Model Number 639A91	TRIAXIAL ICP® ACCELEROMETER						
Performance	ENGLISH	SI		1			
Sensitivity(± 10 %)	100 mV/g	10.2 mV/(m/s²)	[2]	Optional versions	have iden		
Measurement Range	± 50 g pk	± 491 m/s² pk			xcept whe		
Frequency Range(± 5 %)	8.0 to 5500 Hz	8.0 to 5500 Hz					
Frequency Range(± 3 dB)	0.5 to 10 kHz	0.5 to 10 kHz		EX - Hazardous	Area Appro		
Resonant Frequency	≥ 25 kHz	≥ 25 kHz					
Broadband Resolution(1 to 10,000 Hz)	.0003 g rms	.003 m/s² rms	[1]				
Non-Linearity	≤ 1 %	≤ 1 %	[3]				
Transverse Sensitivity	≤ 5 %	≤ 5 %					
Environmental							
Overload Limit(Shock)	± 5000 g pk	± 5000 g pk					
Temperature Range(Operating)	-65 to 250 °F	-54 to 121 °C					
Temperature Response	See Graph	See Graph	[1]	NOTES:			
Electrical				[1] Typical.			
Excitation Voltage	18 to 30 VDC	18 to 30 VDC		[2] Conversion Fa			
Constant Current Excitation	2 to 20 mA	2 to 20 mA		[3] Zero-based, le			
Output Impedance	≤ 150 Ohm	≤ 150 Ohm		[4] See PCB Decl	aration of		
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC					
Discharge Time Constant	≥ .32 sec	≥ .32 sec					
Settling Time(within 10% of bias)	<2 sec	<2 sec					
Spectral Noise(1 Hz)	90 μg/√Hz	883 (µm/sec ²)/√Hz	[1][2]				
Spectral Noise(10 Hz)	20 μg/√Hz	196 (μm/sec ²)/√Hz	[1][2]				
Spectral Noise(100 Hz)	10 μg/√Hz	98.1 (μm/sec ²)/√Hz	[1][2]				
Spectral Noise(1 kHz)	3.0 µg/√Hz	29.4 (µm/sec ²)/√Hz	[1][2]				
Electrical Isolation(Case)	≥ 10 ⁸ Ohm	≥ 10 ⁸ Ohm					
Physical							
Sensing Element	Ceramic	Ceramic					
Sensing Geometry	Shear	Shear					
Housing Material	Stainless Steel	Stainless Steel					
Sealing	Hermetic	Hermetic					
Size (Height x Length x Width)	.72 in x .95 in x .95 in	18.3 mm x 24.1 mm x 24.1 mm					
Weight(Maximum)	3.0 oz	85 gm					
Electrical Connector	4-Pin, M12	4-Pin, M12					
Electrical Connection Position	Side	Side					
Mounting	Through Hole	Through Hole		1			
	Typical Sensitivity Deviation vs Temperature						
	Sensitivity 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			SUPPLIED ACCESSOR Model 081A56 Captive mou Model ACS-1T NIST traceat			
(F	Serial -10	_ _					
[4]	-20 - -100	0 100 200	300	Entered: LK	Engineer		
				Date: 6/20/2017	Date: 6/2		



Revision: NR

ECN #: 46924

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

EX - Hazardous Area Approval- contact factory for specific approvals

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s².
- [3] Zero-based, least-squares, straight line method.
 [4] See PCB Declaration of Conformance PS023 for details.

SUPPLIED ACCESSORIES:

Model 081A56 Captive mounting bolt 1/4-28 x .75" (1)
Model ACS-1T NIST traceable triaxial amplitude response, 10 Hz to upper 5% frequency. (1)

Entered: LK	Engineer: JJD	Sales: JJB	Approved: MC	Spec Number:
Date: 6/20/2017	Date: 6/20/2017	Date: 6/20/2017	Date: 6/20/2017	64198



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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.

Temperature (°F)

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