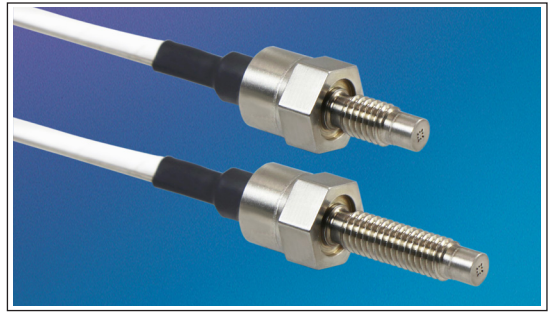




MINIATURE RUGGEDIZED PRESSURE TRANSDUCER

DTL-190 (M) SERIES

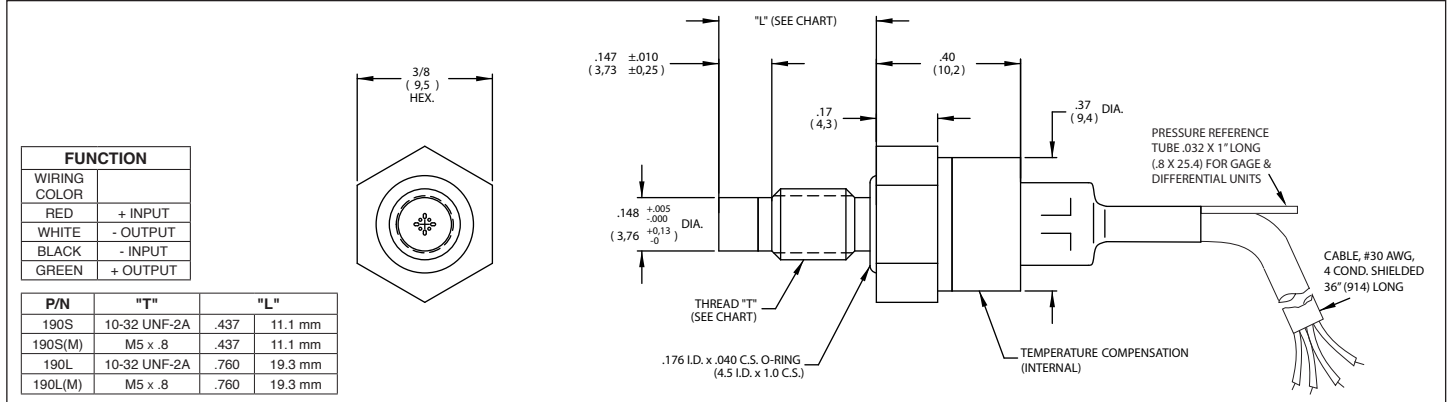
- Easy Installation
- Patented Leadless Technology VIS®
- Optimized Frequency Response



The DTL-190 transducer series features an optimized package design that maximizes the frequency response performance by minimizing the effects of acoustic resonance. This design holds the chip and protective screen to the tightest tolerances thereby achieving a flat frequency response of DC to 50+ kHz regardless of pressure range or packaging when properly installed. Kulite provides installation recommendations for all of its threaded probes, please refer to Figures 1(b) and 2(b) in this document; [English](#), [Metric](#).

The DTL-190 features Kulite's rugged leadless construction, capable of making static and high frequency dynamic pressure measurements in any media compatible with 316 SS, silicon, and silicon dioxide. The DTL-190 can be easily integrated into your test stand via the 10-32 or M5 threaded connection that is common to miniature transducers. With the inputs and outputs coupled to a Kulite KSC-2 signal conditioner, extremely low-noise and accurate static and dynamic pressure measurements are achieved. Optional 5th-wire temperature measurements for greater accuracy are also possible - please contact the factory for details. Part performance not guaranteed if used in water.

Kulite recommends the [KSC-2](#) signal conditioner to maximize the measurement capability of the DTL-190 transducer.



INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 BAR 1000 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 to a Maximum of 2300 PSI (160 BAR)								
	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.)								
	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	1000		
OUTPUT	Frequency Response (Typ.) In Air at Room Temperature									
	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	4.5x10 ⁻⁵	
	Insulation Resistance	100 Megohm Min. @ 50 VDC								