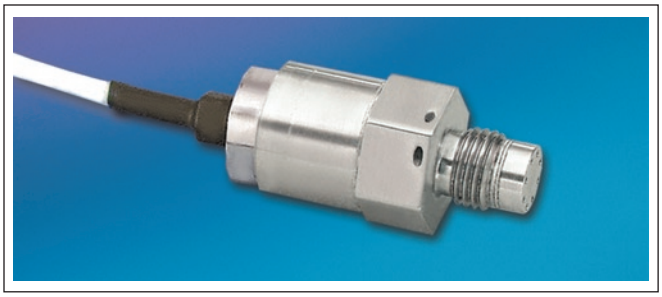
5 VDC OUTPUT IS® PRESSURE TRANSDUCER

ETL-375 (M) SERIES

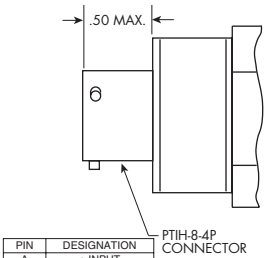
- 5 VDC Output
- Hybrid Microelectronic Regulator-Amplifier
- Patented Leadless Technology
- All Welded Construction
- Secondary Containment On Absolute And Sealed Gage Units
- Aerospace Quality Components
- 3/8-24 UNJF or M10 X 1 Thread
- 4 Wire (ETL-375) 3 Wire (ETL-300-375)
- Intrinsically Safe Applications Available (i.e. IS-ETL-375)



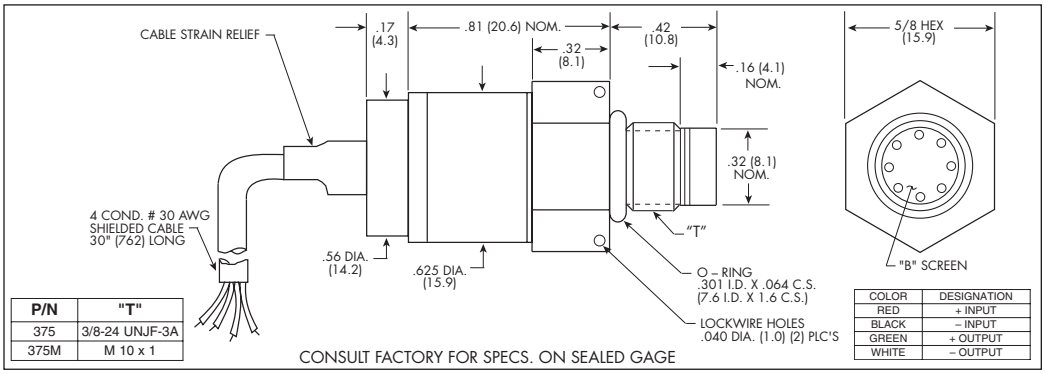
ETL-375 Series transducers are miniature, threaded instruments. The sensing sub-assembly is protected from mechanical damage by a solid screen which has been shown to have minimal influence on the frequency response of the sensor. The ETL Series uses Kulite's Patented Leadless Technology.

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 ± 4VDC with reverse polarity protection available upon request.

OPTIONAL CONNECTOR VERSION HERMETICALLY SEALED



PIN	DESIGNATION
A	+ INPUT
B	– INPUT
C	+ OUTPUT
D	– OUTPUT



P/N	"T"
375	3/8-24 UNJF-3A
375M	M 10 x 1

COLOR	DESIGNATION
RED	+ INPUT
BLACK	– INPUT
GREEN	+ OUTPUT
WHITE	– OUTPUT

INPUT Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI
Operational Mode	Absolute, Gage, Sealed Gage							
Over Pressure	2 Times Rated Pressure to a Max. of 30000 PSI (2100 BAR)							
Burst Pressure	3 Times Rated Pressure to a Max. of 35000 PSI (2400 BAR)							
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)							
Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC							
Maximum Electrical Current	25 mA							
OUTPUT Output Impedance	200 Ohms (Max.)							
Full Scale Reading	5 VDC ± 150mV							
Bandwidth (-3dB)	DC to 5 KHz							
Residual Unbalance	0 to 100 mV (ETL-375)			200 mV ± 50 mV (ETL-300-375)				
Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)							
Resolution	Infinitesimal							
Natural Frequency (KHz) (Typ.)	Greater Than 400 KHz							
Acceleration Sensitivity % FS/g Perpendicular Transverse	 $1.9x10^{-3}$ $5.0x10^{-5}$	 $1.0x10^{-3}$ $3.1x10^{-5}$	 $5.2x10^{-4}$ $2.0x10^{-5}$	 $2.2x10^{-4}$ $1.0x10^{-5}$	 $1.1x10^{-4}$ $7.0x10^{-6}$	 $6.2x10^{-5}$ $4.3x10^{-6}$	 $2.6x10^{-5}$ $2.3x10^{-6}$	 $1.5x10^{-5}$ $1.5x10^{-6}$
Insulation Resistance	100 Megohm Min. @ 50 VDC							
ENVIRONMENTAL 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) Other Ranges Quoted on Request							
Thermal Zero Shift	± 1% FS/100° F (Typ.)							
Thermal Sensitivity Shift	± 1% /100° F (Typ.)							
Linear Vibration	100g Peak, Sine up to 5000 Hz							
Altitude	-150 ft. to +70,000 ft. Will Not Damage Sensor							
Humidity	100% Relative Humidity							
Mechanical Shock	100g half Sine Wave 1 msec. Duration							
PHYSICAL Electrical Connection	4 Conductor 30 AWG Shielded Cable 30" Long							
Weight	24.5 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.)							

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

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