Model 64 Accelerometer

DC Response

Durable Cable

Small Package

Reliable Performance

DESCRIPTION

The Model 64 accelerometer is based on an advanced piezoresistive MEMS sensing element which offers exceptional dynamic range and stability. This unit features a full bridge output configuration with a compensated temperature range from 0 to +50° C. A slight amount of internal gas damping provides outstanding shock survivability and a flat amplitude/phase response up to 7kHz. The Model 64-2000 is compliant with SAE J211 standards for anthropomorphic dummy instrumentation.

FEATURES

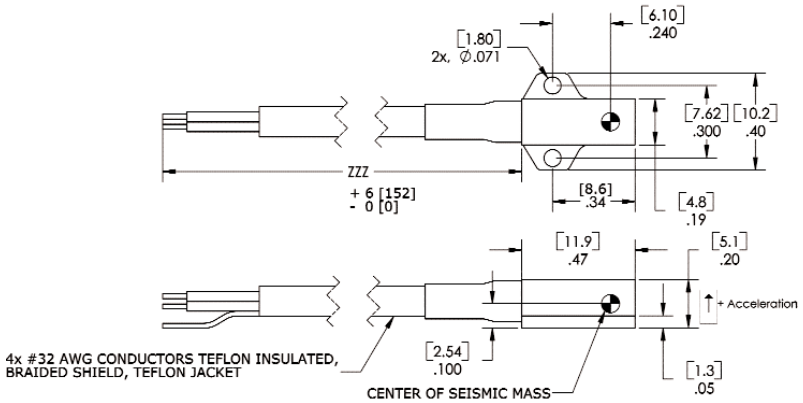
- 2nd GEN MEMS Sensing Element
- ± 50 to ±6,000 g Ranges
- 2-10 Vdc Excitation for Maximum Flexibility
- 0-50°C Temperature Compensated Range
- High Impact Teflon®-jacketed Cable
- 1% Transverse Sensitivity Available
- <± 25 mV Zero Offset

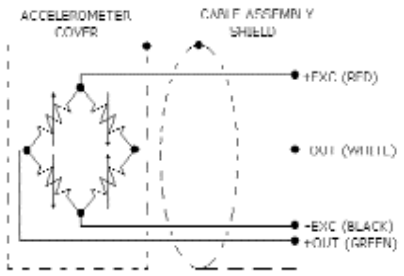
APPLICATIONS

- Safety Crash Testing
  - Auto
  - Truck
  - Recreational Vehicles
- Shock Testing

dimensions

(Dimensions in inches)





www.meas-spec.com
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measurement SPECIALTIES

Model 64 Accelerometer

performance specifications

All values are typical at +24°C, 100 Hz and 10 Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

Parameters							Notes
DYNAMIC							
Range(g)	±50	±100	±200	±500	±2000	±6000	
Sensitivity (mV/g)	2	0.9	0.9	0.4	0.15	0.05	
Frequency Response (Hz)	0-400	0-500	0-600	0-800	0-2000	0-2000	±2%
	0-1000	0-1200	0-1500	0-2000	0-5000	0-5000	±5%
	0-1400	0-1500	0-2100	0-2800	0-7000	0-7000	±1dB
Resonance (Hz)	4000	6000	8000	15000	26000	26000	
Shock Limit	5000	5000	5000	5000	5000	10000	g
Non-Linearity			±1		% of Reading		±2% of Reading for ±6,000 g
Transverse Sensitivity			<3		%		1% available
Zero Acceleration Output			<±25		mV		
Thermal Zero Shift			±0.04 (±0.02)		%FSO/°C(%FSO/°F)		0°C to +50°C (32 to -122°F)
Thermal Sensitivity Shift			±0.1 (±0.06)		%/°C(%/°F)		0°C to +50°C (32 to -122°F)
ELECTRICAL							
Voltage Excitation			2 to 10		Vdc		Output ratiometric to excitation. Do not reverse polarity.
Input Resistance			3500-4800		Ω		Measured between +EXC and - EXC
Output Resistance (Varies with current)			2700-4800		Ω		Measured between +OUT and - OUT
Insulation Resistance			>100		MΩ		At 50 Vdc, leads to case and shield
Ground Isolation							Shield is connected to cover but isolated from mounting surface
ELECTRICAL							
Cable Output Connections			+EXC		RED		32 AWG Teflon® Insulated
			-EXC		BLACK		32 AWG Teflon® Insulated
			+OUT		GREEN		32 AWG Teflon® Insulated
			-OUT		WHITE		32 AWG Teflon® Insulated
			CABLE SHIELD		N/A		Braided Wires
			CABLE JACKET		WHITE		Santoprene
PHYSICAL							
Case Material							Anodized aluminum
Cover Material							Brass
Cable Connections							Integral 30 foot cable
Weight			1		gram		
Mounting							2x 0-80 x 3/16 socket head cap screws (Flat Washers and Allen Wrench included)
Mounting Torque			<3(<0.3)		lb-in (Nm)		
ENVIRONMENTAL							
Operating Temperature			-40 to +121		°C		
Humidity							Epoxy Sealed
PART NUMBERING							
Model Number + Range (g's) + Excitation Vdc + Cable Length + Options					(see sample below)		

ordering information

MODEL NUMBER:
64-ZZZZ-ZZ-ZZZ-XY
- XY — NO CONNECTOR
- ZZZ — CABLE LENGTH (INCHES) [e.g. 360 IS 360 INCHES OF CABLE]
- ZZ — EXCITATION (Vdc) [e.g. 10 IS 10 Vdc EXCITATION]
- ZZZZ — RANGE (g) [e.g. 0200 IS 200g RANGE]

Supplied Materials:
1. Calibration Certificate
2. Mounting Screws (P/N AC-D02009) x 2
3. Washers (P/N AC-D02008) x 2
4. Allen Wrench

Custom connector options are available.
Contact Measurement Specialties, Inc. for applicable model number.

www.meas-spec.com
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measurement SPECIALTIES

Distribuidor

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