



5 VDC OUTPUT DIGITALLY CORRECTED PRESSURE TRANSDUCER

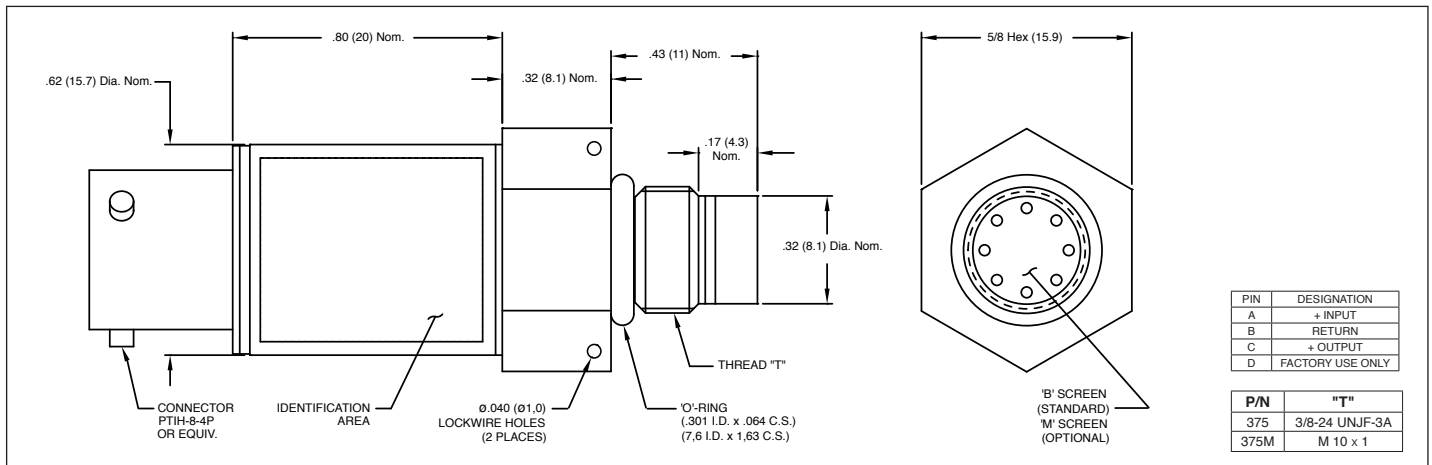
ETM-DC-375 (M) CO SERIES

- 5 VDC Digitally Corrected Output
- Hybrid Microelectronic Regulator-Amplifier
- All Welded Construction
- Silicon on Silicon Integrated Sensor **VIS®**
- Secondary Containment On Absolute And Sealed Gage Units
- Aerospace Quality Components
- Analog Output
- Intrinsically Safe Applications Available (i.e. IS-ETM-DC-375)



ETM-DC-375(M) CO Series transducers are miniature, threaded instruments. The sensing sub-assembly is protected from mechanical damage by a solid screen which has been shown to have minimal influence on the frequency response of the sensor. Incorporation of a Kulite proprietary electronics module within the main body of this

product allows for operation from an unregulated power supply ranging from 8 - 32 VDC with reverse polarity protection available upon request. The result is a stable, digitally corrected 0 to 5 VDC output signal.



| | 17 | 35 | 70 | 170 | 350 | 700 | 1400 BAR |
|-------------------------------|---|-----|------|------|------|-------|-----------|
| INPUT | 250 | 500 | 1000 | 2500 | 5000 | 10000 | 20000 PSI |
| Pressure Range | Absolute, Sealed Gage | | | | | | |
| Operational Mode | 2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 30000 PSI (2100 BAR) | | | | | | |
| Over Pressure | 3 Times Rated Pressure to a Max. of 35000 PSI (2400 BAR) | | | | | | |
| Burst Pressure | Any Liquid or Gas Compatible With 15-5 PH and 316 Stainless Steel | | | | | | |
| Pressure Media | 25 mA | | | | | | |
| Maximum Electrical Current | 8 - 32 VDC | | | | | | |
| Rated Electrical Excitation | 5 VDC | | | | | | |
| OUTPUT | 0 VDC | | | | | | |
| Full Scale Output (FSO) | 50 Ohms (Typ.) | | | | | | |
| Residual Unbalance | ± 0.5% (Typ.) | | | | | | |
| Output Impedance | <i>(End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)</i> | | | | | | |
| Total Error Band | DC to 2500 Hz | | | | | | |
| Bandwidth (-3dB) | Infinitesimal | | | | | | |
| Resolution | 100 Megohm Min. @ 50 VDC | | | | | | |
| Insulation Resistance | -40°F to +280°F (-40°C to +140°C) (Max.) | | | | | | |
| ENVIRONMENTAL | -40°F to +250°F (-40°C to +120°C) | | | | | | |
| Operating Temperature Range | 100g Peak, Sine up to 5000 Hz | | | | | | |
| Compensated Temperature Range | 100g half Sine Wave 11 msec. Duration | | | | | | |
| Linear Vibration | PTIH-8-4P or Equivalent (Mating Connector Available Upon Request) | | | | | | |
| Mechanical Shock | 24.5 Grams (Max.) Excluding Cable | | | | | | |
| Electrical Connection | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon | | | | | | |
| Weight | 80 Inch-Pounds (Max.) | | | | | | |
| Pressure Sensing Principle | | | | | | | |
| Mounting Torque | | | | | | | |

Note: 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.