points) | $\pm 0.25\%$ FSO (Max.)<br>(Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included) |           |          |           |           |            |             |                     |  |
|                 | Bandwidth (-3dB)                        | DC to 10 KHz  |           |          |           |           |            |             |                     |  |
|                 | Residual Unbalance                      | 0.5 VDC $\pm$ .025 VDC  |           |          |           |           |            |             |                     |  |
|                 | Resolution                              | Infinitesimal   |           |          |           |           |            |             |                     |  |
| ENVIRONMENTAL   | Insulation Resistance                   | 100 Megohm Min. @ 50 VDC  |           |          |           |           |            |             |                     |  |
|                 | Operating Temperature Range             | $-40^{\circ}\text{F}$ to $+265^{\circ}\text{F}$ ( $-40^{\circ}\text{C}$ to $+130^{\circ}\text{C}$ )             |           |          |           |           |            |             |                     |  |
|                 | Compensated Temperature Range           | $-40^{\circ}\text{F}$ to $+250^{\circ}\text{F}$ ( $-40^{\circ}\text{C}$ to $+120^{\circ}\text{C}$ )             |           |          |           |           |            |             |                     |  |
|                 | Linear Vibration                        | 20g Peak, Sine 10 to 2000 Hz  |           |          |           |           |            |             |                     |  |
|                 | Humidity                                | 100% Relative Humidity  |           |          |           |           |            |             |                     |  |
| PHYSICAL        | Mechanical Shock                        | 20g half Sine Wave 11 msec. Duration  |           |          |           |           |            |             |                     |  |
|                 | Electrical Connection                   | PTIH-10-6P Connector or Equivalent  |           |          |           |           |            |             |                     |  |
|                 | Weight                                  | 110 Grams   |           |          |           |           |            |             |                     |  |
|                 | 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. (K) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.