

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.



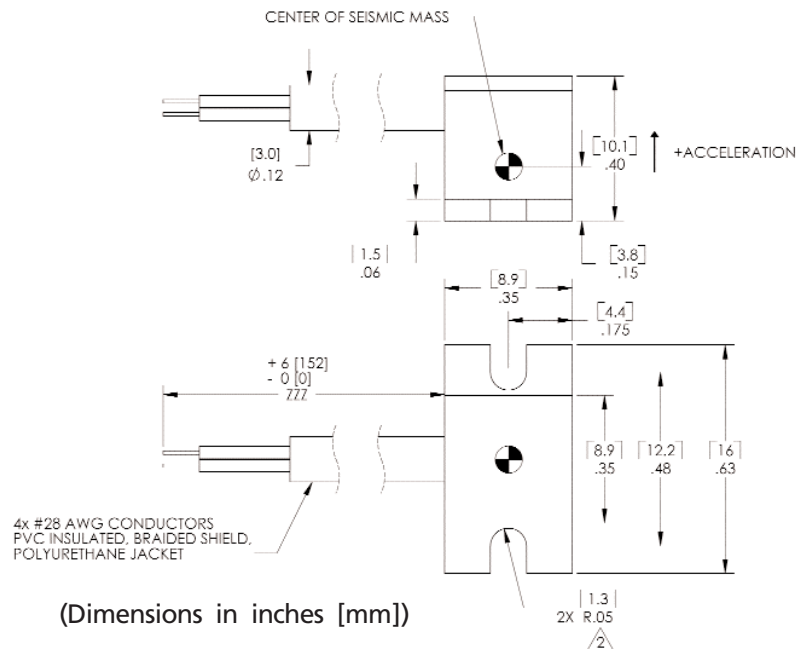
FEATURES

- ◆ 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

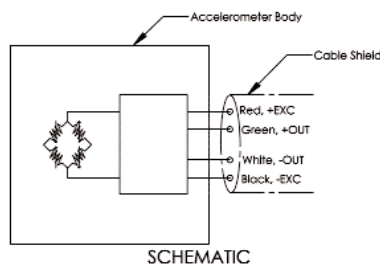
APPLICATIONS

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

dimensions



(Dimensions in inches [mm])



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Model 1201F Accelerometers

performance specifications

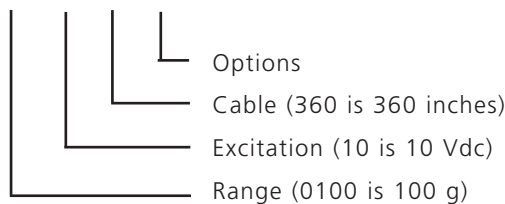
All values are typical at 25 °C, 100 Hz and 10 Vdc excitation unless otherwise stated. Measurement Specialties reserves the right to update and change these specifications without notice.

PARAMETERS

DYNAMIC						Units	Notes	
Range	±50	±100	±200	±500	±1000	g		
Sensitivity	2.0	0.9	0.9	0.4	0.15	mV/g		
Frequency Response	1100	1500	2000	2700	3000	Hz	±1 dB	
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						3500-4800	Ω	Typical
Output Resistance						2700-4800	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	
Humidity								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 TBDJ)
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

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