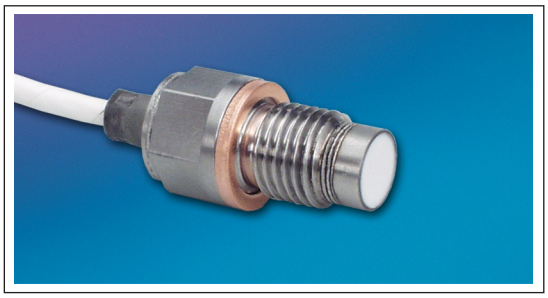
HIGH PRESSURE RUGGEDIZED DYNAMIC RESPONSE PRESSURE TRANSDUCER

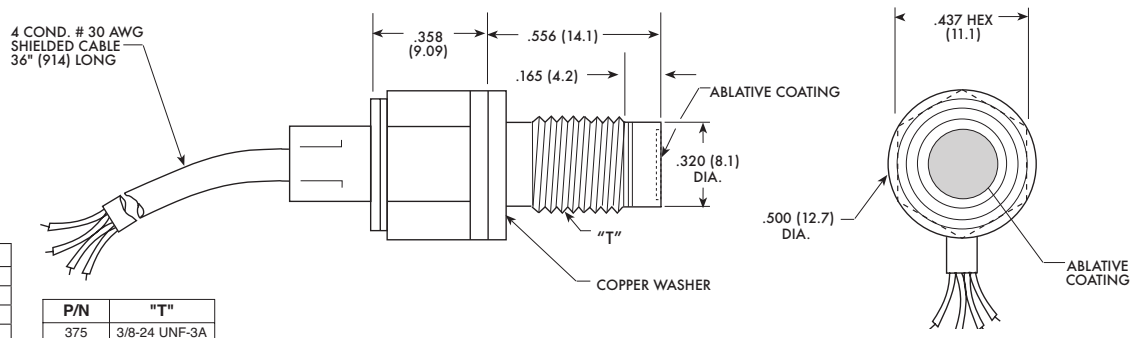
HKS-HP-375 (M) SERIES

- Low Impedance High Output
- Very High Natural Frequency
- Excellent Signal To Noise Ratio
- Silicon on Silicon Integrated Sensor **VIS**®
- Designed For Shock Pressure Applications

Designed for high pressure, high shock environments, this range of transducers is widely used in both military and commercial applications.



Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the HKS-HP-375 transducer.



WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	- INPUT
GREEN	+ OUTPUT
WHITE	- OUTPUT

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

INPUT	Pressure Range	35 500	70 1000	140 2000	350 5000	700 10000	1400 20000	2100 BAR 30000 PSI
	Operational Mode	Sealed Gage						
	Over Pressure	70 1000	100 1500	210 3000	510 7500	1000 15000	1700 25000	2450 BAR 35000 PSI
	Burst Pressure	140 2000	210 3000	420 6000	840 12000	1400 20000	2100 30000	2800 BAR 40000 PSI
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH, 316 Stainless Steel and Silicone RTV and Copper Crush Ring						
	Rated Electrical Excitation	5 VDC/AC						
	Maximum Electrical Excitation	7.5 VDC/AC						
	Input Impedance	1000 Ohms (Nom.)						
OUTPUT	Output Impedance	1000 Ohms (Nom.)						
	Full Scale Output (FSO)	100mV (Nom.)						75mV (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 RTV (KHz) (Typ.)	400	720	900	1120	1350	1600	1800
	Acceleration Sensitivity % FS/g Perpendicular	$1.1x10^{-4}$	$6.2x10^{-5}$	$2.7x10^{-5}$	$1.5x10^{-5}$	$1.3x10^{-5}$	$8.6x10^{-6}$	$6.0x10^{-6}$
	Insulation Resistance	100 Megohm Min. @ 50 VDC						
ENVIRONMENTAL	Operating Temperature Range	-65°F to +300°F (-55°C to +150°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	± 6% FS/100°F (Typ.)						
	Thermal Sensitivity Shift	± 6% /100°F (Typ.)						
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz						
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration						
PHYSICAL	Electrical Connection	4 Conductor 30 AWG Shielded Cable 36" Long						
	Weight	10 Grams (Nom.) Excluding Cable						
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon						
	Mounting Torque	80-120 Inch-Pounds (Max.)						
	Diaphragm Coating	Ablative Coating Standard						

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