

# Model 63 Accelerometer

- DC Response
- Durable Cable
- Small Package
- Reliable Performance



The **Model 63** accelerometer is a small, compact triaxial device designed for vehicle impact and road testing. Its mechanical overload stops provide high shock protection in rugged applications. Featuring ranges from 500 g to 2000 g and frequency response to 3000 Hz, this sensor is easily mounted in hard to reach places.

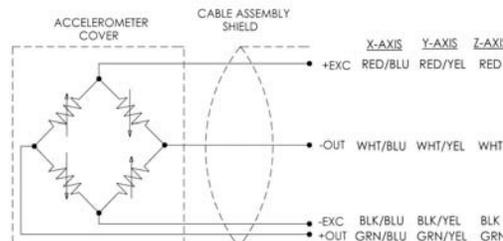
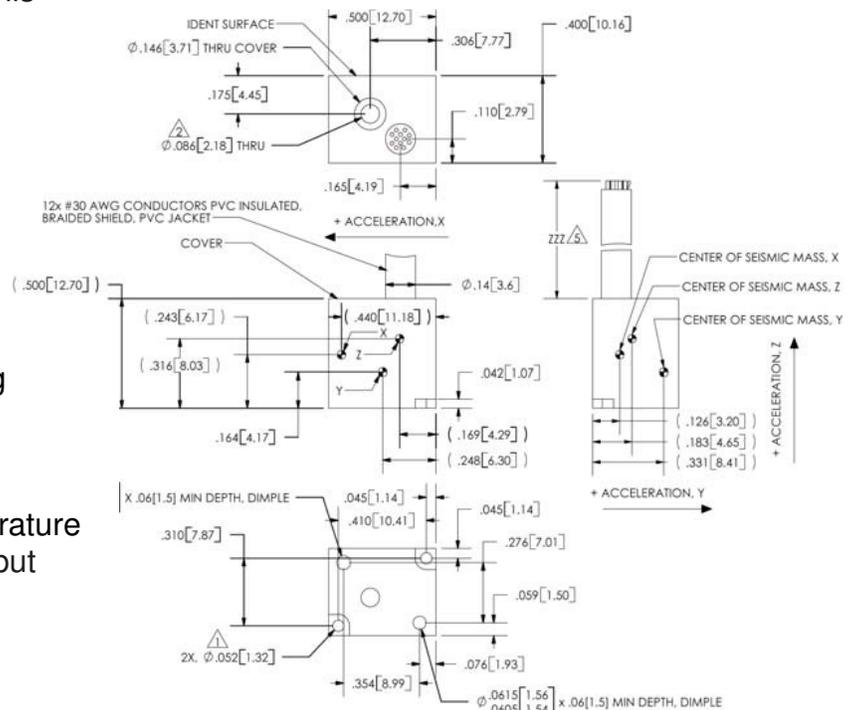
## FEATURES

- 2<sup>nd</sup> Generation MEMS Sensing Element
- 2000 g Full Scale Range
- 2-10 VDC Excitation
- -20 to +85 °C Operating Temperature
- <±50 mV Zero Measurand Output
- Mechanical Overload Stops
- Replaceable Sensors

## APPLICATIONS

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

## dimensions



TABULATION $\Delta$	
ZZZ	TOLERANCE
$\leq 12$ [305]	+ 1 [25] - 0 [0]
$> 12$ [305] & $\leq 60$ [1524]	+ 2 [51] - 0 [0]
$> 60$ [1524] & $\leq 120$ [3048]	+ 4 [102] - 0 [0]
$> 120$ [3048] & $\leq 360$ [9144]	+ 6 [152] - 0 [0]
$> 360$ [9144]	+ 12 [305] - 0 [0]

# Model 63 Accelerometer

## performance specifications

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

### PARAMETERS

#### DYNAMIC

				Units	Notes
Range	500	1000	2000		
Sensitivity	0.9	0.15	0.15	mV/g	
Frequency Response (Z - Axis)	0-3000	0-3000	0-3000	Hz	±5%
Frequency Response (X & Y - Axis)	0-1500	0-1500	0-1500	Hz	±5%
Resonance	17,000	22,000	26,000	Hz	Gas Damped
Non-Linearity		±1		% FSO	
Transverse Sensitivity		<3		%	
Zero Acceleration Output		<±50		mV	
Thermal Zero Shift, 0 - 50°C(32 - 122°F)		±0.05 (±0.03)		%FSO/°C (%FSO/°F)	
Thermal Sensitivity Shift, 0 - 50°C(32 - 122°F)		±0.1 (±0.06)		%/°C(%/°F)	

#### ELECTRICAL

Voltage Excitation	2 to 10			Vdc	
Input Impedance	3500 to 4800			S	
Output Impedance (Varies with current)	2700 to 4800			S	
Insulation Resistance	>100			MS	
Ground Isolation	Isolated				
Cable Output	12 x 30 AWG Conductors				72" Standard Length

#### PHYSICAL

Case Material	Stainless Steel				
Weight	7			grams	Without Cable
Mounting	Screw				M2 X 0.4, 16 mm length
Mounting Torque	3(0.3)				Lb-in(Nm)

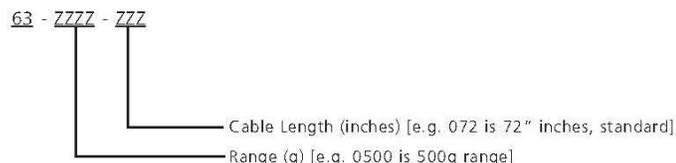
#### ENVIRONMENTAL

Shock Limit	5000	7000	10000	g's	
Operating Temperature	-20 to +85 / -4 to +185				°C/°F
Humidity					Epoxy sealed

PART NUMBERING Model Number+Range+Cable Length

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## ordering info



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