



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)



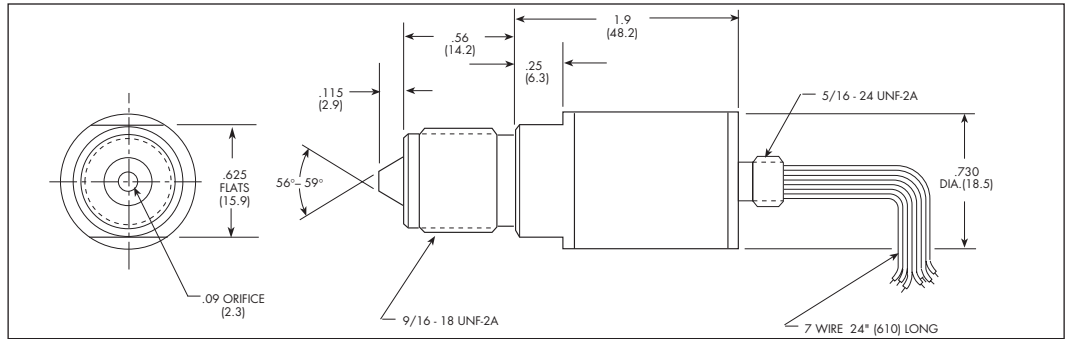
The IPT-4N-750HT Downhole Transducer utilizes Kulite's State of the Art, Silicon on Silicon Isolated Diaphragm sensing technology, to provide excellent long term stability and high accuracy at temperatures to 350°F. All wetted materials are Inconel for corrosive media.

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



	70	170	350	700	1050 BAR
Pressure Range	1000	2500	5000	10000	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	15 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 (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 (38°C) (Typ.)				
Thermal Sensitivity Shift	± 1% /100°F (38°C) (Typ.)				
Linear Vibration	50g Peak, Sine 10 to 5000 Hz				
Acceleration	100 g				
Acceleration Sensitivity	Not Greater Than .00003% FS/g				
Humidity	100% Relative Humidity				
Mechanical Shock	100g, 6 msec.				
PHYSICAL					
Pressure Port	9/16-18 UNF-24 Mates With Autoclave F-250 or Sno-Tric 44F				
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. Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal. (E)