



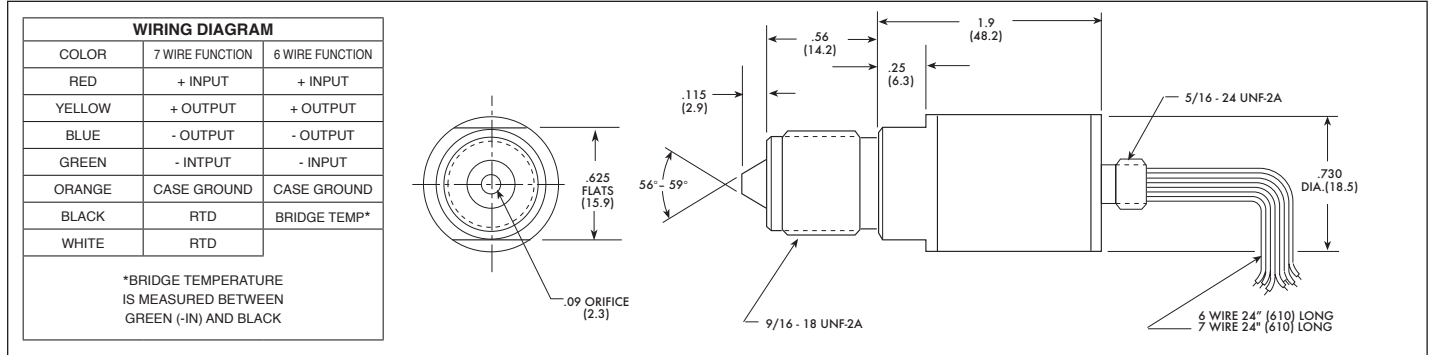
DOWNHOLE PRESSURE TRANSDUCER IPT-4N-750HT

- Internally Compensated
- Excellent Long Term Stability .1% Typical
- All Wetted Materials Inconel
- Built In Temperature Sensor
- Silicon on Silicon Integrated Sensor VIS®
- High Unamplified Output
- Intrinsically Safe Applications Available (i.e. IS-IPT-4N-750HT)



The IPT-4N-750HT Downhole Transducer utilizes Kulite's State of the Art, Silicon on Silicon Isolated Diaphragm sensing technology, to provide excellent long term stability and high accuracy at temperatures to 350°F. All wetted materials are Inconel for corrosive media.

This transducer is equipped with internal circuitry to compensate for the inherent thermal sensitivity of the silicon sensor. With no further compensation, it will offer an overall accuracy improvement across the entire range of typical well environments.



| | | | | | | |
|--------------------------|--|--|-------------|---|--------------|-----------------------|
| INPUT | Pressure Range | 70 1000 | 170 2500 | 350 5000 | 700 10000 | 1050 BAR 15000 PSI |
| | Operational Mode | Absolute | | | | |
| | Over Pressure | 2 Times Rated Pressure Range or 22500 PSI Whichever is Less | | | | |
| | Burst Pressure | 3 Times Rated Pressure Range or 22500 PSI Whichever is Less | | | | |
| | Pressure Media | Any Liquid or Gas Compatible With Inconel | | | | |
| | Rated Electrical Excitation | 10 VDC/AC (RMS) | | | | |
| | Maximum Electrical Excitation | 12 VDC/AC (RMS) | | | | |
| | RTD Excitation | 1mA (2 mA Max.) | | | | |
| | Input Impedance | 2500 Ohm (Min.) | | | | |
| OUTPUT | Output Impedance | 2500 Ohms (Nom.) | | | | |
| | Full Scale Output (FSO) | 100 mV (Nom.) | | | | |
| | Temperature Sensor | 1000 Ohm Platinum RTD Per DIN EN 60751 (IEC 751) (BS 43760) Class A | | | | |
| | Residual Unbalance | + 3 mV - 0mV | | | | |
| | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.) | | | | |
| | Resolution | Infinitesimal | | | | |
| | Natural Frequency of Sensor (KHz) (Typ.) | 720 | 910 | 1120 | 1350 | 1500 |
| ENVIRONMENTAL | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | |
| | Operating Temperature Range | -40°F to +350°F (-40°C to +175°C) | | | | |
| | Compensated Temperature Range | 0°F to +350°F (-18°C to +175°C) | | | | |
| | Thermal Zero Shift | ± .5% FS/100°F (55°C) (Typ.) | | | | |
| | Thermal Sensitivity Shift | ± 1% /100°F (55°C) (Typ.) | | | | |
| | Linear Vibration | 10-2,000 Hz Sine, 100g. (Max.) | | | | |
| | Acceleration | 100 g | | | | |
| Acceleration Sensitivity | Not Greater Than .00003% FS/g | | | | | |
| Mechanical Shock | 20g half Sine Wave 11 msec. Duration | | | | | |
| PHYSICAL | Pressure Port | 9/16-18 UNF-24, Mates with Autoclave F250C | | | | |
| | Electrical Connection | 7 Wire 24" (610) Long (Internal RTD) | | 6 Wire 24" (610) Long (Internal Bridge Temp.) | | |
| | Weight | 110 Grams (Max.) Excluding Cable | | | | |
| | Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon | | | | |

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (M) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.