



## DOWNHOLE PRESSURE TRANSDUCER

### IPT-4N-750HT

- Internally Compensated
- Excellent Long Term Stability .1% Typical
- All Wetted Materials Inconel
- Built In Temperature Sensor
- Silicon on Silicon Integrated Sensor VIS®
- High Unamplified Output
- Intrinsically Safe Applications Available (i.e. IS-IPT-4N-750HT)



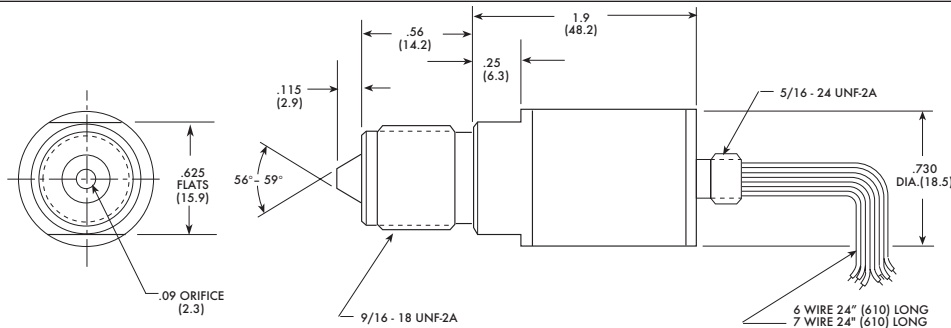
The IPT-4N-750HT Downhole Transducer utilizes Kulite's State of the Art, Silicon on Silicon Isolated Diaphragm sensing technology, to provide excellent long term stability and high accuracy at temperatures to 350°F. All wetted materials are Inconel for corrosive media.

This transducer is equipped with internal circuitry to compensate for the inherent thermal sensitivity of the silicon sensor. With no further compensation, it will offer an overall accuracy improvement across the entire range of typical well environments.



#### WIRING DIAGRAM

WIRE COLOR	FUNCTION
RED	+ IN
YELLOW	+ OUT
BLUE	- OUT
GREEN	- IN
ORANGE	CASE GROUND
BLACK	RTD
WHITE	RTD



INPUT	Pressure Range	70 1000	170 2500	350 5000	700 10000	1050 BAR 15000 PSI
	Operational Mode	Absolute				
	Over Pressure	2 Times Rated Pressure Range or 22500 PSI Whichever is Less				
	Burst Pressure	3 Times Rated Pressure Range or 22500 PSI Whichever is Less				
	Pressure Media	Any Liquid or Gas Compatible With Inconel				
	Rated Electrical Excitation	10 VDC/AC (RMS)				
	Maximum Electrical Excitation	12 VDC/AC (RMS)				
	RTD Excitation	1mA (2 mA Max.)				
	Input Impedance	2500 Ohm (Min.)				
	OUTPUT	Output Impedance	2500 Ohms (Nom.)			
Full Scale Output (FSO)		100 mV (Nom.)				
Temperature Sensor		1000 Ohm Platinum RTD Per DIN EN 60751 (IEC 751) (BS 43760) Class A				
Residual Unbalance		+ 3 mV - 0mV				
Combined Non-Linearity, Hysteresis and Repeatability		± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)				
Resolution		Infinitesimal				
Natural Frequency of Sensor (KHz) (Typ.)		720	910	1120	1350	1500
Insulation Resistance		100 Megohm Min. @ 50 VDC				
ENVIRONMENTAL	Operating Temperature Range	-40°F to +350°F (-40°C to +175°C)				
	Compensated Temperature Range	0°F to +350°F (-18°C to +175°C)				
	Thermal Zero Shift	± .5% FS/100°F (55°C) (Typ.)				
	Thermal Sensitivity Shift	± 1% /100°F (55°C) (Typ.)				
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)				
	Acceleration	100 g				
	Acceleration Sensitivity	Not Greater Than .00003% FS/g				
PHYSICAL	Mechanical Shock	20g half Sine Wave 11 msec. Duration				
	Pressure Port	9/16-18 UNF-24, Mates with Autoclave F250C				
	Electrical Connection	7 Wire 24" (610) Long (Internal RTD)		6 Wire 24" (610) Long (Internal Bridge Temp.)		
	Weight	110 Grams (Max.) Excluding Cable				
Sensing Principle		Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon				

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (K) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.