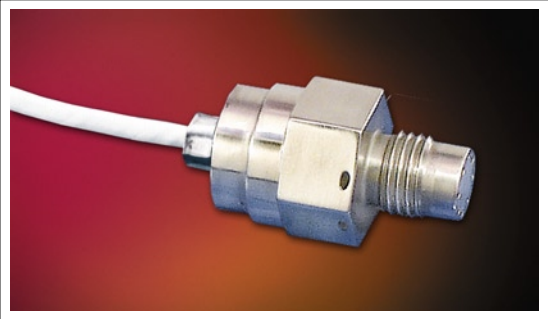




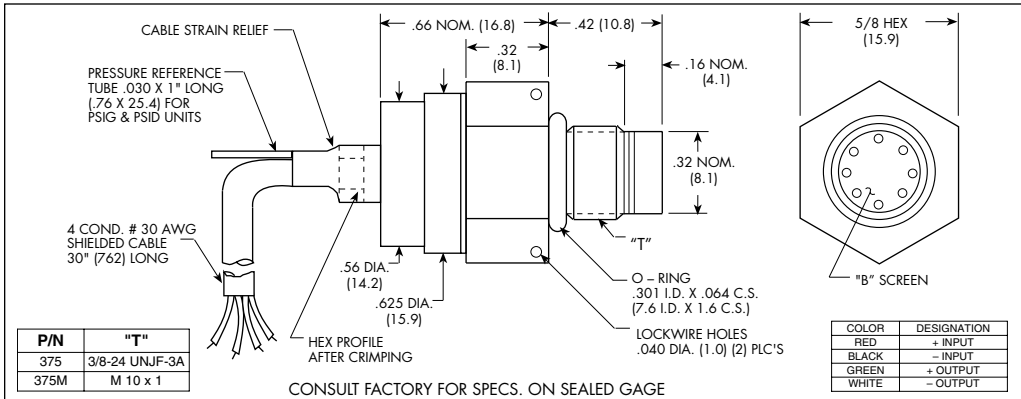
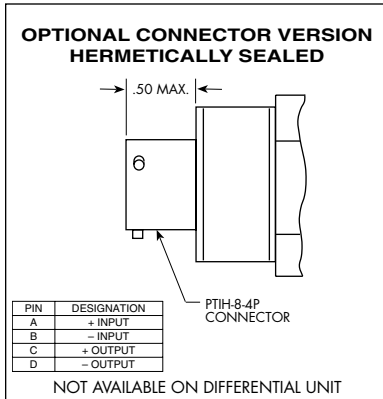
# MINIATURE HIGH TEMPERATURE IS® PRESSURE TRANSDUCER

## 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.



<b>INPUT</b>	1.7	3.5	7	17	35	70	170	350	700	1400 BAR
Pressure Range	25	50	100	250	500	1000	2500	5000	10000	20000 PSI
Operational Mode	Absolute, Gage, Sealed Gage, Differential									
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.)									
<b>OUTPUT</b>										
Output Impedance	1000 Ohms (Nom.)									
Full Scale Output (FSO)	100 mV (75 mV For 25 PSI Range) (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.)	120	210	285	425	550	720	910	1120	1350	1600
Acceleration Sensitivity % FS/g Perpendicular	1.9x10 <sup>-5</sup>	1.0x10 <sup>-3</sup>	5.2x10 <sup>-4</sup>	2.2x10 <sup>-4</sup>	1.1x10 <sup>-4</sup>	6.2x10 <sup>-5</sup>	2.6x10 <sup>-5</sup>	1.5x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	8.0x10 <sup>-6</sup>
Transverse	5.0x10 <sup>-5</sup>	3.1x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	1.0x10 <sup>-5</sup>	7.0x10 <sup>-6</sup>	4.3x10 <sup>-6</sup>	2.3x10 <sup>-6</sup>	1.5x10 <sup>-6</sup>	1.3x10 <sup>-6</sup>	1.0x10 <sup>-6</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC									
<b>ENVIRONMENTAL</b>										
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.) (± 2% FS/100° F For 25 PSI Range)									
Thermal Sensitivity Shift	± 1% FS/100° F (Typ.) (± 2% FS/100° F For 25 PSI Range)									
Linear Vibration	100g Peak, Sine up to 5000 Hz									
Humidity	100% Relative Humidity									
Mechanical Shock	20,000g, 100µ sec.									
<b>PHYSICAL</b>										
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. (C)