

Model 1201F Accelerometer

DC Response

Durable Cable

Reliable Performance

Low Cost

DESCRIPTION

The Model 1201F accelerometer is a small, compact uniaxial 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 1000g and frequency response to 3000 Hz, this sensor is easily mounted in hard to get places on vehicles under test.



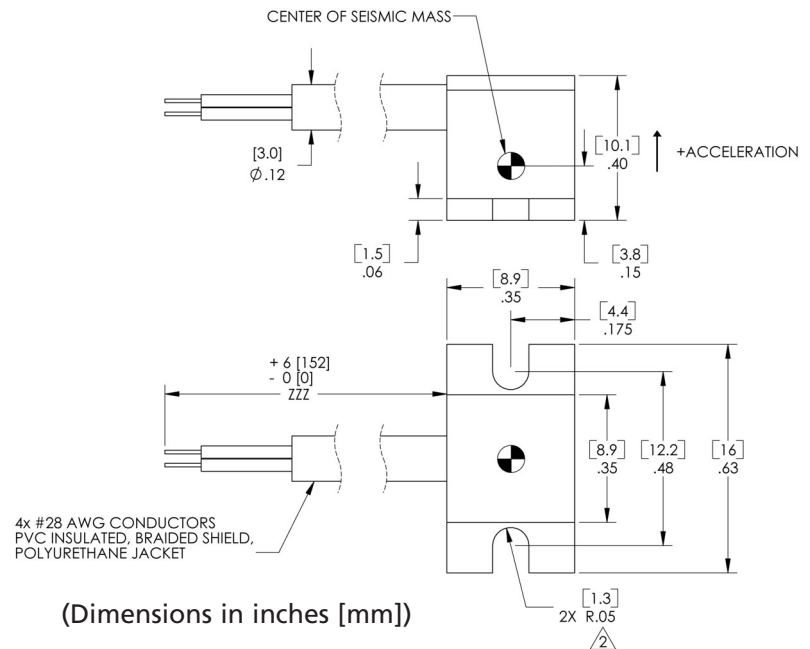
dimensions

FEATURES

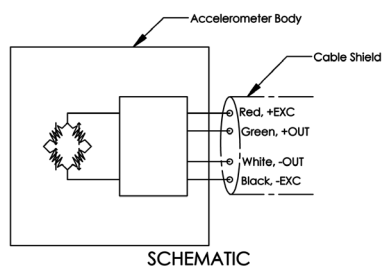
- ◆ 2nd GEN MEMS Sensing Element
- ◆ 1000 g Full Scale Range
- ◆ 2-10 VDC Excitation for Maximum Flexibility
- ◆ 0-50 °C Temperature Compensation
- ◆ ±40 mV Zero Measurand Output
- ◆ Gas Damping
- ◆ Connector Options
- ◆ Mechanical Overload Stops
- ◆ Designed for Screw Mounting

APPLICATIONS

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



(Dimensions in inches [mm])



Model 1201F Accelerometers

performance specifications

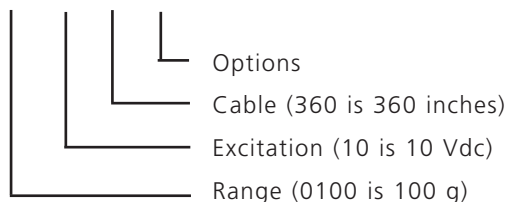
All values are typical at 25 °C, 100 Hz and 10 Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC						Units	Notes
Range	±50	±100	±200	±500	±1000	g	
Sensitivity	2.0	1	0.5	0.2	0.15	mV/g	
Frequency Response	1100	1500	2000	2700	3000	Hz	±10%
Resonance	>3K	>4K	>5K	>10K	>10K	Hz	Gas Damped
Non-Linearity	±1.0	±1.0	±1.0	±1.0	±1.0	% FSO	
Transverse Sensitivity			3			%	Typical
Zero Acceleration Output			±40			mV	
Thermal Zero Shift			±1			%Span	Typical
Thermal Sensitivity Shift			±0.2			%/°C	0-50°C
ELECTRICAL							
Voltage Excitation			2 to 10			Vdc	
Input Resistance			4000			Ω	Typical
Output Resistance			4000			Ω	Typical
Insulation Resistance			100			MΩ	MAX
Ground Isolation			Isolated				
Identification Chip			Customer Specified				Dallas DS2401
Cable Output Connections			30 Feet Integral, Tinned Leads or Customer Specified				Lemo, Deutsch, Tajimi
ELECTRICAL							
+ EXC						RED	28 AWG, PVC insulated
- EXC						BLACK	28 AWG, PVC insulated
+ OUT						GREEN	28 AWG, PVC insulated
- OUT						WHITE	28 AWG, PVC insulated
CABLE SHIELD						N/A	Braided Wires
CABLE JACKET						WHITE	POLYURETHANE
PHYSICAL							
Case Material			Anodized Aluminum				Black
Bracket Material			Anodized Aluminum				Black
Weight			3			grams	Without Cable
Mounting			Adhesive/Screw Mount				
ENVIRONMENTAL							
Shock Limit	3000	3000	4000	5000	5000	g's	
Operating Temperature					-20 to +85	°C	
Humidly							Epoxy sealed
PART NUMBERING Model Number+Range+Excitation+Cable Length+Options							

ordering information

1201F-ZZZZ-ZZ-ZZZX



Options
X = None
D = Deutsch Connector (P/N TBD)
L = Lemo Connector (P/N FGG.18.307.CYCD42)
T = Tajimi Connector (P/N R05PB5M)

Example: 1201F-1000-10-360X

Model 1201F, 1000g Full Scale Range, 10Vdc excitation, 360 inches cable, no options