

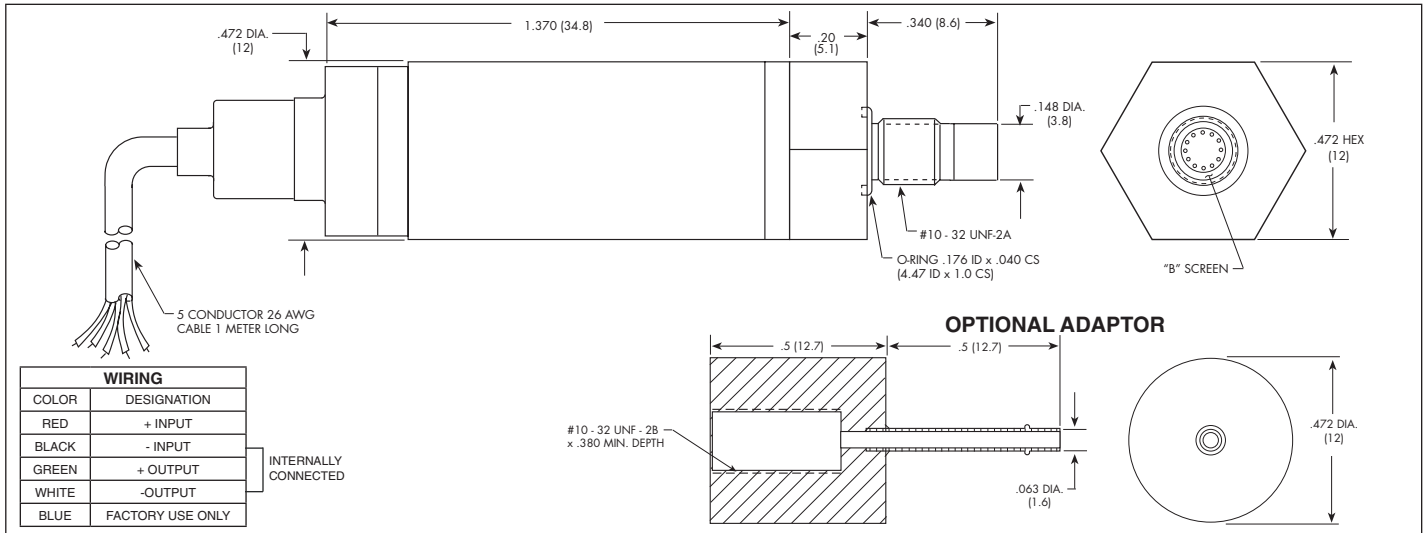


# MINIATURE DIGITALLY CORRECTED PRESSURE TRANSDUCER

## ETL-79-HA-DC-190 SERIES

- Robust Construction
- Ultra Miniature Amplified Version
- Digitally Corrected
- High Accuracy
- Patented Leadless Technology **VIS**<sup>®</sup>

The ETL-79 Series is one of the smallest amplified transducers currently available. It incorporates the latest pressure sensing technology – Kulite's dielectrically isolated, silicon on silicon, patented leadless sensing element, which enables this device to be used in harsh environments. The ETL-79 digitally corrected transducer offers high accuracy with a total error band of  $\pm 0.10\%$  FSO Typical, inclusive of all errors over a wide temperature range of 50°F to +250°F.



<b>INPUT</b>	Pressure Range	.35 5	1.7 25	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	Absolute, Sealed Gage					
	Over Pressure	2 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)					
	Burst Pressure	3 Times Rated Pressure to a Maximum of 5000 PSI (350 BAR)					
	Pressure Media	Any Media Compatible With SiO <sub>2</sub> and 15-5 Stainless Steel					
	Rated Electrical Excitation	8 - 32 VDC					
<b>OUTPUT</b>	Maximum Electrical Current	25 mA (Max.)					
	Output Impedance	750 Ohms (Max.)					
	Full Scale Output (FSO) (Net)	4.0 VDC $\pm$ .025 VDC					
	Total Error Band (Excluding End Points)	$\pm 0.2\%$ (Max.) (Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)					
	Bandwidth (-3dB)	DC to 10 KHz					
	Residual Unbalance	0.5 VDC $\pm$ .025 VDC					
<b>ENVIRONMENTAL</b>	Resolution	Infinitesimal					
	Acceleration Sensitivity % FS/g Perpendicular	1.5x10 <sup>-3</sup>	5.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>
	Insulation Resistance	100 Megohm Min. @ 50 VDC					
	Operating Temperature Range	-40°F to +265°F (-40°C to +130°C)					
	Compensated Temperature Range	50°F to +250°F (10°C to +120°C)					
	Linear Vibration	50g Peak, Sine 10 to 2000 Hz					
<b>PHYSICAL</b>	Mechanical Shock	100g half Sine Wave 11 msec. Duration					
	Electrical Connection	5 Conductor 26 AWG Viton Cable 1 Meter Long					
	Weight	10 Grams 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.)					

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