

MINIATURE 5V OUTPUT HIGH TEMPERATURE IS® PRESSURE TRANSDUCER WITH INTEGRATED TEMPERATURE SENSOR

- ETL/T-375 (M) SERIES
- Combined Pressure and Temperature Capability
- Robust Construction

INPLIT

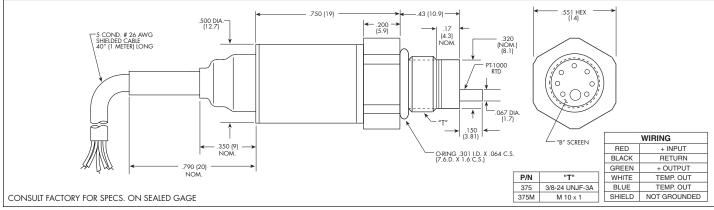
- · Excellent Long Term Stability
- Patented Leadless Technology VIS®

The ETL/T-375 is a miniature threaded pressure transducer/platinum RTD combination. The pressure transducer utilizes a patented silicon on silicon design. The platinum RTD protrudes beside the diaphragm to sense media temperature. The pressure and temperature devices are designed to operate independently. All wetted parts of the transducer are compatible with most aircraft and automotive fluids.

17

2 5





17

25

70

170

250 BAD

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 BAI) Burst Pressure 3 Times Rated Pressure Pressure Media All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory) Maximum Electrical Current 25 mA Rated Electrical Excitation 12 ± 4 VDC 28 ± 4 VDC RTD Excitation 1mA (2mA Max.) 5 VDC ± 75mV or 10 VDC ± 150mV (3 Wire System Single Ended Output) (3 Wire System Single Ended Output) Output Impedance 200 Ohms (Nom.) 1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) Bandwidth (-3dB) DC to 3000 Hz Residual Unbalance 0.5V ± 75mV Combined Non-Linearity, Hysteresis and Repeatability ± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.) Resolution Infinitesimal Acceleration Sensitivity % FS/g Perpendicular 5.0x10-4 3.0x10-4 1.5x10-4 1.0x10-4 6.0x10-5 4.0x10-5 2.5x10-5 1.7x10-5	INPUT	1.7	3.5	7	17	35	70	170	250 BAR	
2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 6000 PSI (420 BAI Burst Pressure Breasure Hodia 3 Times Rated Pressure 4 Times 4 Time	Pressure Range	25	50	100	250	500	1000	2500	3600 PSI	
Burst Pressure All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory) Maximum Electrical Current All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory) Maximum Electrical Excitation 12 ± 4 VDC	Operational Mode	Absolute, Sealed Gage								
Pressure Media	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)								
Maximum Electrical Current 25 mA 28 ± 4 VDC 28 ±	Burst Pressure	3 Times Rated Pressure								
Rated Electrical Excitation 12 ± 4 VDC	Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)								
The mail Sensitivity Serial Personne Range Sensitivity Serial Range S	Maximum Electrical Current	25 mA								
OUTPUT Full Scale Reading 5 VDC ± 75mV (3 Wire System Single Ended Output) 5 VDC ± 75mV or 10 VDC ± 150mV (3 Wire System Single Ended Output) Output Impedance 200 Ohms (Nom.) Bandwidth (-3dB) 1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) Besidual Unbalance 0.5V ± 75mV Combined Non-Linearity, Hysteresis and Repeatability ± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.) Resolution Infinitesimal Acceleration Sensitivity % FS/g Perpendicular Transverse 5.0x10 ⁴ 3.0x10 ⁴ 1.5x10 ⁴ 1.0x10 ⁴ 6.0x10 ⁵ 4.0x10 ⁵ 2.5x10 ⁵ 1.7x10 ⁵ 6.0x10 ⁶ 4.0x10 ⁵ 2.2x10 ⁵ 1.8x10 ⁸ Insulation Resistance 100 Megohm Min. @ 50 VDC ENVIRONMENTAL Operating Temperature Range -65°F to +375°F (-55°C to +190°C) Compensated Temperature Range -65°F to +350°F (-55°C to +175°C) Thermal Zero Shift ± 1% FS/100°F (Typ.) Thermal Sensitivity Shift ± 1% 7100°F (Typ.) Steady Acceleration and Linear Vibration 100g Peak, Sine up to 5000 Hz Humidity 100g 11 msec. 10,000g. 100µ sec. PHYSICAL Electrical Connection 5 Conductor 26 AWG Shielded Cable 40° (1 Meter Long) Weight 20 Grams Excluding Cable Fessure Sensing Principle Fully Active	Rated Electrical Excitation	12 ± 4 VDC 28 ± 4 VDC								
Full Scale Reading 5 VDC ± 75mV (3 Wire System Single Ended Output) (3 Wire System Single Ended Output) OUtput Impedance 200 Ohms (Nom.) RTD 1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.) Bandwidth (-3dB) DC to 3000 Hz Residual Unbalance 0.5V ± 75mV Combined Non-Linearity, Hysteresis and Repeatability and Repeatability Resolution 1.50x10 ⁴ 3.0x10 ⁴ 1.5x10 ⁴ 1.0x10 ⁴ 6.0x10 ⁵ 4.0x10 ⁵ 2.5x10 ⁵ 1.7x10 ⁵ 6.0x10 ⁵ 4.0x10 ⁵ 2.5x10 ⁵ 1.8x10 ⁶ Acceleration Sensitivity % FS/g Perpendicular Transverse 5.0x10 ⁴ 3.0x10 ⁴ 1.5x10 ⁴ 1.0x10 ⁴ 6.0x10 ⁵ 6.0x10 ⁵ 4.0x10 ⁵ 2.5x10 ⁵ 1.8x10 ⁶ Insulation Resistance 1.0x10 ⁶ 6.0x10 ⁵ 1.0x10 ⁵ 6.0x10 ⁶ 4.0x10 ⁶ 2.2x10 ⁶ 1.8x10 ⁶ ENVIRONMENTAL Operating Temperature Range -65°F to +375°F (-55°C to +175°C) Compensated Temperature Range -65°F to +350°F (-55°C to +175°C) Thermal Zero Shift ± 1% FS/100°F (Typ.) Thermal Sensitivity Shift ± 1% 100°F (Typ.) Steady Acceleration and Linear Vibration 100g Peak, Sine up to 50000 Hz Humidity 100% Relative Humidity Mechanical Shock 5 Conductor 26 AWG Shielded Cable 40° (1 Meter Long) PHYSICAL Electrical Connection	RTD Excitation	1mA (2mA Max.)								
RTD										
Bandwidth (-3dB)	Output Impedance	200 Ohms (Nom.)								
Residual Unbalance Combined Non-Linearity, Hysteresis and Repeatability Resolution Acceleration Sensitivity % FS/g Perpendicular Transverse Insulation Resistance ENVIRONMENTAL Operating Temperature Range Compensated Temperature Range Thermal Zero Shift Thermal Sensitivity Shift Steady Acceleration and Linear Vibration Humidity Mechanical Shock PHYSICAL Electrical Connection Weight Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Slilicon on Silicon Patented Leadless Technology	RTD	1000 Ohms Platinum, DIN EN 60751 Tables, Class A (65% Response Time 3 Seconds Max.)								
Combined Non-Linearity, Hysteresis and Repeatability Resolution Acceleration Sensitivity % FS/g Perpendicular Transverse Insulation Resistance ENVIRONMENTAL Operating Temperature Range Thermal Zero Shift Thermal Sensitivity Shift Steady Acceleration and Linear Vibration Vibration Vibration Wechanical Shock PHYSICAL Electrical Connection Weight Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology	Bandwidth (-3dB)	DC to 3000 Hz								
## 10.1% BFSL (Typ.), ± 0.5% BFSL (Max.) Resolution	Residual Unbalance	0.5V ± 75mV								
Acceleration Sensitivity % FS/g Perpendicular Transverse 5.0x10 ⁻⁴ 3.0x10 ⁻⁴ 4.0x10 ⁻⁵ 2.0x10 ⁻⁵ 1.0x10 ⁻⁵ 6.0x10 ⁻⁵ 4.0x10 ⁻⁵ 2.5x10 ⁻⁵ 1.7x10 ⁻⁵ 6.0x10 ⁻⁶ 2.2x10 ⁻⁶ 1.8x10 ⁻⁶ 1.8x10 ⁻⁶ 1.0x10 ⁻⁶ 6.0x10 ⁻⁶ 4.0x10 ⁻⁶ 2.2x10 ⁻⁶ 1.8x10 ⁻		± 0.1% BFSL (Typ.), ± 0.5% BFSL (Max.)								
Perpendicular Transverse	Resolution	Infinitesimal								
ENVIRONMENTAL Operating Temperature Range Compensated Temperature Range Thermal Zero Shift Thermal Sensitivity Shift Steady Acceleration and Linear Vibration Humidity Mechanical Shock PHYSICAL Electrical Connection Weight Pressure Sensing Principle Temperature Range -65°F to +375°F (-55°C to +190°C) ### ### ### ### ### ### ### ### ### #	Perpendicular								1.7x10 ⁻⁵ 1.8x10 ⁻⁶	
Operating Temperature Range-65°F to +375°F (-55°C to +190°C)Compensated Temperature Range-65°F to +350°F (-55°C to +175°C)Thermal Zero Shift± 1% FS/100°F (Typ.)Thermal Sensitivity Shift± 1% /100°F (Typ.)Steady Acceleration and Linear Vibration100g Peak, Sine up to 5000 HzHumidity100% Relative HumidityMechanical Shock100g 11 msec. 10,000g. 100μ sec.PHYSICAL Electrical Connection5 Conductor 26 AWG Shielded Cable 40" (1 Meter Long)Weight20 Grams Excluding CablePressure Sensing PrincipleFully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology	Insulation Resistance				100 Megohm N	/lin. @ 50 VDC				
Thermal Zero Shift ± 1% FS/100°F (Typ.) Thermal Sensitivity Shift £ 1% /100°F (Typ.) Steady Acceleration and Linear Vibration Humidity Mechanical Shock PHYSICAL Electrical Connection Weight Pressure Sensing Principle ### 15 / 100°F (Typ.) ### 100° F				-	65°F to +375°F (-55°C to +190°C	D)			
Thermal Sensitivity Shift Steady Acceleration and Linear Vibration Humidity Mechanical Shock PHYSICAL Electrical Connection Weight Pressure Sensing Principle ### 1% /100°F (Typ.) ### 100g Peak, Sine up to 5000 Hz 100g Relative Humidity #### 100% Relative Humidity 100% Relative Humidity #### 10	Compensated Temperature Range	-65°F to +350°F (-55°C to +175°C)								
Steady Acceleration and Linear Vibration Humidity Mechanical Shock PHYSICAL Electrical Connection Weight Pressure Sensing Principle Steady Acceleration and Linear 100g Peak, Sine up to 5000 Hz 100% Relative Humidity 100% Relative Humidit	Thermal Zero Shift	± 1% FS/100°F (Typ.)								
Vibration 100g Peak, Sine up to 5000 Hz Humidity 100% Relative Humidity Mechanical Shock 100g 11 msec. 10,000g. 100µ sec. PHYSICAL Electrical Connection 5 Conductor 26 AWG Shielded Cable 40" (1 Meter Long) Weight 20 Grams Excluding Cable Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology	Thermal Sensitivity Shift	± 1% /100°F (Typ.)								
Mechanical Shock 100g 11 msec. 10,000g. 100μ sec. PHYSICAL Electrical Connection 5 Conductor 26 AWG Shielded Cable 40" (1 Meter Long) Weight 20 Grams Excluding Cable Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology		100g Peak, Sine up to 5000 Hz								
PHYSICAL Electrical Connection 5 Conductor 26 AWG Shielded Cable 40" (1 Meter Long) Weight 20 Grams Excluding Cable Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology	Humidity	100% Relative Humidity								
Electrical Connection 5 Conductor 26 AWG Shielded Cable 40" (1 Meter Long) Weight 20 Grams Excluding Cable Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology	Mechanical Shock	100g 11 msec. 10,000g. 100μ sec.								
Pressure Sensing Principle Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology			5 Conductor 26 AWG Shielded Cable 40" (1 Meter Long)							
	Weight		20 Grams Excluding Cable							
Mounting Torque 50 Inch-Pounds (Max.) 6Nm	Pressure Sensing Principle	Fully Ac	ctive Four Arm V	Vheatstone Bridg	je Dielectrically I	solated Silicon o	on Silicon Patent	ted Leadless Ted	chnology	
	Mounting Torque		50 Inch-Pounds (Max.) 6Nm							

Note: Custom pressure ranges, accuracies, mechanical configurations and RTD resistance 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. (H)