



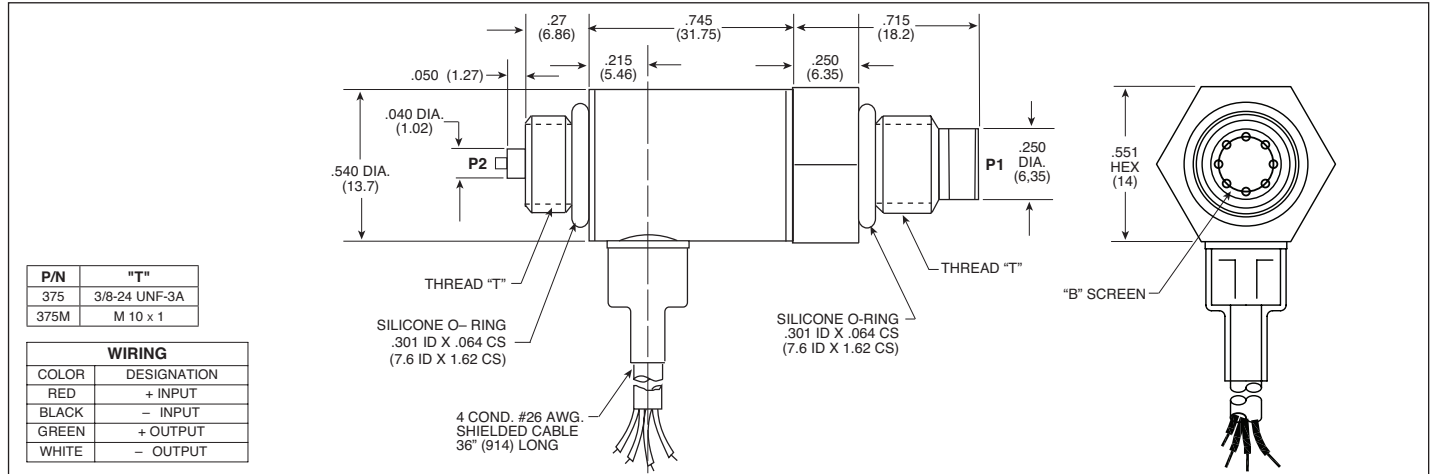
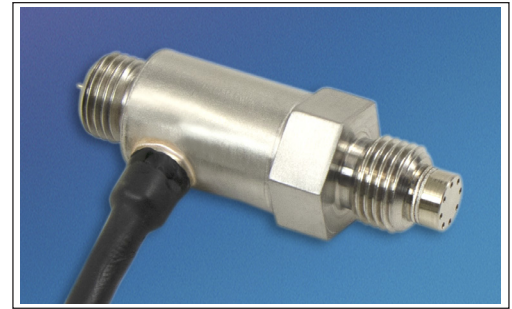
## DIFFERENTIAL PRESSURE TRANSDUCER

### XTL-3-375 (M) SERIES

- Robust Construction
- Automotive and Flight Test Applications
- Patented Leadless Technology **VIS**<sup>®</sup>

The XTL-3-375 series is a non-amplified differential transducer. The Kulite patented leadless sensing element is extremely accurate even at low pressures making the XTL-3-375 ideal for low pressure differential measurements in automotive and flight test applications.

Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the XTL-3-375 transducer.



INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	5 75	7 100	10 150	14 200	17 250	21 BAR 300 PSI		
	Operational Mode	Differential											
	Over Pressure	2 Times Rated Pressure											
	Burst Pressure	3 Times Rated Pressure											
	Line Pressure	10 Times Rated Pressure (Max.)											
	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											
	Input Impedance	1000 Ohms (Min.)											
	Output Impedance	1000 Ohms (Nom.)											
OUTPUT	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	340	380	440	500	550	575		
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	1.0x10 <sup>-3</sup>	6.5x10 <sup>-4</sup>	5.0x10 <sup>-3</sup>	3.0x10 <sup>-3</sup>	2.3x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	6.4x10 <sup>-4</sup>	1.1x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	4.0x10 <sup>-5</sup>		
	Insulation Resistance	100 Megohm Min. @ 50 VDC											
	Operating Temperature Range	-65°F to +350°F (-55°C to +175°C) Higher Temperature Ranges Available - Please Consult Factory											
	Compensated Temperature Range	-40°F to +350°F (-40°C to +175°C)											
	Thermal Zero Shift	± 1% FS/100°F (Typ.)											
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)											
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)											
	Mechanical Shock	20g half Sine Wave 11μ sec. Duration											
	PHYSICAL	Electrical Connection	4 Conductor 26 AWG Shielded Cable 36" Long										
		Weight	20 Grams (Max.) Excluding Cable										
Pressure Sensing Principle		Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology											
Mounting Torque	80 Inch-Pounds (Max.) 9 Nm												

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