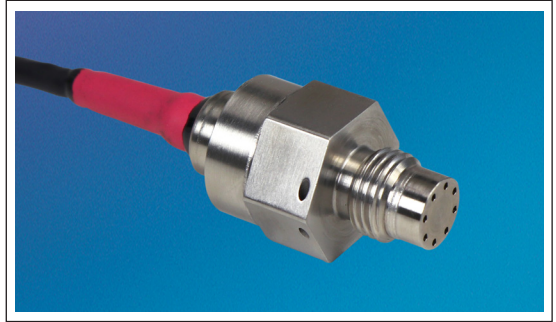




MINIATURE HIGH PRESSURE PRESSURE TRANSDUCER

HKM/HKL-233(X)-375 (M) SERIES

- Excellent Stability
- All Welded Construction
- Hermetic Sealed Package
- Robust Construction
- High Natural Frequencies
- Aerospace Quality Components
- "X" Identifies Electrical Connection Option
- Patented Leadless Technology VIS® (HKL Series)
- Thermorad Jacket Compatible With Most Aircraft Fluids
- Intrinsically Safe Applications Available (i.e. IS-HKM-233(X)-375)



The HKM/HKL-233(X)-375 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply.

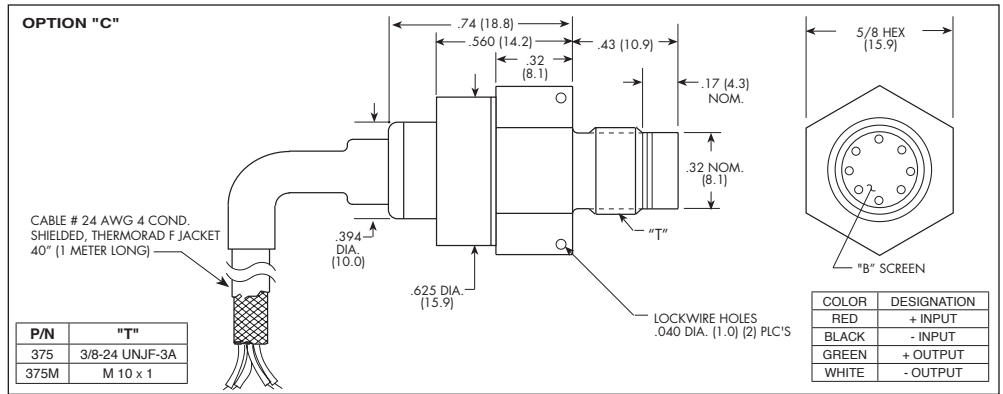
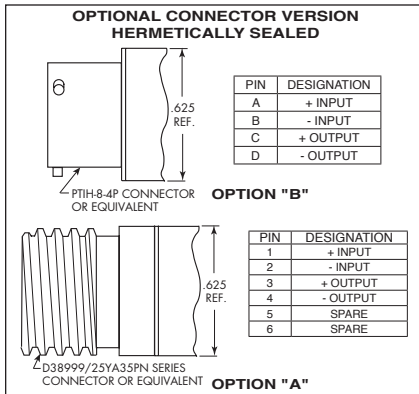
The HKM-233(X)-375 utilizes a flush metal diaphragm as a force collector. A solid state piezoresistive sensing element is located immediately behind this metal diaphragm which is protected by a metal screen. Force transfer is accomplished via an intervening film of non-compressible silicone oil. This sensing sub assembly is welded to a stainless steel body.

The HKL-233(X)-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 microcircuitry: 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.

Part performance not guaranteed if used in water (HKL only).

Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the HKM/HKL-233-375 transducers.



	1.7 25	3.5 50	7 100	17 BAR 250 PSI	35 500	70 1000	HKM 140 2000	210 3000	350 BAR 5000 PSI
INPUT	Pressure Range		Absolute		Absolute, Sealed Gage		2 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)		
	Operational Mode		2 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)		3 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)		All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases-Consult Factory)		
	Over Pressure		10 VDC		12 VDC		1000 Ohms (Min.)		
	Burst Pressure		1000 Ohms (Nom.)		100 mV		0 mV		
	Pressure Media		Infinitesimal		100 Megohm Min. @ 50 VDC		-65°F to +350°F (-55°C to +175°C)		
	Rated Electrical Excitation		-65°F to +300°F (-55°C to +150°C)		± 2% FSO +32°F to 180°F (0°C to +85°C)		Increasing to ± 3% At All Other Temperatures Within The Compensated Range		
	Maximum Electrical Excitation		20g Peak, Sine 10 to 2000 Hz		Unaffected		100% Relative Humidity		
	Input Impedance		20g Half Sine Wave 11 msec. Duration		Electrical Connection		OPTION A: D38999/25YA35PN Connector or Equivalent, OPTION B: PTIH-8-4P Connector or Equivalent, OPTION C: 4 Conductor 24 AWG Shielded, Thermorad F Jacketed Cable, 40" (1 Meter)		
OUTPUT	Output Impedance		17 Grams (Max.) Excluding Cable		Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon (Patented Leadless Technology HKL Series)		80 Inch-Pounds (Max.)		
	Full Scale Output								
	Residual Unbalance								
	Resolution								
	Insulation Resistance								
ENVIRONMENTAL	Operating Temperature Range								
	Compensated Temperature Range								
	Total Error Band								
	Linear Vibration								
	Altitude								
	Humidity								
	Mechanical Shock								
PHYSICAL	Electrical Connection								
	Weight								
	Pressure Sensing Principle								
	Mounting Torque								

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (X) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.