

Model 1203 Accelerometer

DC Response

Durable Cable

Reliable Performance

Low Cost

**RoHS
Compliant**

Triaxial

DESCRIPTION

The Model 1203 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 50 g to 1000 g and frequency response to 3000 Hz, this sensor is easily mounted in hard to reach places on vehicles under test.

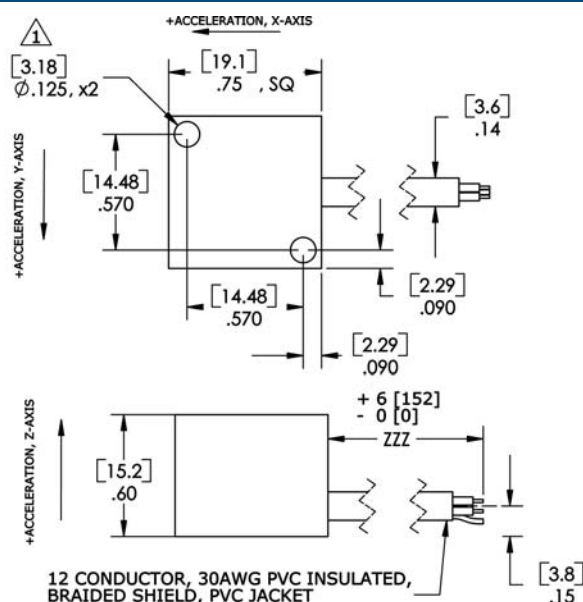
FEATURES

- ◆ 2nd Generation MEMS Sensing Element
- ◆ 1000 g Full Scale Range
- ◆ 2-10 VDC Excitation
- ◆ 0-50 °C Temperature Compensation
- ◆ ±40 mV Zero Measurand Output
- ◆ Gas Damping
- ◆ Mechanical Overload Stops
- ◆ Designed for Screw Mounting

APPLICATIONS

- ◆ Crash Testing
- ◆ Impact Testing
- ◆ Off-Road Testing
- ◆ Road Testing

dimensions



(Dimensions in inches [mm])

STANDARD TOLERANCE

INCHES	(MILLIMETERS)
.XX = $\pm .03$ inch	(.X $\pm .8$)
.XXX = $\pm .010$ inch	(.XX $\pm .25$)

(Dimensions in inches [mm])

ACCELEROMETER CASE

CABLE ASSEMBLY SHIELD

	X-AXIS	Y-AXIS	Z-AXIS
+EXC	RED/BLU	RED/YEL	RED
-OUT	WHT/BLU	WHT/YEL	WHT
-EXC	BLK/BLU	BLK/YEL	BLK
+OUT	GRN/BLU	GRN/YEL	GRN

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performance specifications

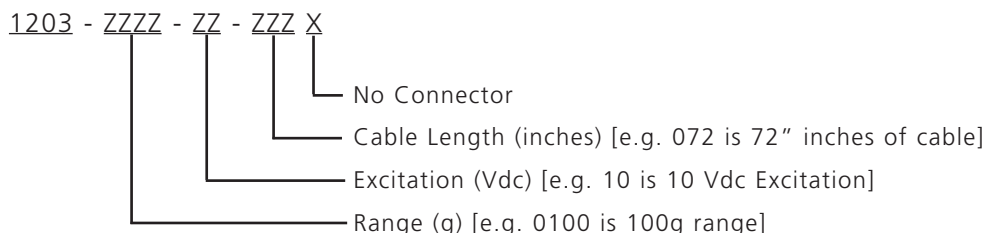
All values are typical at 24 °C, 100 Hz and 10 Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC						Units	Notes
Range	50	100	200	500	1000		
Sensitivity	2.0	0.9	0.9	0.4	0.15	mV/g	
Frequency Response	0-600	0-800	0-1000	0-1200	0-1500	Hz	±10%
Resonance	2000	3000	4000	6000	7000	Hz	Gas Damped
Non-Linearity			±1			% FSO	
Transverse Sensitivity			3			%	
Zero Acceleration Output			<±40			mV	
Thermal Zero Shift			±0.05 (±0.03)			%FSO/°C (%FSO/°F)	
Thermal Sensitivity Shift			±0.2 (±0.11)			%/°C (%/°F)	
ELECTRICAL							
Voltage Excitation			2 to 10			Vdc	
Input Impedance			3500 to 4800			Ω	
Output Impedance (Varies with current)			2700 to 4800			Ω	
Insulation Resistance			>100			MΩ	
Ground Isolation			Isolated				
Cable Output			Tinned Leads				72" Standard Length
PHYSICAL							
Case Material			Aluminum				
Weight			20			grams	Without Cable
Mounting			Screw				
ENVIRONMENTAL							
Shock Limit	3000	3000	4000	5000	5000	g's	
Operating Temperature			-20 to +85			°C	
Humidly							Epoxy sealed

PART NUMBERING Model Number+Range+Cable Length

ordering information



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