HIGH TEMPERATURE IS® PRESSURE TRANSDUCER

XTEL-375 (M) SERIES

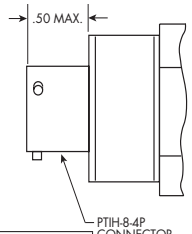
- Small Pressure Sensitive Area
- Patented Leadless Technology **VIS**®
- 3/8-24 UNJF or M10 X 1 Thread
- -65°F To 450°F Temperature Capability
- No Internal Lead Flexing
- All Welded Construction
- Extra Low G Sensitivity
- High Natural Frequency

The XTEL-375 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply.

The XTEL-375 utilizes Kulite's Patented Leadless Technology. A solid state piezoresistive sensing element is protected by a metal screen. This sensing sub assembly is welded to a stainless steel body.

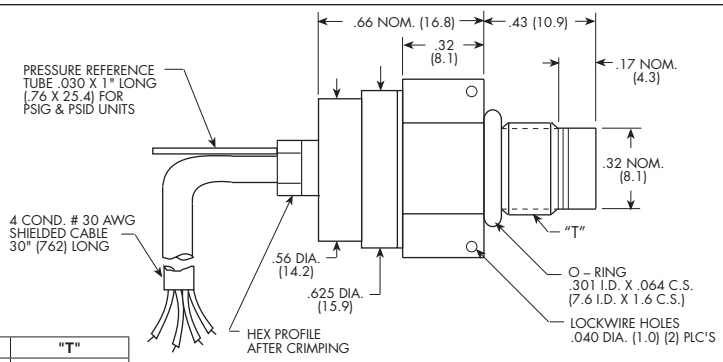
This advanced construction results in a highly stable, reliable and rugged instrument with all the advantages of microcircuitry: significant miniaturization, excellent repeatability, low power consumption, etc. Coupled with high temperature capabilities, its Patented Leadless Construction makes it possible for the sensing unit to be installed in such a way that will not compromise its high natural frequency.

OPTIONAL CONNECTOR VERSION HERMETICALLY SEALED



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

NOT AVAILABLE ON DIFFERENTIAL UNIT



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

CONSULT FACTORY FOR SPECS. ON SEALED GAGE

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

INPUT Pressure Range	0.35 5	0.7 10	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	140 BAR 2000 PSI
Operational Mode	Absolute, Gage, Sealed Gage, Differential					Absolute, Sealed Gage			
Over Pressure	2 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)								
Burst Pressure	3 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)								
Pressure Media	All Nonconductive, Noncorrosive Liquids or Gases (Most Conductive Liquids and Gases - Please Consult Factory)								
Rated Electrical Excitation	10 VDC/AC								
Maximum Electrical Excitation	15 VDC/AC								
Input Impedance	1000 Ohms (Min.)								
OUTPUT 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 (KHz) (Typ.)	150	175	240	300	380	550	700	1000	1400
Acceleration Sensitivity % FS/g Perpendicular Transverse	 $1.5x10^{-3}$ $2.2x10^{-4}$	 $1.0x10^{-3}$ $1.4x10^{-4}$	 $5.0x10^{-4}$ $6.0x10^{-5}$	 $3.0x10^{-4}$ $4.0x10^{-5}$	 $1.5x10^{-4}$ $2.0x10^{-5}$	 $1.0x10^{-4}$ $9.0x10^{-6}$	 $6.0x10^{-5}$ $6.0x10^{-6}$	 $4.5x10^{-5}$ $3.0x10^{-6}$	 $2.0x10^{-5}$ $2.0x10^{-6}$
Insulation Resistance	100 Megohm Min. @ 50 VDC								
ENVIRONMENTAL Operating Temperature Range	-65°F to +450°F (-55°C to +232°C)								
Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)								
Thermal Zero Shift	± 1% FS/100°F (Typ.)								
Thermal Sensitivity Shift	± 1% /100°F (Typ.)								
Linear Vibration	100g Peak, Sine up to 5000 Hz								
Humidity	100% Relative Humidity								
Mechanical Shock	20,000g, 100µ sec.								
PHYSICAL Electrical Connection	4 Conductor 30 AWG Shielded Cable 30" Long								
Weight	17 Grams (Max.) Excluding Cable								
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology								
Mounting Torque	80Inch-Pounds (Max.) 6Nm								

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. (I)

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