



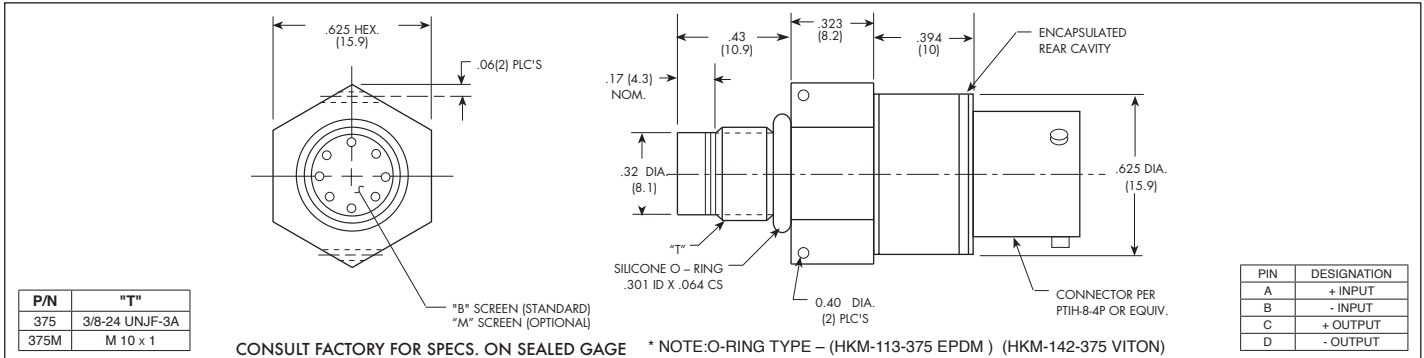
**METAL DIAPHRAGM  
AUTOMOTIVE PRESSURE TRANSDUCERS**

**HKM-113-375 (M) (Braking Systems)  
HKM-142-375 (M) (MAP Systems)**

- Easy Installation
- High Natural Frequency
- Silicon on Silicon Integrated Sensor **VIS®**
- 3/8-24 UNJF 3A or M 10 x 1 Thread
- Wide Temperature Range
- Compatible With Most Automotive Fluids
- Intrinsically Safe Applications Available  
(i.e. IS-HKM-113-375 or IS-HKM-142-375)



Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the HKM-113-375 and HKM-142-375 transducers.



	HKM-113-375		HKM-142-375							
<b>INPUT</b>	Pressure Range	3.5 50	7 100	17 250	35 500	70 1000	210 3000	350 5000	700 10000	1400 BAR 20000 PSI
	Operational Mode	Absolute, Sealed Gage								
	Over Pressure	2 Times Rated Pressure to 500 PSI (35 BAR), 1.5 Times Rated Pressure Above 500 PSI (BAR) to a Max of 25000 PSI (1724 BAR)								
	Burst Pressure	3 Times Rated Pressure to a Max. of 25000 PSI (1724 BAR)								
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH and 316 SS or Inconel 625								
	Rated Electrical Excitation	10 VDC								
	Maximum Electrical Excitation	12 VDC								
	Input Impedance	1000 Ohms (Min.)								
<b>OUTPUT</b>	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	3.0x10 <sup>-4</sup>	2.0x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>	4.0x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	1.5x10 <sup>-5</sup>	1.3x10 <sup>-5</sup>	8.0x10 <sup>-6</sup>
<b>ENVIRONMENTAL</b>	Insulation Resistance	100 Megohm Min. @ 50 VDC								
	Operating Temperature Range	-65°F to +380°F (-55°C to +193°C)								
	Compensated Temperature Range	-40°F to +350°F (-40°C to +175°C)			-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	20g Peak, Sine 10 to 2000 Hz								
	Humidity	100% Relative Humidity								
<b>PHYSICAL</b>	Mechanical Shock	20g Half Sine Wave 11 msec. Duration								
	Electrical Connection	PTIH-8-4P Connector or Equivalent (Mating Connector Available Upon Request)								
	Weight	21 Grams (Nom.)								
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon								
Mounting Torque	80 Inch-Pounds									

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (AA) 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.