

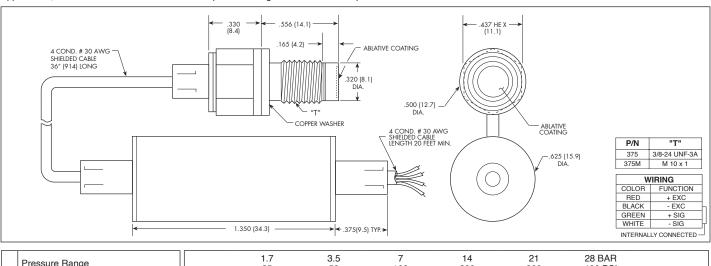
LOW PRESSURE 5VDC OUTPUT RUGGEDIZED PRESSURE TRANSDUCER

ETS-LP-375 (M) SERIES

- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- · Very High Natural Frequency
- Designed For Shock Pressure Applications
- Silicon on Silicon Integrated Sensor VIS®



Designed for low pressure, high shock environments, this range of transducers is widely used in shock pressure applications, now mated with an external in-line amplifier for a high level 5 Volt DC output



Pressure Range	1.7 25	3.5 50	7 100	14 200	21 300	28 BAR 400 PSI
Operational Mode	Sealed Gage					
Over Pressure	2 Times Rated Pressure					
Burst Pressure	3 Times Rated Pressure					
Pressure Media	Any Liquid or Gas Compatible With 15-5 PH, 316 Stainless Steel and Silicone RTV (All Media May Not Be Suitable With Crush Ring Supplied)					
Maximum Electrical Current	25 mA					
Rated Electrical Excitation	12 ± 4 VDC				28 ±	4 VDC
Full Scale Reading	5 VDC ± 150mV			5 VDC ± 150mV or 10 VDC ± 300mV		
Output Impedance	200 Ohms (Max.)					
Bandwidth (-3dB) Amplifier Only	DC Up to 150 KHz					
Residual Unbalance	500 mV ± 50 mV					
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.)					
Resolution	Infinitesimal					
Natural Frequency of Sensor Without Ablative Coating (KHz) (Typ.)	190	250	310	400	475	540
Acceleration Sensitivity % FS/g Perpendicular	1.25x10 ⁻³	6.5x10 ⁻⁴	3.5x10 ⁻⁴	1.8x10 ⁻⁴	1.2x10 ⁻⁴	9.3x10 ⁻⁵
Insulation Resistance	100 Megohm Min. @ 50 VDC					
Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)					
Compensated Temperature Range	0°F to +212°F (-18°C to +100°C)					
Thermal Zero Shift	2% FS/100°F (Typ.)					
Thermal Sensitivity Shift	2% /100°F (Typ.)					
Linear Vibration	20g Peak, Sine 10 to 2000 Hz					
Mechanical Shock	20g Half Sine Wave 11 msec. Duration					
Electrical Connection	4 Conductor 30 AWG Shielded Cable					
Weight	10 Grams (Nom.) Excluding Cable and Amplifier					
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					
	Operational Mode Over Pressure Burst Pressure Pressure Media Maximum Electrical Current Rated Electrical Excitation Full Scale Reading Output Impedance Bandwidth (-3dB) Amplifier Only Residual Unbalance Combined Non-Linearity, Hysteresis and Repeatability Resolution Natural Frequency of Sensor Without Ablative Coating (KHz) (Typ.) Acceleration Sensitivity % FS/g Perpendicular Insulation Resistance Operating Temperature Range Compensated Temperature Range Thermal Zero Shift Thermal Sensitivity Shift Linear Vibration Mechanical Shock Electrical Connection Weight Pressure Sensing Principle Mounting Torque	Operational Mode Over Pressure Burst Pressure Pressure Media Maximum Electrical Current Rated Electrical Excitation Output Impedance Bandwidth (-3dB) Amplifier Only Residual Unbalance Combined Non-Linearity, Hysteresis and Repeatability Resolution Natural Frequency of Sensor Without Ablative Coating (KHz) (Typ.) Acceleration Sensitivity % FS/g Perpendicular Insulation Resistance Operating Temperature Range Compensated Temperature Range Thermal Zero Shift Thermal Sensitivity Shift Linear Vibration Mechanical Shock Electrical Connection Weight Pressure Sensing Principle Mounting Torque	Operational Mode Over Pressure Burst Pressure Pressure Media Maximum Electrical Current Rated Electrical Excitation Full Scale Reading Output Impedance Bandwidth (-3dB) Amplifier Only Residual Unbalance Combined Non-Linearity, Hysteresis and Repeatability Resolution Natural Frequency of Sensor Without Ablative Coating (KHz) (Typ.) Acceleration Sensitivity % FS/g Perpendicular Insulation Resistance Operating Temperature Range Compensated Temperature Range Thermal Zero Shift Thermal Sensitivity Shift Linear Vibration Mechanical Shock Electrical Connection Weight Pressure Sensing Principle Mounting Torque	Pressure Hange 25 50 100 Operational Mode Sea Over Pressure 2 Times F Burst Pressure 3 Times F Pressure Media Any Liquid or Gas Compatible With 15-5 PH, 316 Stain With Crush Maximum Electrical Current Rated Electrical Excitation 12 ± 4 VDC Full Scale Reading 5 VDC ± 150mV Output Impedance 200 O Bandwidth (-3dB) Amplifier Only DC Up Residual Unbalance 500 m Combined Non-Linearity, Hysteresis and Repeatability ± 0.1% FSO BFSL (T Resolution Infin Natural Frequency of Sensor Without Ablative Coating (KHz) (Typ.) 190 250 310 Acceleration Sensitivity % FS/g Perpendicular 1.25x10-3 6.5x10-4 3.5x10-4 Insulation Resistance 100 Megohn -65°F to +250° Operating Temperature Range -65°F to +250° 70°F to +212°F Compensated Temperature Range 0°F to +212°F 710 Thermal Sensitivity Shift 2% FS/ 710 Linear Vibration 20g Peak, Si 710 Mech	Pressure Hange	Pressure Hange 25 50 100 200 300 Operational Mode Sealed Gage Over Pressure 2 Times Rated Pressure Burst Pressure 3 Times Rated Pressure Pressure Media Any Liquid or Gas Compatible With 15-5 PH, 316 Stainless Steel and Silicone RTV (All With Crush Ring Supplied) Maximum Electrical Current 25 mA Rated Electrical Excitation 12 ± 4 VDC 28 ± Full Scale Reading 5 VDC ± 150mV 5 VDC ± 150mV Output Impedance 200 Ohms (Max.) Bandwidth (-3dB) Amplifier Only DC Up to 150 KHz Residual Unbalance 500 mV ± 50 mV Combined Non-Linearity, Hysteresis and Repeatability ± 0.1% FSO BFSL (Typ.) ± 0.5% FSO (Max.) Resolution Infinitesimal Natural Frequency of Sensor Without Ablative Coating (KHz) (Typ.) 190 250 310 400 475 Acceleration Sensitivity % FS/g Perpendicular 1 Insulation Resistance 100 Megohn Min. @ 50 VDC Operating Temperature

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (C) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2016 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.