



# 602M167AQT INDUSTRIAL ICP® ACCELEROMETER

## Performance

	<b>ENGLISH</b>	<b>SI</b>	
Sensitivity ( $\pm 10\%$ )	100 mV/g	10.2 mV (m/s <sup>2</sup> )	[2]
Measurement Range	$\pm 50$ g	$\pm 490$ m/s <sup>2</sup>	
Frequency Range ( $\pm 3$ dB)	30 to 480,000 cpm	0.5 to 8000 Hz	[3]
Resonant Frequency	1500 kcpm	25 kHz	[1]
Broadband Resolution (1 to 10,000 Hz)	350 $\mu$ g	3434 $\mu$ m/s <sup>2</sup>	[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 <sup>2</sup> pk	
Temperature Range	-65 to +250 °F	-54 to +121 °C	
Temperature Response	See Graph	See Graph	
Enclosure Rating	IP68	IP68	

## Electrical

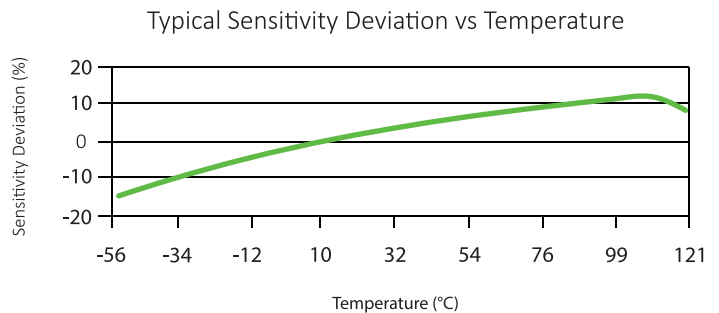
Settling Time (within 1% of bias)	$\leq 2.0$ sec	$\leq 2.0$ sec	
Discharge Time Constant	$\geq 0.3$ sec	$\geq 0.3$ sec	
Excitation Voltage	18 to 28 VDC	18 to 28 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Impedance	$< 150$ ohm	$< 150$ ohm	
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC	
Spectral Noise (10 Hz)	8.0 $\mu$ g/ $\sqrt$ Hz	78.5 ( $\mu$ m/s <sup>2</sup> )/ $\sqrt$ Hz	[1]
Spectral Noise (100 Hz)	5 $\mu$ g/ $\sqrt$ Hz	49.1 ( $\mu$ m/s <sup>2</sup> )/ $\sqrt$ Hz	[1]
Spectral Noise (1 kHz)	4 $\mu$ g/ $\sqrt$ Hz	39.2 ( $\mu$ m/s <sup>2</sup> )/ $\sqrt$ Hz	[1]
Electrical Isolation (Case)	$> 10^8$ ohm	$> 10^8$ ohm	

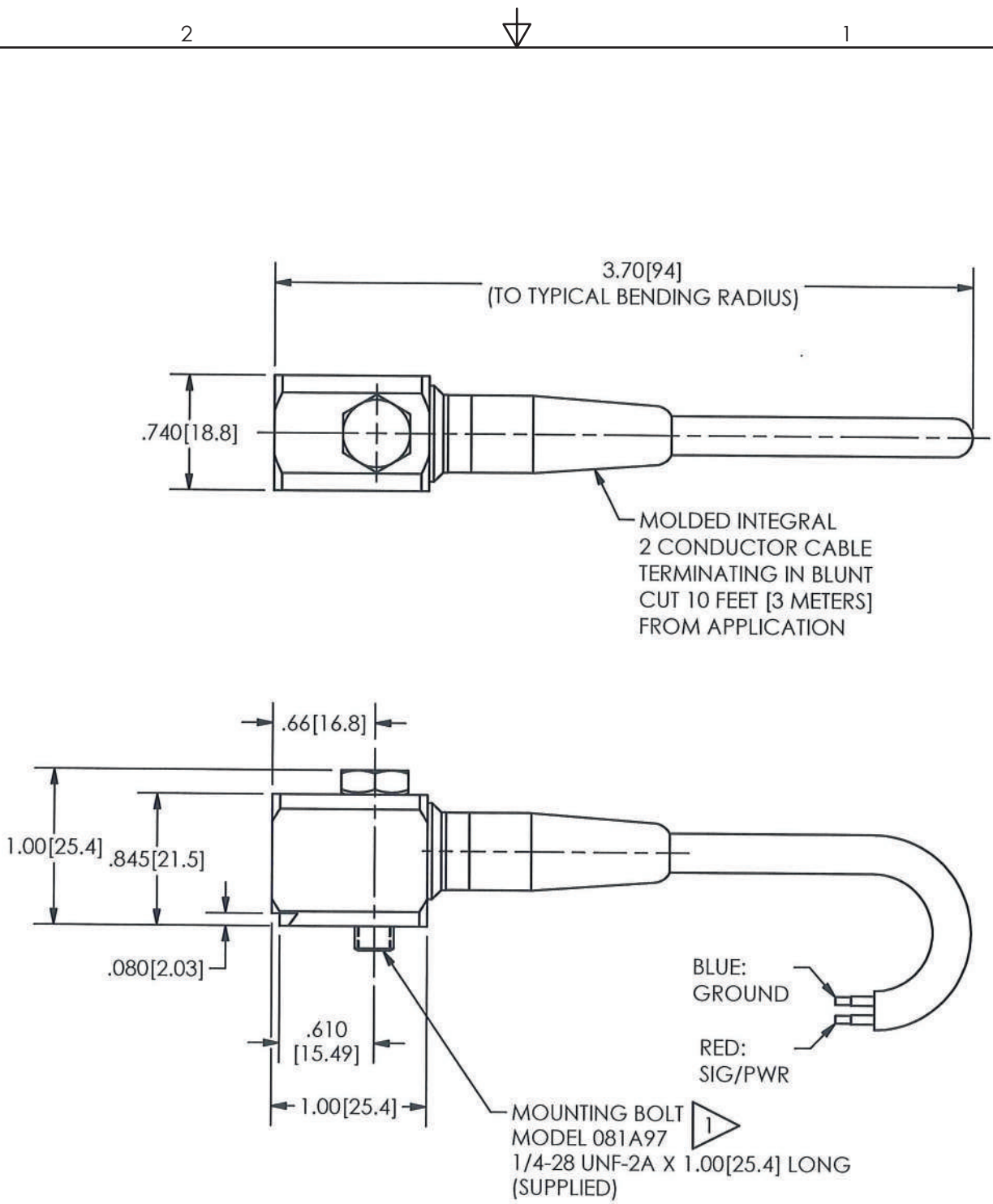
## Physical


Size (Length x Width x Height)	3.70 in x 0.74 in x 0.845 in	94 mm x 18.8 mm x 21.5 mm	
Weight (without cable)	2.61 oz	74.0 gm	
Mounting Thread	1/4-28 Male	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	Molded Integral Cable	Molded Integral Cable	
Electrical Connection Position	Side	Side	
Cable Length	10 ft	3.0 m	
Cable Type	Polyurethane	Polyurethane	[6]

### NOTES:

- [1] Typical.
- [2] Conversion Factor 1g = 9.81 m/s<sup>2</sup>.
- [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.
- [6] Twisted shielded pair.





UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		TITLE  OUTLINE DRAWING MODEL 602M167AQT ACCELEROMETER	 E-MAIL: sales@aqtech.com	
DIMENSIONS IN INCHES	DIMENSIONS IN MILLIMETERS [ IN BRACKETS ]		CODE IDENT. NO.	DWG. NO.
DECIMALS XX ±.03 XXX ±.010  ANGLES ± 2 DEGREES	DECIMALS X ± 0.8 XX ± 0.25  ANGLES ± 2 DEGREES		SCALE: FULL	SHEET 1 OF 1
FILLETS AND RADII .003 - .005	FILLETS AND RADII 0.07 - 0.13			