



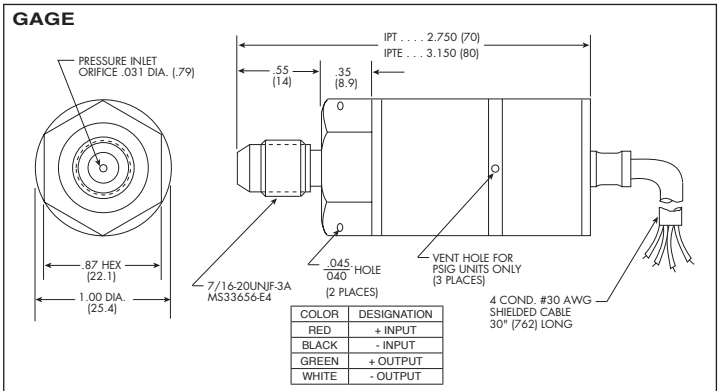
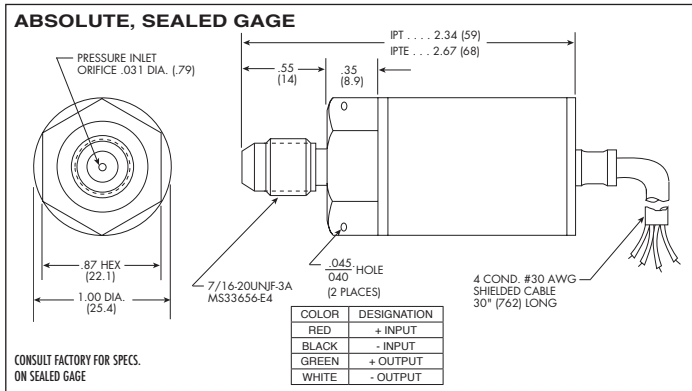
# GENERAL PURPOSE, 5 VDC OUTPUT PRESSURE TRANSDUCERS

## IPT-1100 SERIES IPTE-1100 SERIES (AMPLIFIED)

- High Unamplified Output (IPT-1100)
- 5 VDC Output (IPTE-1100)
- Rugged All Welded Construction
- High Overload Capabilities
- Silicon on Silicon Integrated Sensor **VIS**<sup>®</sup>
- Excellent Long Term Stability
- Intrinsically Safe Applications Available (i.e. IS-IPT-1100 or IS-IPTE-1100)



The ingenious application of modern solid state technology to transducer sensing makes the IPT-1100 Series the most advanced general purpose pressure transducer available. Designed to measure liquid or gas pressure, the transducer is of all-welded stainless steel construction, with integral pressure port and diaphragm. The IPT-1100 provides an extremely rugged, accurate and inexpensive means for pressure-to-voltage conversion. The IPT-1100 Series are ideally suited for a large number of applications in Industry, Process Control, Marine, Automation and Hydraulics. Similar in design to the unamplified IPT-1100 Series, the IPTE-1100 is a 5 volt unit containing a hybrid microelectronic amplifier and regulator within the all welded case.



	IPT-1100				IPTE-1100				
<b>INPUT</b>	Pressure Range	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	170 2500	350 BAR 5000 PSI
	Operational Mode	Absolute, Sealed Gage, Gage							
	Over Pressure	2 Times Rated Pressure Range							
	Burst Pressure	5 Times Rated Pressure Range to Max. of 20000 PSI (1400 BAR)							
	Pressure Media	Any Liquid or Gas Compatible With 17-4 PH or 316 SS							
	Rated Electrical Excitation	10 VDC/AC (RMS)				28 VDC ± 4 VDC			
<b>OUTPUT</b>	Maximum Electrical Excitation	12 VDC/AC (RMS)				N.A.			
	Input Impedance	1000 Ohm (Min.)				N.A.			
	Output Impedance	1000 Ohm (Nom.)				200 Ohm (Typ.)			
	Full Scale Output (FSO)	100 mV (Nom.)				5V ± 3%			
	Bandwidth (-3dB)	DC to 5 KHz							
	Residual Unbalance	± 5% FSO				0 ± 100 mV (4 Wire)		200 mV ± 100 mV (3 Wire)	
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)							
	Resolution	Infinitesimal							
	Natural Frequency (KHz) (Typ.)	120	210	285	425	550	720	910	1120
	Insulation Resistance	100 Megohm Min. @ 50 VDC							
<b>ENVIRONMENTAL</b>	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)							
	Compensated Temperature Range	0°F to +180°F (-18°C to +80°C) Other Ranges Quoted on Request							
	Thermal Zero Shift	± 1% FS/100°F (Typ.)							
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)							
	Linear Vibration	50g Peak, Sine 10 to 2000 Hz							
<b>PHYSICAL</b>	Mechanical Shock	100g half Sine Wave 11 msec. Duration							
	Pressure Port	A. 33656/E4 7/16-20 UNJF-3A				B. 1/4"-18 NPT Male		C. Other Ports Available	
	Electrical Connection	4 Conductor 30 AWG Shielded Cable 30" (762) Long							
	Weight	110 Grams Approx.				120 Grams Approx.			
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon							
Mounting Torque	100 Inch-Pounds (Max.)								

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