

Model Number 121A41	ICP® PRESSURE SENSOR	Revision: C ECN #: 30245
-------------------------------	-----------------------------	-----------------------------

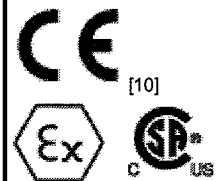
	ENGLISH	SI	
Performance			
Measurement Range(for ±5V output)	100 psi	689.5 kPa	
Sensitivity(± 15 %)	50 mV/psi	7.25 mV/kPa	
Maximum Pressure	8 kpsi	55.16 MPa	[8]
Resolution	4 mpsi	0.028 kPa	
Resonant Frequency	≥60 kHz	≥60 kHz	
Rise Time(Reflected)	≤4 μ sec	≤4 μ sec	
Low Frequency Response(-5 %)	0.5 Hz	0.5 Hz	
Non-Linearity	≤2.0 % FS	≤2.0 % FS	[9]
Environmental			
Acceleration Sensitivity	≤0.05 psi/g	≤0.035 kPa/(m/s ²)	
Temperature Range(Operating)	-65 to +250 °F	-54 to +121 °C	
Hazardous Area Approval	CSA (C-US) NRTL - Canadian Standards Association	CSA (C-US) NRTL - Canadian Standards Association	[1][2][3][4]
Hazardous Area Approval	ATEX	ATEX	[5][6][7]
Electrical			
Output Polarity(Positive Pressure)	Positive	Positive	
Discharge Time Constant(at room temp)	≥1.0 sec	≥1.0 sec	
Excitation Voltage	22 to 28 VDC	22 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	<100 ohm	<100 ohm	
Output Bias Voltage	10 to 15 VDC	10 to 15 VDC	
Electrical Isolation	≥10 ⁸ ohm	≥10 ⁸ ohm	
Physical			
Sensing Geometry	Compression	Compression	
Sensing Element	Quartz	Quartz	
Housing Material	316L Stainless Steel	316L Stainless Steel	
Diaphragm	316L Stainless Steel	316L Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Weight	2.7 oz	75.6 gm	

OPTIONAL VERSIONS

Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used.

NOTES:

[1] AEx ia IIC T4, DIV1 CL1 GR A-D
 [2] Ex ia IIC T4, DIV1 CL1 GR A-D
 [3] AEx nA IIC T4, DIV2 CL1 GR A-D
 [4] Ex nL IIC T4, DIV2 CL1 GR A-D
 [5] Ex ia IIC T4.
 [6] Ex nL IIC T4.
 [7] Ex nA IIC T4.
 [8] Due to high sensitivity, the static pressure should be applied and removed very slowly. Rate should prevent more than 10 Volt change in output until Output Bias Voltage returns to normal (approximately 15 times discharge time constant).
 [9] Zero-based, least-squares, straight line method.
 [10] See PCB Declaration of Conformance PS059 for details.



All specifications are at room temperature unless otherwise specified. In the interest of constant product improvement, we reserve the right to change specifications without notice.

ICP® is a registered trademark of PCB Group, Inc.

Entered: <i>JH</i>	Engineer: <i>BM</i>	Sales: <i>DPC</i>	Approved: <i>EB</i>	Spec Number:
Date: <i>3-12-09</i>	Date: <i>3-10-09</i>	Date: <i>3-9-09</i>	Date: <i>3-10-09</i>	38020

PCB PIEZOTRONICS™
PRESSURE DIVISION

3425 Walden Avenue, Depew, NY 14043

Phone: 716-684-0001
 Fax: 716-686-9129
 E-Mail: pressure@pcb.com