



g

AAA640 SERIES

DC-Operated Accelerometerwith unfiltered and low passfilter outputs

FEATURES

- Ranges±1g to ±20g
- Essentiallyzero temperature coefficent of damping ratio
- Filtered and unfiltered outputs simultaneously available
- Integral temperature compensation
- DCinput DCoutput
- Signalground isolated from power ground
- High reliability

BENEFITS

- High resolution down to 0.001%FRO(max)
- Low weight 120g
- Wide temperature range -40 °Cto +100 °C



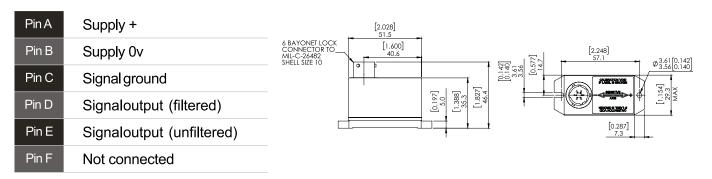
APPLICATIONS

- Data acquisition Systems
- Roadbed analysis
- Crashrecorders
- Railways
- Vibration monitoring
- Simulators

ELECTRICAL CONNECTIONS

SIDEVIEW

PLAN VIEW







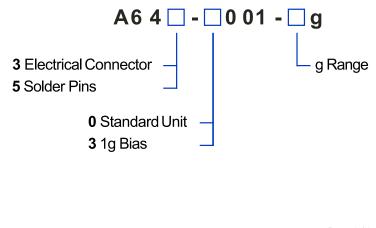
TECHNICAL SPECIFICATIONS

Specifications by Range @25°C		±1g	±2g	±3g	±5g	±10g	±20g	
Output Impedance	Ω (max)		1					
Output Noise	V rms (max)		5					
Filtered Output Response	dB		-3					
Non-linearity (seenote 2)	% FRO(max)		±0.5					
Hysteresis	% FRO(max)		0.02					
Resolution	% FRO(min)		0.001					
Cross-axisSensitivity (seenote 3)	% FRO(max)		±1					
Zero Offset (seenote 4)	% FRO(max)	±2						
Damping Ratio		0.7 (±0.2)						
Thermal Zero Shift	%FRO/°C(max)	±0.02						
Thermal Sensitivity Shift	%Reading/°C (max)		±0.02					
Weight	grams (max)			120)			
Electrical								
Full Range Output (FRO)(seenote 1)	Volts dc	±5 (±2%)						
Input Voltage	Volts dc	+6 to 32VdcUnregulated						
Input Current	mA dc (max)	100						
Environmental Characteristics								
Operating Temperature Range	C°	-40 to 100						
Compensated Temperature Range	°C		0 to 50					
Storage Temperature Range	g		-55 to 130					
Shock	g		200 for 2ms					
Insulation Resistance	MΩ (@50Vdc)		20					

NOTES

- Full RangeOutput (FRO)isdefined asthe full acceleration excursionfrom positive to negative, i.e.±2g = 4g
- 2. Non-linearity is determined by the method of least squares
- 3. Cross-axissensitivityis the output of unit when subjected to full range acceleration in cross-axis
- 4. Zerooffset isspecified under static conditions with no vibration inputs

MODEL DESIGNATION & ORDERING CODE



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Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.

Germany/Austria/Switzerland info@althen.de

Benelux sales@althen.nl France info@althensensors.fr Sweden info@althensensors.se USA/Canada info@althensensors.com Other countries info@althensensors.com