



AUTO/MOTOR SPORT PRESSURE TRANSDUCER

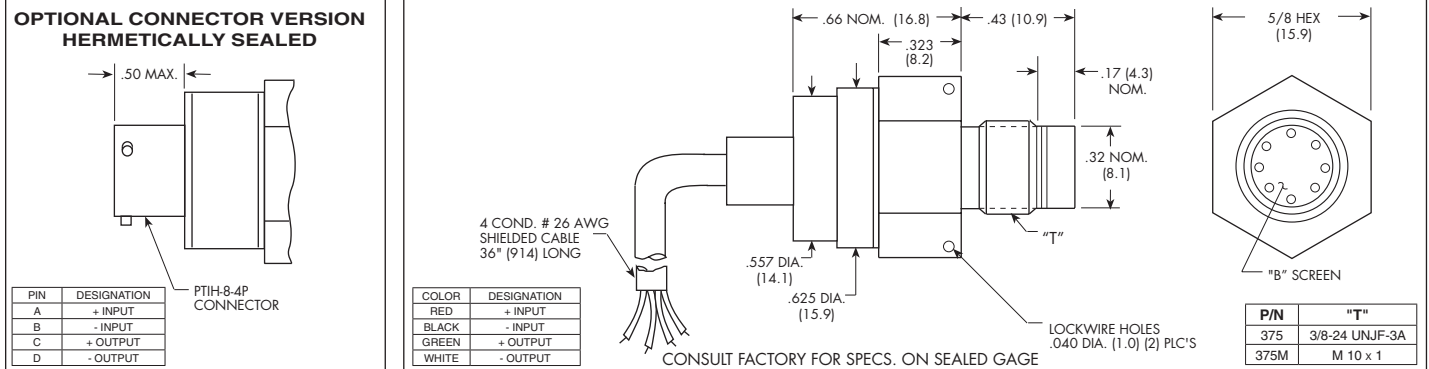
HKL-AC-375 (M) SERIES

- World's Smallest In Its Class
- Acceleration/Vibration Insensitive Design **VIS²**
- Light Weight And Compact Construction

This new generation of transducers has been designed to meet the ever increasing demands for smaller and lighter sensors. The HKL-AC-375 incorporates the latest Kulite patented and patent pending technologies in pressure sensor development. One of these patented innovative technologies makes the HKL-AC-375 insensitive to acceleration forces.



Kulite recommends the **KSC-2** signal conditioner to maximize the measurement capability of the HKL-AC-375 transducer.



INPUT	Pressure Range	1.7	3.5	7	17	35 BAR
		25	50	100	250	500 PSI
	Operational Mode	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				
	Maximum Electrical Excitation	12 VDC				
OUTPUT	Input Impedance	1000 Ohms (Min.)				
	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 Without Screen (KHz)	120	210	285	425	550
	Acceleration Sensitivity % FS/g Perpendicular	N/A <<1x10 ⁻⁶				
ENVIRONMENTAL	Insulation Resistance	100 Megohm Min. @ 50 VDC				
	Operating Temperature Range	-65°F to +350°F (-55°C to +175°C) (Max.)				
	Compensated Temperature Range	-40°F to +250°F (-40°C to +120°C)				
	Thermal Zero Shift	± 1% FS/100°F (Typ.)				
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)				
	Steady Acceleration and Linear Vibration	100g Peak, Sine up to 5000 Hz				
	Humidity	100% Relative Humidity				
	Mechanical Shock	100g half Sine Wave 11 msec. Duration				
PHYSICAL	Pressure Port	3/8 - 24 UNJF or M10x1 Thread				
	Electrical Connection	4 Conductor 26 AWG Shielded Cable 36" Long				
	Weight	10 Grams (Max.) Excluding Cable				
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology				
Mounting Torque	25 Inch-Pounds (Max.)					

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (Q) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.