

Piezoresistive accelerometer

Model 7264

Specifications

| Dynamic characteristics | Units | -200 | -2000 |
|---|--|------------------------|--------------------------|
| Range | g pk | ±200 | ±2000 |
| Sensitivity (at 100 Hz) | mV/g Typ (Min) | 2.5 (2.0) | 0.25 (0.20) |
| Amplitude response ±5% | Hz | 0 to 1000 | 0 to 4000 |
| Mounted resonance frequency | Hz Typ | 6000 | 25 000 |
| Damping ratio | Typ | 0.005 | 0.005 |
| Non-linearity and hysteresis [% of reading, to full range] | % Max | ±3 | ±3 |
| Transverse sensitivity [1] | % Max | 3 | 3 |
| Zero measurand output | mV Max | ±50 | ±50 |
| Thermal zero shift From 0 °F to +150 °F (-18 °C to +66 °C), ref. 75 °F (24 °C) | mV Max | ±40 | ±40 |
| Thermal sensitivity shift At 0 °F to +150 °F (-18 °C to +66 °C) | % Typ | -5 | -5 |
| Warm-up time | Minutes max | 2 | 2 |
| Electrical characteristics | | | |
| Excitation [2][3][7] | 10.0 Vdc, 15 Vdc maximum (5 Vdc + 2 Vdc optional) | | |
| Input resistance [2][4] | 2800 ohms | | |
| Insulation resistance | 100 megohms minimum at 100 Vdc, between sensors, cable shield and housing | | |
| Physical characteristics | | | |
| Case material | Hard anodized aluminum alloy | | |
| Electrical connections | Integral cable, four conductor No. 32 AWG Teflon® insulated leads, braided shield, silicone jacket (-1 red, -2 white, -3 blue - cable color) | | |
| Identification | Manufacturer's logo, model number and serial number | | |
| Mounting/torque | Holes for two 2-56 mounting screws/5 lbf-in (0.6 Nm) | | |
| Weight | 1 gram (cable weighs 9 grams/meter) | | |
| Environmental characteristics | | | |
| Acceleration limits (in any direction) [5] | | | |
| Static | g | 1000 | 5000 |
| Sinusoidal vibration | g pk | 1000, below 1000 Hz | 1000, below 4000 Hz |
| Shock (half-sine pulse duration) | g | 2000, 1 msec or longer | 5000, 200 µsec or longer |
| Temperature | | | |
| Operating | 0 °F to 150 °F (-18 °C to +66 °C) | | |
| Storage | -65 °F to +200 °F (-54 °C to +93 °C) | | |
| Humidity | | | |
| Unaffected. Sealed by epoxy and silicone rubber | | | |
| Altitude | | | |
| Unaffected | | | |
| Calibration [6] | | | |
| Sensitivity (at 100 Hz and 10 g pk) | mV/g | | |
| Frequency response | 20 Hz to 1000 Hz for 7264-200, to 4000 Hz for -2000, % deviation reference 100 Hz; dB plot continued through resonance frequency. | | |
| Zero measurand output | mV | | |
| Maximum transverse sensitivity | % of sensitivity | | |
| Input and output resistance | Ohms | | |

Piezoresistive accelerometer

Model 7264

Notes:

1. 1% transverse sensitivity available as "T" option.
2. Other excitation voltages may be used up to 15.0 Vdc. Specify at time of order to obtain a more accurate calibration.
3. Rated excitation is 10.0 Vdc. The strain gage elements have a positive temperature coefficient of resistance of approximately 0.5% per °F. Power supply current regulating capability should be carefully considered when operating at low temperature extremes, especially when exciting more than one transducer from a single supply.
4. Measured at approximately 1 Vdc. Bridge resistance increases with applied voltage due to heat dissipation in the strain gage elements.
5. The safety sleeve should be kept on the unit when not in use to prevent possible handling damage.
6. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 866-ENDEVCO for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.
7. 5 Vdc and 2 Vdc excitation should be specified at the time of order.

Included accessories

| | |
|--------|--|
| EHM30 | Hex wrench |
| EHW196 | (2) Size-2 flat washers |
| EH468 | (2) 0-80 x 1/8 inch socket head cap screws |

Optional accessories

| | |
|------------------|----------------------------|
| 24328 -1, -2, -3 | 4 Conductor shielded cable |
| 7953A | Triaxial mounting block |

Contact

ENDEVCO

www.endevco.com

Tel: +1 (866) ENDEVCO

[+1 (866) 363-3826]