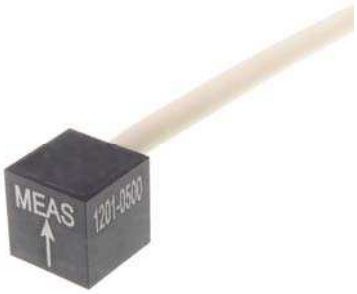
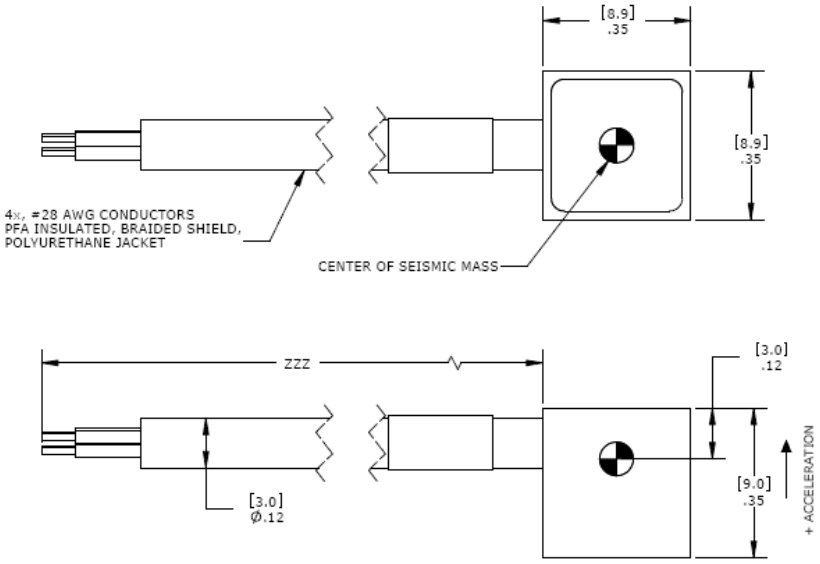
Model 1201 Accelerometer

DC Response Accelerometer
Durable, Low Noise Cable
Vehicle Crush Zone Testing
Low Cost, High Performance



The Model 1201 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.
For a similar accelerometer designed for bolt mounting, see the model 1201F.

dimensions

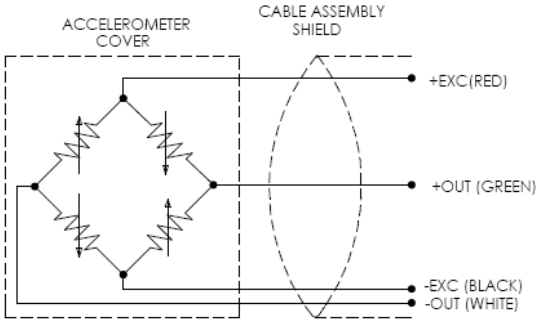


FEATURES

- Advanced MEMS Sensing Element
- ±50g to ±1000 g Dynamic Range
- 2-10 Vdc Excitation
- 0-50 °C Temperature Range
- ±40 mV Zero Measurand Output
- Gas Damping
- Connector Options
- Mechanical Overload Stops

APPLICATIONS

- Crash Testing
- Crush Zone Testing
- Impact Testing
- Off-Road Testing
- Transportation Testing



32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 t&m@meas-spec.com

Model 1201 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. Standard product parameters are described in PSC-1004 for Plug & Play DC Accelerometers.

Parameters	-0050	-0100	-0200	-0500	-1000	
DYNAMIC						**Notes**
Range(g)	±50	±100	±200	±500	±1000	
Sensitivity (mV/g) [1]	2.0	0.9	0.9	0.40	0.15	@ 10Vdc excitation
Frequency Response (Hz)	0-800	0-1000	0-1400	0-2000	0-3000	±5%
Natural Frequency (Hz)	2000	3000	4000	6000	7000	
Non-Linearity (% FS)	±1	±1	±1	±1	±1	
Damping Ratio	0.7	0.7	0.7	0.6	0.5	Typical
Transverse Sensitivity (%)	<3	<3	<3	<3	<3	
Shock Limit (g)	3000	3000	4000	5000	5000	

ELECTRICAL		
Zero Acceleration Output (mV)	<±40	
Excitation (Vdc)	2 to 10	
Input Resistance (Ω)	2400-6000	
Output Resistance (Ω)	2400-6000	
Insulation Resistance (MΩ)	>100	@50Vdc
Ground Isolation	Isolated from mounting surface.	
ENVIRONMENTAL		
Thermal Zero Shift (%FSO/°C)	±0.05	From 0 to +50°C
Thermal Sensitivity Shift (%/°C)	±0.2	From 0 to +50°C
Operating Temperature (°C)	-20 to +85	
Humidity	Epoxy Sealed, IP65	
PHYSICAL		
Case Material	Anodized Aluminum	
Cable	4x #28 AWG Conductors, PFA Insulated, Braided Shield, PU Jacket	
Weight (grams)	<2.5	Cable Not Included
Mounting	Adhesive	

[1] Output is ratiometric to excitation voltage

Calibration supplied: CS-FREQ-0100 NIST Traceable Amplitude Calibration from 20Hz to ±5% Frequency Limit

Optional accessories:

101	Three Channel DC Signal Conditioner Amplifier
140	Auto-zero Inline Amplifier

ordering info

PART NUMBERING Model Number+Range+Cable Length+Options

1201-GGGG-ZZZ-XXX
- I I I_____Options (otherwise leave blank)
- I I_____ Cable (360 is 360 inches)
- I_____ Range (0100 is 100 g)

Optional Dash Numbers

-001	5Vdc Calibration
-002	2Vdc Calibration
-005	Lemo FGG.1B.307 and Dallas DS2401 Installed

Example: 1201-1000-360
Standard Configuration: 1000g, 360" (30ft) cable, No Options

32 Journey Ste. 150 Aliso Viejo, CA 92656 949-716-5377 t&m@meas-spec.com