

Model Number 138A05		ICP® PRESSURE SENSOR		Revision: M ECN #: 55416		
Performance		ENGLISH	SI	OPTIONAL VERSIONS		
Measurement Range(for ±5V output)		5,000 psi	34,475 kPa	Optional versions have identical specifications and accessories as listed for the standard model except where noted below. More than one option may be used. W - Water Resistant Cable		
Useful Overrange(for ± 10V output)		10,000 psi	68,950 kPa			[1]
Sensitivity(± 15 %)		1.0 mV/psi	0.15 mV/kPa			
Maximum Pressure		50,000 psi	344,750 kPa			
Resolution		0.1 psi	0.7 kPa			[2]
Resonant Frequency		≥ 1,000 kHz	≥ 1,000 kHz			
Rise Time(Reflected)		≤ 1.5 μ sec	≤ 1.5 μ sec			
Low Frequency Response(- 5 %)		1.7 Hz	1.7 Hz			
Non-Linearity		≤ 2.0 % FS	≤ 2.0 % FS			[3]
Environmental						
Temperature Range(Operating)		-10 to +100 °F	-23 to +37.8 °C			
Maximum Shock		20,000 g pk	196,140 m/s² pk			
Electrical						
Output Polarity(Positive Pressure)		Positive	Positive			
Discharge Time Constant(at room temp)		≥ 0.3 sec	≥ 0.3 sec			
Excitation Voltage		20 to 30 VDC	20 to 30 VDC			
Constant Current Excitation		2 to 20 mA	2 to 20 mA			
Output Impedance		≤ 100 Ohm	≤ 100 Ohm			
Output Bias Voltage		8 to 14 VDC	8 to 14 VDC			
Physical						
Sensing Element		Tourmaline	Tourmaline			
Housing Material		Stainless Steel	Stainless Steel			
Electrical Connector		10-32 Coaxial Jack	10-32 Coaxial Jack			
Weight		0.75 oz	21.0 gm			
NOTES:						
[1]For +10 volt output, minimum 24 VDC supply voltage required. Negative 10 volt output may be limited by output bias.						
[2]Typical.						
[3]Zero-based, least-squares, straight line method.						
[4]See PCB Declaration of Conformance PS023 for details.						
SUPPLIED ACCESSORIES:						
Model PCS-6AE Calibration of dynamic pressure sensors at 10% and 100% of sensor range up to a maximum of 20k psi						
Entered: ND		Engineer: RPF		Sales: MV		
Date: 12/13/2024		Date: 12/13/2024		Date: 12/13/2024		
				Approved: RPF		
				Spec Number:		
				138-1050-80		
						
				AN AMPHENOL COMPANY		
				Phone: 716-684-0001		
				Fax: 716-684-0987		
				E-Mail: info@pcb.com		
3425 Walden Avenue, Depew, NY 14043						

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.

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