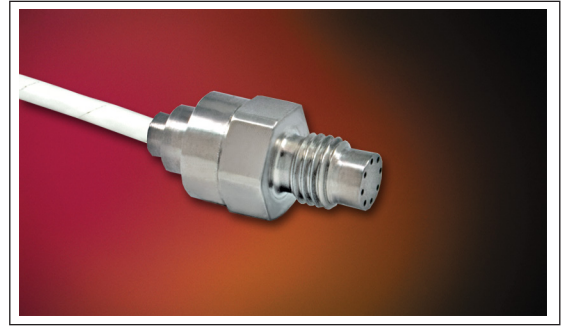


Kulite
HIGH TEMPERATURE PRESSURE TRANSDUCER

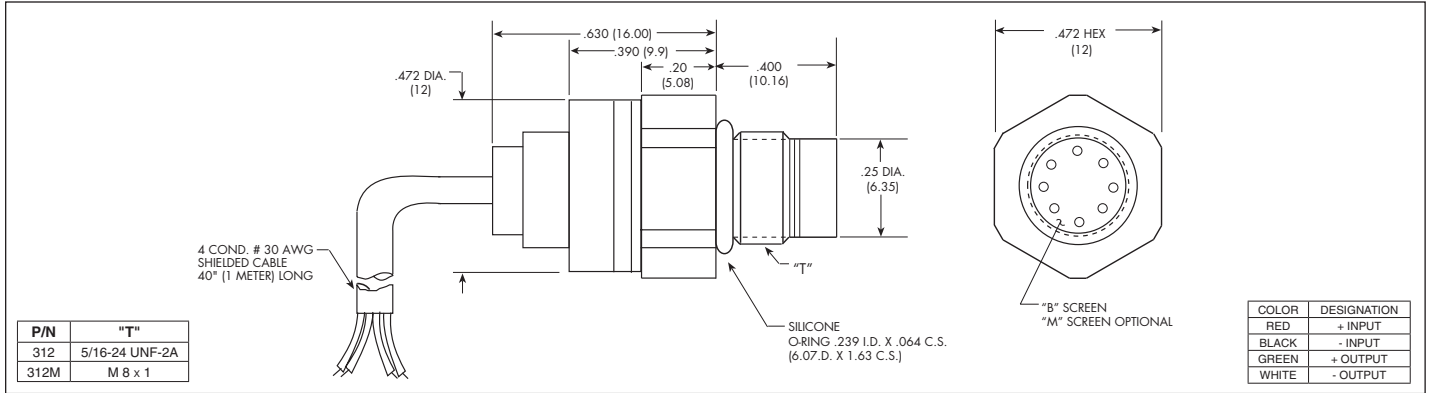
HEL-312 (M) SERIES

- Small Pressure Sensitive Area
- Patented Leadless Technology **VIS**[®]
- High Natural Frequency
- No Internal Lead Flexing
- Extra Low G Sensitivity
- -65°F To 525°F Temperature Capability

The ruggedness of this sensor has not compromised its performance. It was designed for ease of installation and will operate properly in any medium compatible with 15-5 SS or SiO₂. Coupled with high temperature, its Patented Leadless Construction makes it possible for the sensing unit to be installed in such a way that will not compromise its high natural frequency.



Kulite recommends the **KSC-2** signal conditioner to maximize the measurement capability of the HEL-312 transducer.



	0.35	0.7	1.7	3.5	7	17	35	70	140 BAR	
	5	10	25	50	100	250	500	1000	2000 PSI	
INPUT	Pressure Range	Absolute, Gage, Differential		Absolute, Gage, Sealed Gage, Differential		Absolute, Sealed Gage				
	Operational Mode	Absolute, Gage, Differential		Absolute, Gage, Sealed Gage, Differential		Absolute, Sealed Gage				
	Over Pressure	2 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)								
	Burst Pressure	3 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)								
	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								
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) (Typ.)	150	175	240	300	380	550	700	1000	1400
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	1.5x10 ⁻³	1.0x10 ⁻³	5.0x10 ⁻⁴	3.0x10 ⁻⁴	1.5x10 ⁻⁴	1.0x10 ⁻⁴	6.0x10 ⁻⁵	4.5x10 ⁻⁵	2.0x10 ⁻⁵
	Insulation Resistance	100 Megohm Min. @ 50 VDC								
	Operating Temperature Range	-65°F to +525°F (-55°C to +273°C)								
	Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)								
	Thermal Zero Shift	± 1% FS/100°F (Typ.)								
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)								
	Linear Vibration	100g Peak, Sine up to 5000 Hz								
PHYSICAL	Mechanical Shock	20,000g, 100µ sec.								
	Electrical Connection	4 Conductor 30 AWG Shielded Cable 40" Long (Optional Connector Available)								
	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	50 Inch-Pounds (Max.) 6Nm									

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (E) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2015 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.