MINIATURE RUGGEDIZED PRESSURE TRANSDUCER

HKL-375 (M) SERIES

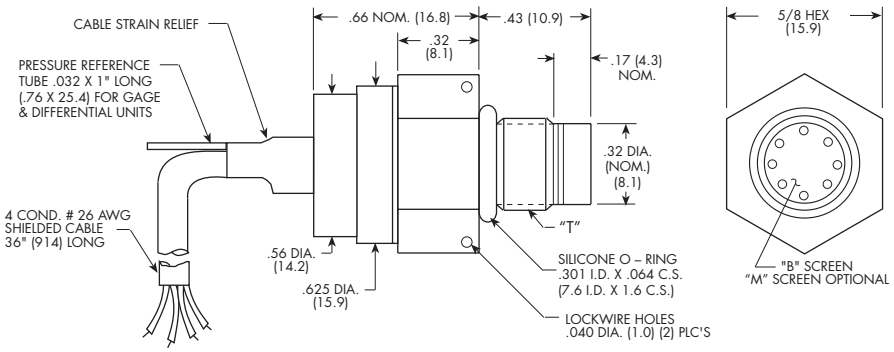
- Excellent Stability
- All Welded Construction
- Robust Construction
- High Natural Frequencies
- 3/8-24 UNJF or M10 X 1 Thread
- Patented Leadless Technology **VIS**®

The HKL-375 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply.

The HKL-375 utilizes Kulite's Patented Leadless Technology. A solid state piezoresistive sensing element is protected by a metal screen. This sensing sub assembly is welded to a stainless steel body.

This advanced construction results in a highly stable, reliable and rugged instrument with all the advantages of significant miniaturization, excellent repeatability, low power consumption, etc. The miniaturization process also yields a marked increase in the natural frequencies of the transducers, making them suitable for use even in shock pressure measurements.

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



COLOR	DESIGNATION
RED	+ INPUT
BLACK	– INPUT
GREEN	+ OUTPUT
WHITE	– OUTPUT

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

INPUT	Pressure Range	0.7 1.0 10 15	1.7 3.5 7 BAR 25 50 100 PSI
	Operational Mode	Absolute, Gage, Differential	Absolute, Gage, Sealed Gage, Differential
	Over Pressure	2 Times Rated Pressure	
	Burst Pressure	3 Times Rated Pressure	
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable With O-Ring Supplied)	
	Rated Electrical Excitation	10 VDC/AC	
	Maximum Electrical Excitation	12 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 of Sensor Without Screen (KHz) (Typ.)	Greater Than 175 KHz	
	Acceleration Sensitivity % FS/g Perpendicular	$1.0x10^{-3}$ $6.5x10^{-4}$	$5.0x10^{-4}$ $3.0x10^{-4}$ $1.5x10^{-4}$
	Insulation Resistance	100 Megohm Min. @ 50 VDC	
ENVIRONMENTAL	Operating Temperature Range	-65°F to +250°F (-55°C to +120°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.)	
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)	
	Mechanical Shock	20g half Sine Wave 11 msec. Duration	
PHYSICAL	Electrical Connection	4 Conductor 26 AWG Shielded Cable 36" Long	
	Weight	17 Grams (Max.) Excluding Cable	
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology	
	Mounting Torque	80 Inch-Pounds (Max.) 9 Nm	

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (K) Continuous development and refinement of our products may result in specification changes without notice.
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.

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