

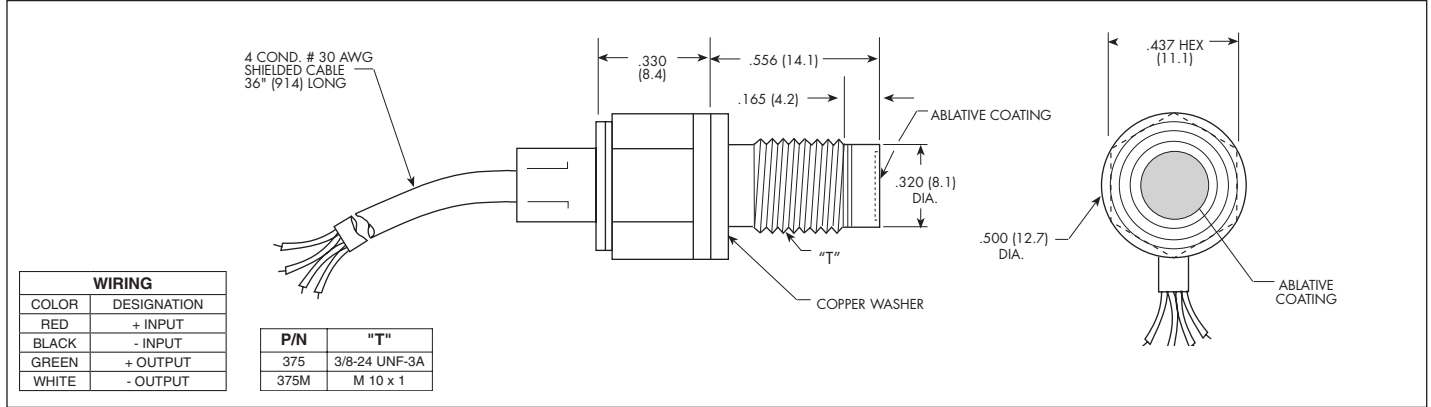


# HIGH PRESSURE RUGGEDIZED DYNAMIC RESPONSE IS<sup>®</sup> PRESSURE TRANSDUCER

## HKS-11-375 (M) SERIES

- Low Impedance High Output
- Very High Natural Frequency
- Excellent Signal To Noise Ratio
- Silicon on Silicon Integrated Sensor **VIS<sup>®</sup>**
- Designed For Pressure Blast Applications

Designed for high pressure, high shock environments, this range of transducers is widely used in both military and commercial applications.



WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	- INPUT
GREEN	+ OUTPUT
WHITE	- OUTPUT

P/N	"T"
375	3/8-24 UNF-3A
375M	M 10 x 1

<b>INPUT</b> Pressure Range	70 1000	140 2000	350 5000	700 10000	1400 20000	2100 BAR 30000 PSI
Operational Mode	Sealed Gage					
Over Pressure	100 1500	210 3000	510 7500	1000 15000	1700 25000	2450 BAR 35000 PSI
Burst Pressure	210 3000	420 6000	840 12000	1400 20000	2100 30000	2800 BAR 40000 PSI
Pressure Media	Any Liquid or Gas Compatible With 15-5 PH, 316 Stainless Steel and Silicone RTV					
Rated Electrical Excitation	10 VDC/AC					
Maximum Electrical Excitation	15 VDC/AC					
Input Impedance	1000 Ohms (Nom.)					
<b>OUTPUT</b> Output Impedance	1000 Ohms (Nom.)					
Full Scale Output (FSO)	100mV (Nom.)	100mV (Nom.)	100mV (Nom.)	100mV (Nom.)	100mV (Nom.)	75mV (Nom.)
Residual Unbalance	± 5 mV					
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.)					
Resolution	Infinitesimal					
Natural Frequency (KHz) (Typ.)	720	900	1120	1350	1600	1800
Acceleration Sensitivity % FS/g Perpendicular	6.2x10 <sup>-5</sup>	2.7x10 <sup>-5</sup>	1.5x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	8.6x10 <sup>-6</sup>	6.0x10 <sup>-6</sup>
Transverse	4.3x10 <sup>-6</sup>	2.4x10 <sup>-6</sup>	1.5x10 <sup>-6</sup>	1.3x10 <sup>-6</sup>	1.0x10 <sup>-6</sup>	8.0x10 <sup>-7</sup>
Insulation Resistance	100 Megohm Min. @ 50 VDC					
<b>ENVIRONMENTAL</b> Operating Temperature Range	-65°F to +300°F (-55°C to +150°C)					
Compensated Temperature Range	80°F to +180°F (25°C to +80°C) Any 100°F Range Within The Operating Range on Request					
Thermal Zero Shift	± 1% FS/100°F (Typ.)					
Thermal Sensitivity Shift	± 1% /100°F (Typ.)					
Steady Acceleration	10,000g. (Max.)					
Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)					
<b>PHYSICAL</b> Electrical Connection	4 Conductor 30 AWG Shielded Cable 36" Long					
Weight	10 Grams (Nom.) Excluding Cable and Amplifier					
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon					
Mounting Torque	80-120 Inch-Pounds (Max.)					
Diaphragm Coating	Ablative Coating Standard					

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. (I)