

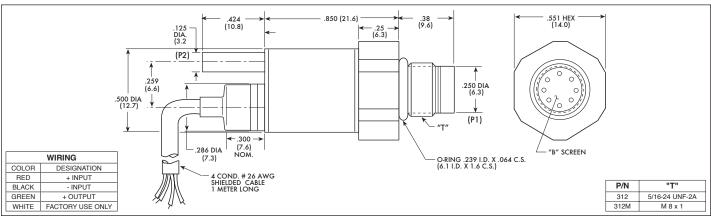
## DIGITALLY CORRECTED MINIATURE 5VDC OUTPUT PRESSURE TRANSDUCER

## ET-3DC-312(M) SERIES

- Differential Pressure
- · Robust Construction
- · Digitally Corrected
- High Accuracy
- · Silicon on Silicon Integrated Sensor VIS®

The ET-3DC-312 series is a highly accurate unidirectional differential pressure transducer meant to measure very low pressure differences. It is ideal for use in air speed measurements using pitot tubes. It can also be used for flow measurements or any other application where high accuracy is needed when measuring small pressures.





| INPUT         | Pressure Range                | .14<br>2   | .35<br>5 | .7<br>10 | 1.4 BAR<br>20 PSI |
|---------------|-------------------------------|--|----------|----------|-------------------|
|               | Operational Mode              | Differential   |          |          |                   |
|               | Over Pressure                 | 2 Times Rated Pressure   |          |          |                   |
|               | Burst Pressure                | 3 Times Rated Pressure   |          |          |                   |
|               | Pressure Media                | All Nonconductive, Noncorrosive Liquids or Gases   |          |          |                   |
|               | Maximum Electrical Current    | 25 ma (Max.)   |          |          |                   |
|               | Rated Electrical Excitation   | 8 - 32 VDC   |          |          |                   |
| OUTPUT        | Full Scale Output (FSO)       | 5 VDC  |          |          |                   |
|               | Zero Unbalance (0 PSID)       | 0 VDC  |          |          |                   |
|               | Output Impedance              | 50 Ohms (Typ.)   |          |          |                   |
|               | Total Error Band              | 0.5% (Typ.) (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included) |          |          |                   |
|               | Bandwidth (-3dB)              | DC to 2500 Hz  |          |          |                   |
|               | Resolution                    | Infinitesimal  |          |          |                   |
|               | Insulation Resistance         | 100 Megohm Min. at 50 VDC  |          |          |                   |
| ENVIRONMENTAL | Operating Temperature Range   | -40°F to +280°F (-40°C to +140°C) (Max.)   |          |          |                   |
|               | Compensated Temperature Range | -40°F to +250°F (-40°C to +120°C)  |          |          |                   |
|               | Linear Vibration              | 20g Peak, Sine 10 to 2000 Hz   |          |          |                   |
|               | Mechanical Shock              | 20g Half Sine Wave 11 msec. Duration   |          |          |                   |
| PHYSICAL      | Electrical Connection         | 4 Conductor Viton Cable 1 Meter Long   |          |          |                   |
|               | Weight                        | 21 Grams Excluding Cable   |          |          |                   |
|               | Sensing Principle             | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon                                   |          |          |                   |
|               | Torque                        | 50 Inch-Pounds (Max.) 6Nm  |          |          |                   |

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. 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.