

Model 1201 Accelerometer

DC Response

Durable Cable

Reliable Performance

Low Cost

DESCRIPTION

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.



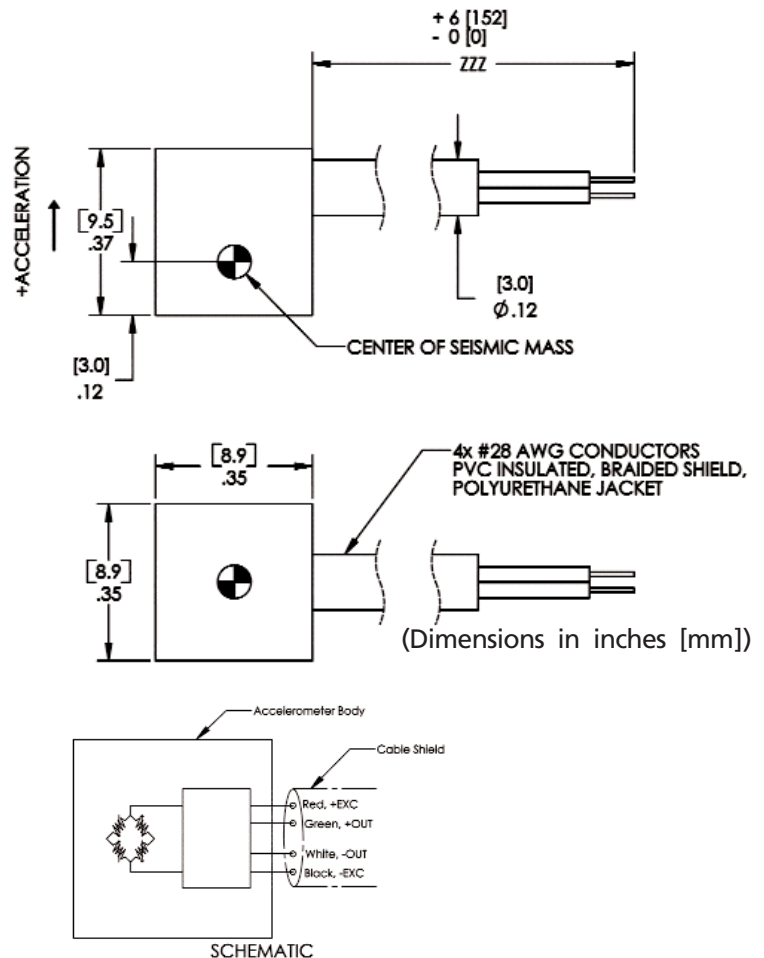
FEATURES

- ◆ 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 Adhesive Mounting

APPLICATIONS

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

dimensions



Model 1201 Accelerometer

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.

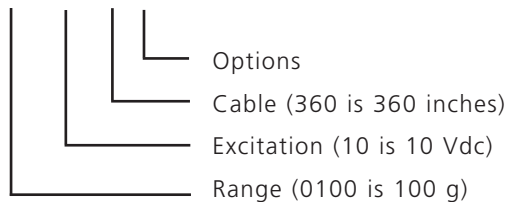
PARAMETERS

| 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 | 4000 | | | | | Ω | Typical |
| Output Resistance | 4000 | | | | | Ω | Typical |
| Insulation Resistance | 100 | | | | | M Ω | MAX |
| Ground Isolation | Isolated | | | | | | |
| Identification Chip | Customer Specified | | | | | | Dallas DS 2401 |
| 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 | | | | | | |
| 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

1201-ZZZZ-ZZ-ZZZX



Accessories:
Mounting Flange (AC-DO202S)

Example: 1201-0500-10-360X

Model 1201, 500g Full Scale, 10Vdc excitation, 360 inches cable, no options

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

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