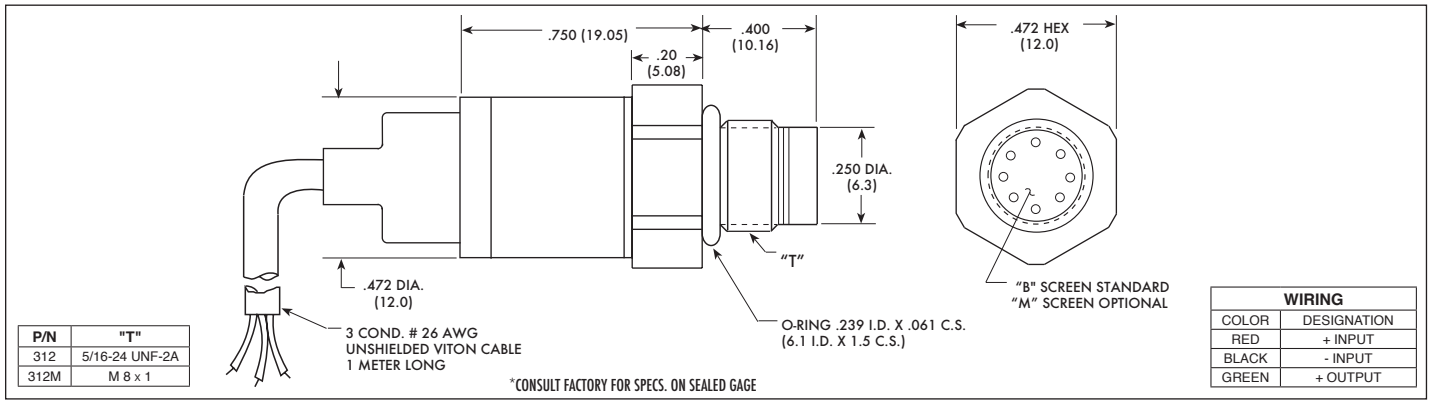
MINIATURE 5VDC OUTPUT PRESSURE TRANSDUCER

ETL-634(X)-312(M)

- Smallest High Performance Amplified Transducer Worldwide
- High Temperature Electronics 365°F (185°C)
- Rugged Design Provides Compatibility With Most Corrosive and Conductive Media
- Patented Leadless Technology **VIS**®
- High Over Pressure Capability
- Designed and Engineered For Severe Environmental Conditions

The ETL-634(X)-312(M) Series transducers are miniature, threaded instruments. The sensing subassembly is protected from mechanical damage by a solid screen which has been shown to have minimal influence on the frequency response of the sensor. The ETL Series uses Kulite's Patented Leadless Technology. Incorporation of a Kulite proprietary electronics module within the main body of this product allows for operation from an unregulated power supply ranging from 12 ± 4VDC or 28 ± VDC.



P/N	"T"
312	5/16-24 UNF-2A
312M	M 8 x 1

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

INPUT	Pressure Range	1 15*	2 29	5 73	10 145	15 BAR 218 PSI	
	Operational Mode	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	12 ± 4 VDC					
	Maximum Electrical Current	25 mA (Max.)					
OUTPUT	Output Impedance	200 Ohms (Typ.)					
	Full Scale Reading (X)	4.9V ± 2% (A)	4.5V ± 1.5% (B)	4.5V ± 1% (C)	4.9V ± 1.5% (D)	4.75V ± 1% (E)	4.7V ± 1% (F)
	Bandwidth (-3dB)	DC to 5 KHz					
	Residual Unbalance (X)	350 ± 50 mV (A)	500 ± 75 mV (B)	300 ± 45 mV (C)	300 ± 75 mV (D)	300 ± 50 mV (E)	300 ± 50 mV (F)
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.25% FSO (Max.)					
	Resolution	Infinitesimal					
	Acceleration Sensitivity % FS/g Perpendicular	$6.5x10^{-4}$	$4.2x10^{-4}$	$2.3x10^{-4}$	$1.4x10^{-4}$	$1.1x10^{-4}$	
	Insulation Resistance	> 100 Megohm Min. @ 50 VDC					
ENVIRONMENTAL	Operating Temperature Range	-65°F to +365°F (-55°C to +185°C)					
	Compensated Temperature Range	+68°F to +350°F (+20°C to +175°C) Other Ranges Quoted on Request					
	Total Error Band (Excluding End Points)	± 2% FS/100°C ≤ 217.5 PSI (15 BAR), ± 1% FS/100°C ≥ 217.5 PSI (15 BAR)					
	Linear Vibration	100g Peak, Sine up to 5000 Hz					
	Mechanical Shock	100g half Sine Wave 11 msec. Duration					
PHYSICAL	Electrical Connection	3 Conductor 26 AWG Unshielded Cable 1 Meter Long					
	Weight	15 Grams (Max.) Excluding Cable					
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology					
	Mounting Torque	50 Inch-Pounds (Max.) 6Nm					

(X) Denotes FSR and Residual Unbalance Options (A), (B), (C), (D), (E) or (F).

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.

KULITE SEMICONDUCTOR PRODUCTS, INC. • One Willow Tree Road • Leonia, New Jersey 07605 • Tel: 201 461-0900 • Fax: 201 461-0990 • http://www.kulite.com