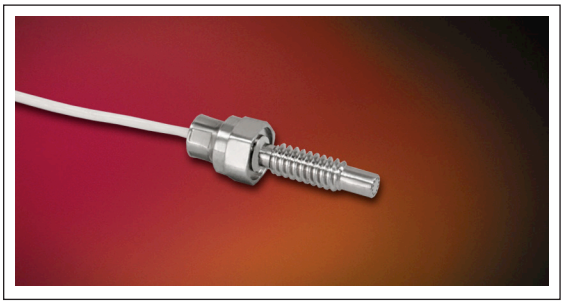
SUBMINIATURE HIGH TEMPERATURE PRESSURE TRANSDUCER

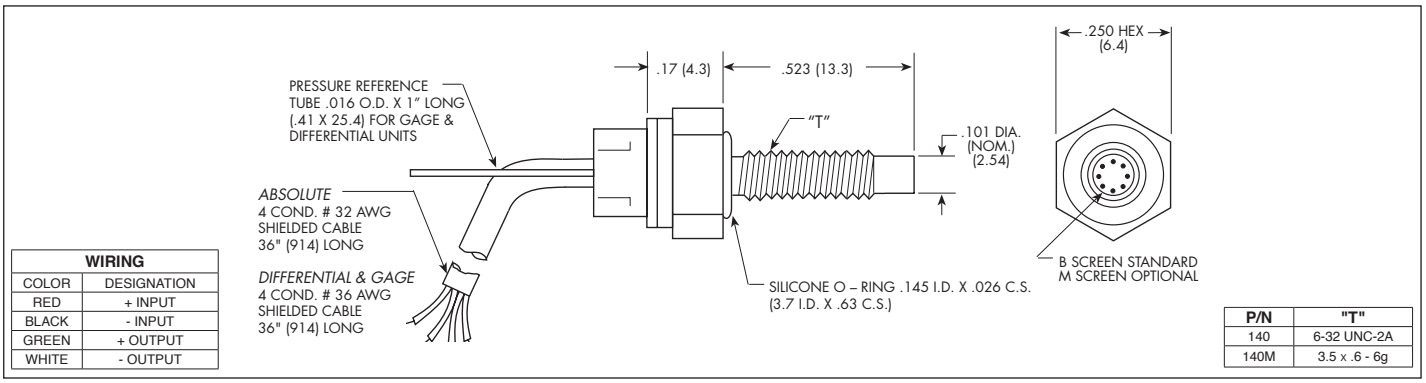
XTEL-140 (M) SERIES

- Wide Temperature Capability -65°F To 450°F
- Easy Installation
- Smallest Threaded Device Available
- Patented Leadless Technology **VIS**®
- High Natural Frequency
- Suitable For Use in Most Conductive Liquids and Gases



The XTEL Series utilizes Kulite's Patented Leadless Technology to obtain extremely high natural frequencies in the smallest thread mount available. This transducer is well suited for both dynamic and static pressure measurements in benign or harsh environments. Its wide operating range (-65°F to +450°F) makes it ideal for numerous applications in Aerospace and other areas of industry. Part performance not guaranteed if used in water.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the XTEL-140 transducer.



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

P/N	"T"
140	6-32 UNC-2A
140M	3.5 x .6 - 6g

INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	Absolute, Gage, Differential		Absolute, Gage, Sealed Gage, Differential			Absolute, Sealed Gage	
	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						
	Maximum Electrical Excitation	12 VDC						
	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.)	175	200	240	300	380	550	700
	Acceleration Sensitivity % FS/g Perpendicular	$1.0x10^{-3}$	$6.5x10^{-4}$	$5.0x10^{-4}$	$3.0x10^{-4}$	$1.5x10^{-4}$	$1.0x10^{-4}$	$6.0x10^{-5}$
	Insulation Resistance	100 Megohm Min. @ 50 VDC						
ENVIRONMENTAL	Operating Temperature Range	-65°F to +450°F (-55°C to +232°C)						
	Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)						
	Thermal Zero Shift	± 2% FS/100°F (Typ.) (± 3% FS/100°F Max.)			± 1% FS/100°F (Typ.) (± 2% FS/100°F Max.)			
	Thermal Sensitivity Shift	± 2% /100°F (Typ.) (± 3% /100°F Max.)			± 1% /100°F (Typ.) (± 2% /100°F Max.)			
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration						
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz						
PHYSICAL	Electrical Connection	4 Conductor 32 AWG Cable 36" Long						
	Weight	3 Grams (Nom.) Excluding Cable						
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology						
	Mounting Torque	15 Inch-Pounds (Max.) 1.7 Nm						

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