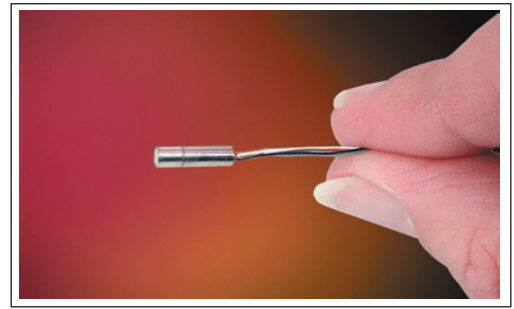




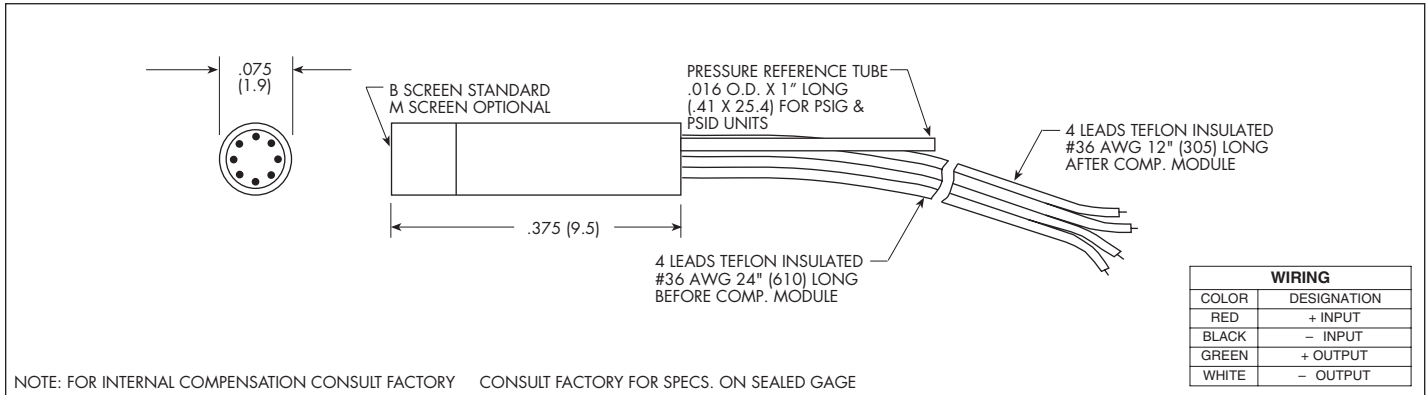
HIGH TEMPERATURE MINIATURE IS® PRESSURE TRANSDUCER

XCEL-072 SERIES

- .075" Diameter
- Patented Leadless Technology
- Ideal For Turbine Engine Probes
- Designed For Both Static and Dynamic Response
- -65°F To 525°F Temperature Capability



The XCEL-072 design features Kulite's patented leadless technology. This allows for a very rugged package suited for probes, pressure rakes and other similar test set ups. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments. Its wide operating temperature range (-65°F to +525°F) makes it ideal for numerous applications in Aerospace and other areas of Industry.



| | | | | | | |
|--|---|----------------------|----------------------|-----------------------|----------------------|----------------------|
| INPUT Pressure Range | 1.7 25 | 3.5 50 | 7 100 | 14 200 | 21 300 | 35 BAR 500 PSI |
| Operational Mode | Absolute, Gage, Sealed Gage, Differential | | | Absolute, Sealed Gage | | |
| Over Pressure | 2 Times Rated Pressure | | | | | |
| Burst Pressure | 3 Times Rated Pressure | | | | | |
| Pressure Media | All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory) | | | | | |
| Rated Electrical Excitation | 10 VDC/AC | | | | | |
| Maximum Electrical Excitation | 15 VDC/AC | | | | | |
| 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 (KHz) (Typ.) | 240 | 300 | 380 | 550 | 575 | 700 |
| Acceleration Sensitivity % FS/g Perpendicular | 5.0x10 ⁻⁴ | 3.0x10 ⁻⁴ | 1.5x10 ⁻⁴ | 1.1x10 ⁻⁴ | 9.0x10 ⁻⁵ | 6.0x10 ⁻⁵ |
| Transverse | 6.0x10 ⁻⁵ | 4.0x10 ⁻⁵ | 2.0x10 ⁻⁵ | 1.5x10 ⁻⁵ | 1.0x10 ⁻⁵ | 6.0x10 ⁻⁶ |
| Insulation Resistance | 100 Megohm Min. @ 50 VDC | | | | | |
| ENVIRONMENTAL Operating Temperature Range | -65°F to +525°F (-55°C to +273°C) | | | | | |
| Compensated Temperature Range | +80°F to +450°F (+25°C to +235°C) | | | | | |
| Thermal Zero Shift | ± 1% FS/100°F (Typ.) | | | | | |
| Thermal Sensitivity Shift | ± 1% /100°F (Typ.) | | | | | |
| Steady Acceleration and Linear Vibration | 1000g Sine | | | | | |
| PHYSICAL Electrical Connection | 4 Leads 36 AWG 36" Long | | | | | |
| Weight | .2 Gram (Nom.) Excluding Module and Leads | | | | | |
| Pressure Sensing Principle | Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology | | | | | |

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.

Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (N)

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