## **S VDC OUTPUT DIGITALLY CORRECTED PRESSURE TRANSDUCER**

## ETL-DC-375 (M) CO SERIES

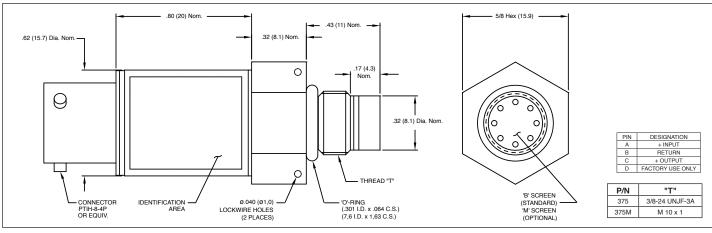
- 5 VDC Digitally Corrected Output
- Hybrid Microelectronic Regulator-Amplifier
- Patented Leadless Technology VIS<sup>®</sup>
- All Welded Construction
- Secondary Containment On Absolute And Sealed Gage Units
- Aerospace Quality Components
- Analog Output



ETL-DC-375(M) CO 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 8 - 32 VDC with reverse polarity protection available upon request. The result is a stable, digitally corrected 0 to 5 VDC output signal.

Part performance not guaranteed if used in water.



Pressure Range	1.7	3.5 50	7	17	35 500	70	170	350 BAR 5000 PSI
Operational Mode	Absolute, Sealed Gage							
Over Pressure	2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 6000 PSI (420 BAR)							
Burst Pressure	3 Times Rated Pressure to a Max. of 10000 PSI (700 BAR)							
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)							
Maximum Electrical Current	25 mA							
Rated Electrical Excitation	8 - 32 VDC							
Full Scale Output (FSO)	5 VDC							
Residual Unbalance	0 VDC							
Output Impedance	50 Ohms (Typ.)							
Total Error Band	± 0.5% (Typ.) (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included) DC to 2500 Hz							
Bandwidth (-3dB)								
Resolution	Infinitesimal							
Insulation Resistance	100 Megohm Min. @ 50 VDC							
Operating Temperature Range	-40°F to +280°F (-40°C to +140°C) (Max.)							
Compensated Temperature Range	-40°F to +250°F (-40°C to +120°C)							
Linear Vibration	20g Peak, Sine 10 to 2000 Hz							
Mechanical Shock	20g Half Sine Wave 11 msec. Duration							
Electrical Connection	PTIH-8-4P or Equivalent (Mating Connector Available Upon Request)							
Weight	24.5 Grams (Nom.)							
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology							
Mounting Torque	80 Inch-Pounds (Max.) (9Nm) Max.							
	Operational ModeOver PressureBurst PressurePressure MediaMaximum Electrical CurrentRated Electrical ExcitationFull Scale Output (FSO)Residual UnbalanceOutput ImpedanceTotal Error BandBandwidth (-3dB)ResolutionInsulation ResistanceOperating Temperature RangeCompensated Temperature RangeLinear VibrationMechanical ShockElectrical ConnectionWeightPressure Sensing Principle	Pressure Range  25    Operational Mode  2    Over Pressure  2    Burst Pressure  2    Pressure Media  All Noncommode    Maximum Electrical Current  All Noncommode    Rated Electrical Excitation  1    Full Scale Output (FSO)  1    Residual Unbalance  0    Output Impedance  1    Total Error Band  (Error Band)    Insulation Resistance  0    Operating Temperature Range  1    Compensated Temperature Range  1    Linear Vibration  1    Mechanical Shock  1    Electrical Connection  1    Weight  1    Pressure Sensing Principle  Fully Action	Pressure Range  25  50    Operational Mode  2 Times Rated Pressure to 1    Burst Pressure  2 Times Rated Pressure to 1    Burst Pressure  All Nonconductive, Nor    Maximum Electrical Current  Rated Electrical Excitation    Full Scale Output (FSO)  Residual Unbalance    Output Impedance  Output Impedance    Total Error Band  (End Point Setting)    Bandwidth (-3dB)  Resolution    Insulation Resistance  Operating Temperature Range    Compensated Temperature Range  Linear Vibration    Mechanical Shock  Electrical Connection    Fully Active Four Arm  Fully Active Four Arm	Pressure Hange  25  50  100    Operational Mode  2  Times Rated Pressure to 1000 PSI (70 BAR    Burst Pressure  3  Times Rated    Pressure Media  All Nonconductive, Noncorrosive Liquids    Maximum Electrical Current  100    Rated Electrical Excitation  100    Full Scale Output (FSO)  100    Residual Unbalance  100    Output Impedance  100    Total Error Band  (End Point Settings, Combined None)    Bandwidth (-3dB)  100    Resolution  100    Insulation Resistance  100    Operating Temperature Range 40°    Compensated Temperature Range 40°    Linear Vibration  100    Mechanical Shock  200    Electrical Connection  PTIH-8-4P or Equinal    Weight  100    Pressure Sensing Principle  Fully Active Four Arm Wheatstone Bridge	Pressure Range  25  50  100  250    Operational Mode  Absolute, S    Over Pressure  2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rate    Burst Pressure  3 Times Rated Pressure to a    Pressure Media  All Nonconductive, Noncorrosive Liquids or Gases (Most    Maximum Electrical Current  25    Rated Electrical Excitation  8 - 32    Full Scale Output (FSO)  5 V    Residual Unbalance  0 V    Output Impedance  50 Ohm    Total Error Band  (End Point Settings, Combined Non-Linearity, Hyste    Bandwidth (-3dB)  DC to 2    Resolution  100 Megohm f    Operating Temperature Range  -40°F to +280°F (-40    Compensated Temperature Range  -40°F to +280°F (-40    Compensated Temperature Range  20g Peak, Sine    Linear Vibration  20g Peak, Sine    Mechanical Shock  20g Half Sine Wave    Electrical Connection  PTIH-8-4P or Equivalent (Mating O    Weight  24.5 Grar    Pressure Sensing Principle  Fully Active Four Arm Wheatstone Bridge Dielectrically I	Pressure Hange  25  50  100  250  500    Operational Mode  Absolute, Sealed Gage    Over Pressure  2 Times Rated Pressure to 1000 PSI (70 BAR)  1.5 Times Rated Pressure Ab    Burst Pressure  3 Times Rated Pressure to a Max. of 10000 P    Pressure Media  All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liq    Maximum Electrical Current  25 mA    Rated Electrical Excitation  8 - 32 VDC    Full Scale Output (FSO)  5 VDC    Residual Unbalance  0 VDC    Output Impedance  50 Ohms (Typ.)    Total Error Band  (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatable    Bandwidth (-3dB)  DC to 2500 Hz    Resolution  Infinitesimal    Insulation Resistance  100 Megohm Min. @ 50 VDC    Operating Temperature Range  -40°F to +280°F (-40°C to +140°C) (    Compensated Temperature Range  -40°E to +250°F (-40°C to +140°C) (    Compensated Temperature Range  20g Peak, Sine 10 to 2000 Hz    Linear Vibration  20g Peak, Sine 10 to 2000 Hz    Mechanical Shock  20g Half Sine Wave 11 msec. Dura    Electrical Connection  PTIH-8-4P or Equivalent (Mating Connec	Pressure Hange    25    50    100    250    500    1000      Operational Mode    Absolute, Sealed Gage    2    Times Rated Pressure to 1000 PSI (70 BAR)    1.5 Times Rated Pressure Above 1000 PSI to      Burst Pressure    2 Times Rated Pressure to 1000 PSI (70 BAR)    1.5 Times Rated Pressure Above 1000 PSI (700 BAR)      Pressure Media    All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases      Maximum Electrical Current    25 mA      Rated Electrical Excitation    8 - 32 VDC      Full Scale Output (FSO)    5 VDC      Residual Unbalance    0 VDC      Output Impedance    50 Ohms (Typ.)      Total Error Band    (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Ther      Bandwidth (-3dB)    DC to 2500 Hz      Resolution    Infinitesimal      Insulation Resistance    100 Megohm Min. @ 50 VDC      Operating Temperature Range    -40°F to +280°F (-40°C to +140°C) (Max.)      Compensated Temperature Range    -40°F to +280°F (-40°C to +120°C)      Linear Vibration    20g Peak, Sine 10 to 2000 Hz      Mechanical Shock    20g Haif Sine Wave 11 msec. Duration      E	Pressure Hange    25    50    100    250    500    1000    2500      Operational Mode    Absolute, Sealed Gage      Absolute, Sealed Gage      6000    Pressure    2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 6000    Burst Pressure Media    All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consul Maximum Electrical Current    25 mA    Pressure Media    All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consul Maximum Electrical Excitation    8 - 32 VDC    Full Scale Output (FSO)    5 VDC    S VDC

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 © 2020 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.