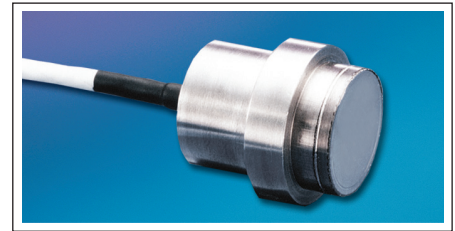




FLUSH DIAPHRAGM PRESSURE TRANSDUCERS

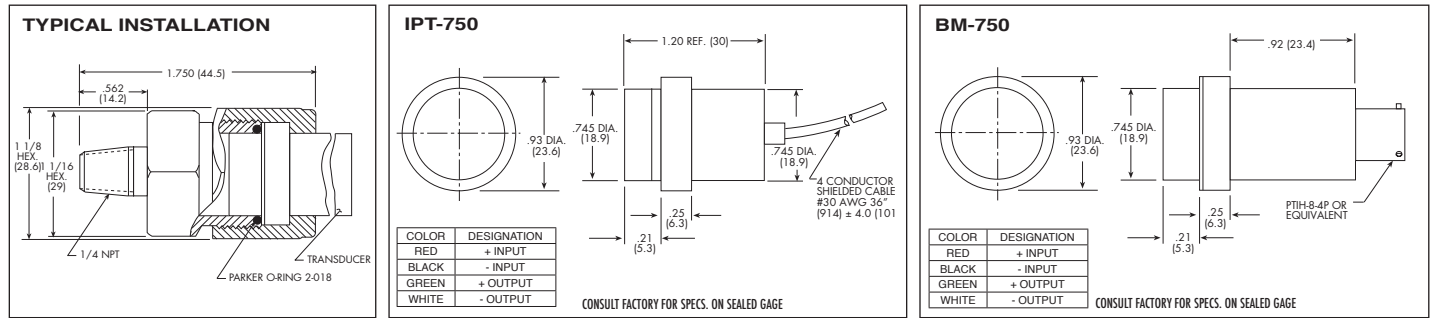
IPT-750 SERIES BM-750 SERIES

- High Output
- Silicon on Silicon Integrated Sensor **VIS®**
- Hygienic Construction
- Process Instrument Compatible
- Flush Stainless Steel Diaphragm
- Hermetic Sealed Connector (BM-750)
- Intrinsically Safe Applications Available (i.e. IS-IPT-750 or IS-BM-750)



This midsize range of Kulite pressure sensors, incorporating flush stainless steel diaphragms, are designed as general purpose measuring instruments. These units incorporate a four arm active semiconductor chip isolated from pressure media by an oil barrier and stainless steel membrane.

Typical applications include tank contents, head pressure and soil stress measurement. The units are manufactured to allow cleaning by sterilization when used in the food processing industry and medical field. Sealing is accomplished with an o-ring. Typical mounting configuration requires a clamp situated behind the .930 diameter shoulder. By using a standard inlet port adaptor, the unit can be converted for pipe mounting applications.



| | | | | | | |
|----------------------|--|--|-----------|----------|----------------------------------|-------------------|
| INPUT | Pressure Range | 1.7 25 | 3.5 50 | 7 100 | 17 250 | 35 BAR 500 PSI |
| | Operational Mode | Absolute, Sealed Gage, Gage (Consult Factory For Vented Gage) | | | | |
| | Over Pressure | 2 Times Rated Pressure Range | | | | |
| | Burst Pressure | 3 Times Rated Pressure Range | | | | |
| | Pressure Media | Any Liquid or Gas Compatible With 17-4 PH or 316 SS | | | | |
| | Rated Electrical Excitation | 10 VDC/AC (RMS) | | | | |
| | Maximum Electrical Excitation | 12 VDC/AC (RMS) | | | | |
| | Input Impedance | 1000 Ohms (Min.) | | | | |
| OUTPUT | Output Impedance | 1000 Ohms (Nom.) | | | | |
| | Full Scale Output (FSO) | 100 mV (Nom.) | | | | |
| | Residual Unbalance | ± 5 mV (Typ.) | | | | |
| | Combined Non-Linearity, Hysteresis and Repeatability | ± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.) | | | | |
| | Resolution | Infinitesimal | | | | |
| | Natural Frequency of Sensor (KHz) (Typ.) | 120 | 210 | 285 | 425 | 550 |
| ENVIRONMENTAL | Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | |
| | Operating Temperature Range | -65°F to +250°F (-55°C to +120°C) | | | | |
| | Compensated Temperature Range | 80°F to +180°F (25°C to +80°C) Other Ranges Quoted on Request | | | | |
| | Thermal Zero Shift | ± 1% FS/100°F (Typ.) | | | | |
| | Thermal Sensitivity Shift | ± 1% /100°F (Typ.) | | | | |
| | Linear Vibration | 100g Peak, Sine 10 to 5000 Hz | | | | |
| PHYSICAL | Humidity | 100% Relative Humidity | | | | |
| | Mechanical Shock | 100g half Sine Wave 11 msec. Duration | | | | |
| | Pressure Port | Flush Mount, Unthreaded (1/4" N.P.T. Male SS Adaptor Available) | | | | |
| | Electrical Connection | 4 Conductor 30 AWG Shielded Cable 36" Long (IPT-750) | | | PTIH-8-4P or Equivalent (BM-750) | |
| | Weight | 39 Grams Approx. (IPT-750) | | | 42 Grams Approx. (BM-750) | |
| | Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon | | | | |
| Mounting Torque | 100 Inch-Pounds (Max.) For Inlet Port Adaptor | | | | | |

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