



603M215AQT INDUSTRIAL ICP® ACCELEROMETER

Performance

	<u>ENGLISH</u>	<u>SI</u>	
Sensitivity ($\pm 10\%$)	100 mV/g	10.2 mV (m/s^2)	[2]
Measurement Range	± 50 g	± 490 m/s^2	
Frequency Range (± 3 dB)	30 to 600,000 cpm	0.5 to 10,000 Hz	[3]
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution (1 to 10,000 Hz)	350 μ g	3434 $\mu m/s^2$	[1]
Non-Linearity	$\pm 1\%$	$\pm 1\%$	[4]
Transverse Sensitivity	$\leq 7\%$	$\leq 7\%$	

Environmental

Overload Limit (Shock)	5000 g pk	49,050 m/s^2 pk
Temperature Range	-65 to +250 °F	-54 to +121 °C
Temperature Response	See Graph	See Graph
Enclosure Rating	IP68	IP68

Electrical

Settling Time (within 1% of bias)	≤ 2.0 sec	≤ 2.0 sec	
Discharge Time Constant	≥ 0.3 sec	≥ 0.3 sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	< 150 ohm	< 150 ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	8 μ g/ \sqrt{Hz}	78.5 ($\mu m/s^2$)/ \sqrt{Hz}	[1]
Spectral Noise (100 Hz)	5 μ g/ \sqrt{Hz}	49.1 ($\mu m/s^2$)/ \sqrt{Hz}	[1]
Spectral Noise (1 kHz)	4 μ g/ \sqrt{Hz}	39.2 ($\mu m/s^2$)/ \sqrt{Hz}	[1]
Electrical Isolation (Case)	$> 10^8$ ohm	$> 10^8$ ohm	

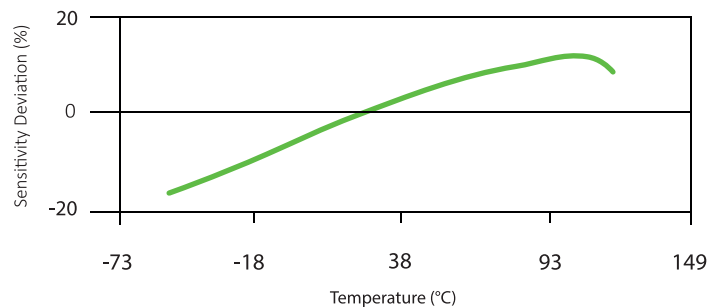
Physical

Size (Hex x Height)	11/16 in x 1.65 in	18 mm x 42.2 mm	
Weight	1.8 oz	51 gm	
Mounting Thread	1/4-28 Female	No Metric Equivalent	[5]
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m	
Sensing Element	Ceramic	Ceramic	
Sensing Geometry	Shear	Shear	
Housing Material	Stainless Steel	Stainless Steel	
Sealing	Welded Hermetic	Welded Hermetic	
Electrical Connector	2-Pin MIL-C-5015	2-Pin MIL-C-5015	
Electrical Connection Position	Top	Top	

NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s^2 .
- [3] The high frequency tolerance is accurate within $\pm 10\%$ of the specified frequency.
- [4] Zero-based, least-squares, straight line method.
- [5] 1/4-28 has no equivalent in S.I. units.

Typical Sensitivity Deviation vs Temperature

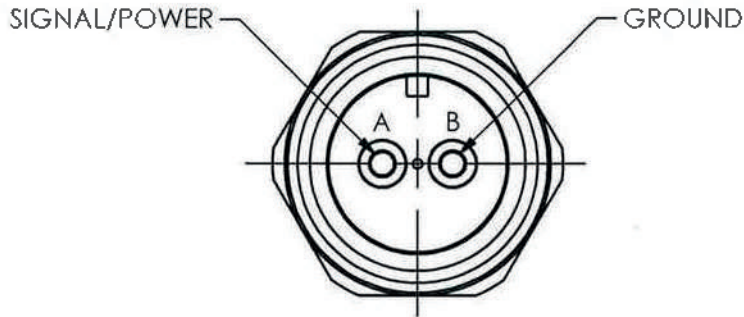




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ELECTRICAL CONNECTOR
5/8-24 UNEF-2A
2-PIN (MIL-C-5015)

11/16 (18) HEX

.030 [.76]

2X Ø.672 [17.07]

1.66 [42.1]

1/4-28 UNF-2B ∇ .20 [5.1]

B

B

A

A

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		TITLE OUTLINE DRAWING MODEL 603M215AQT ACCELEROMETER	 E-MAIL: sales@aqtech.com	
DIMENSIONS IN INCHES	DIMENSIONS IN MILLIMETERS [IN BRACKETS]		CODE IDENT. NO.	DWG. NO.
DECIMALS XX ±.03 XXX ±.010	DECIMALS X ± 0.8 XX ± 0.25		SCALE: 2X	SHEET 1 OF 1
ANGLES ± 2 DEGREES	ANGLES ± 2 DEGREES			
FILLETS AND RADII .003 - .005	FILLETS AND RADII 0.07 - 0.13			

2



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