

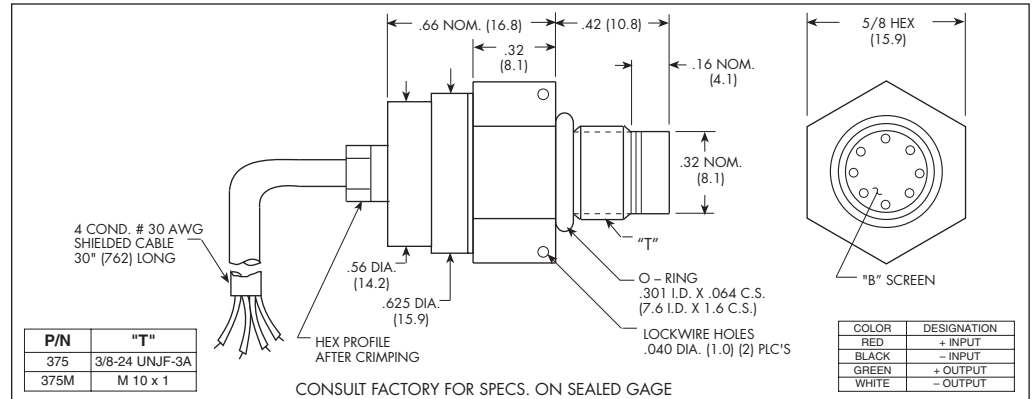
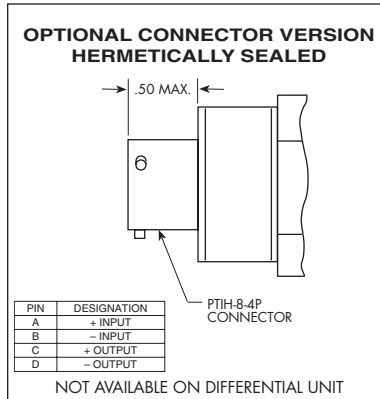


MINIATURE HIGH TEMPERATURE IS® PRESSURE TRANSDUCER

HEM-375 (M) SERIES

- High Temperature
- High Natural Frequencies
- Robust Construction
- Excellent Stability
- High Natural Frequencies
- 3/8-24 UNJF or M10 X 1 Thread

In terms of design the HEM-375 adopts the same approach to transducer construction as the HKM-375 model. Use of high temperature materials and assembly processes allows for continuous use at temperatures up to 450°F (232°C). This transducer is an ideal choice for use in high temperature, high frequency measurement applications such as blast pressure wave studies.



INPUT Pressure Range	35 500	70 1000	170 2500	350 5000	700 10000	1400 BAR 20000 PSI
Operational Mode	Absolute, Sealed Gage					
Over Pressure	2 Times Rated Pressure to a Max. of 30000 PSI (2100 BAR)					
Burst Pressure	3 Times Rated Pressure to a Max. of 35000 PSI (2400 BAR)					
Pressure Media	Any Liquid or Gas Compatible With 15-5 PH or 316 Stainless Steel					
Rated Electrical Excitation	10 VDC					
Maximum Electrical Excitation	15 VDC					
Input Impedance	1000 Ohms (Min.)					
OUTPUT Output Impedance	1000 Ohms (Nom.)					
Full Scale Output (FSO)	100mV					
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.)	Greater Than 400 KHz					
Acceleration Sensitivity % FS/g Perpendicular Transverse	1.1x10 ⁻⁴ 7.0x10 ⁻⁶	6.2x10 ⁻⁵ 4.3x10 ⁻⁶	2.6x10 ⁻⁵ 2.3x10 ⁻⁶	1.5x10 ⁻⁵ 1.5x10 ⁻⁶	1.3x10 ⁻⁵ 1.3x10 ⁻⁶	8.0x10 ⁻⁶ 1.0x10 ⁻⁶
Insulation Resistance	100 Megohm Min. @ 50 VDC					
ENVIRONMENTAL Operating Temperature Range	-65°F to +450°F (-55°C to +232°C)					
Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)					
Thermal Zero Shift	± 1% FS/100° F (Typ.)					
Thermal Sensitivity Shift	± 1% /100° F (Typ.)					
Linear Vibration	100g Peak, Sine up to 5000 Hz					
Humidity	100% Relative Humidity					
Mechanical Shock	20,000g, 100µ sec.					
PHYSICAL Electrical Connection	4 Conductor 30 AWG Shielded Cable 30" Long					
Weight	17 Grams (Max.) Excluding Cable					
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon					
Mounting Torque	80 Inch-Pounds (Max.)					

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. (E)