

DOWNHOLE PRESSURE TRANSDUCER

IPT-6-750HT

- · 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-6-750HT)

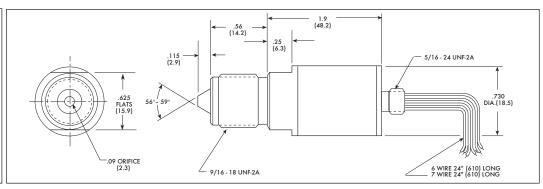
The IPT-6-750HT Downhole Transducer utilizes Kulite's State of the Art, Silicon on Silicon Isolated Diaphragm sensing technology, to provide excellent long term stability and high accuracy at temperatures to 350°F. All wetted materials are Inconel for corrosive media.

This transducer is supplied with a set of coefficients for use in software correction of the thermal shifts of zero and span inherent in the silicon sensor. If requested, a customized lookup table will be supplied. Use of these data yields a significant improvement over alternate technologies at a much more advantageous price.



WIRING DIAGRAM

WIRECOLOR	FUNCTION	
RED	+ IN	
YELLOW	+ OUT	
BLUE	- OUT	
GREEN	– IN	
ORANGE	CASE GROUND	
BLACK	RTD	
WHITE	RTD	
	•	



	Pressure Range	70 170 350 700 1050 BAR 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		
INPUT	Pressure Media	Any Liquid or Gas Compatible With Inconel		
=	Rated Electrical Excitation	5 VDC/AC (RMS)		
	Maximum Electrical Excitation	7.5 VDC/AC (RMS)		
	RTD Excitation	1mA (2 mA Max.)		
	Input Impedance	2500 Ohm (Min.)		
	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		
5	Residual Unbalance	± 5%		
OUTPUT	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)		
0	Resolution	Infinitesimal		
	Natural Frequency of Sensor (KHz) (Typ.)	720 910 1120 1350 1500		
	Insulation Resistance	100 Megohm Min. @ 50 VDC		
NTAL	Operating Temperature Range	-40°F to +350°F (-40°C to +175°C)		
ENVIRONMENTAL	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)		
ENVIE	Mechanical Shock	20g half Sine Wave 11 msec. Duration		
با	Pressure Port	9/16-18 UNF-24, Mates with Autoclave F250C		
PHYSICAL	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. (H) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.