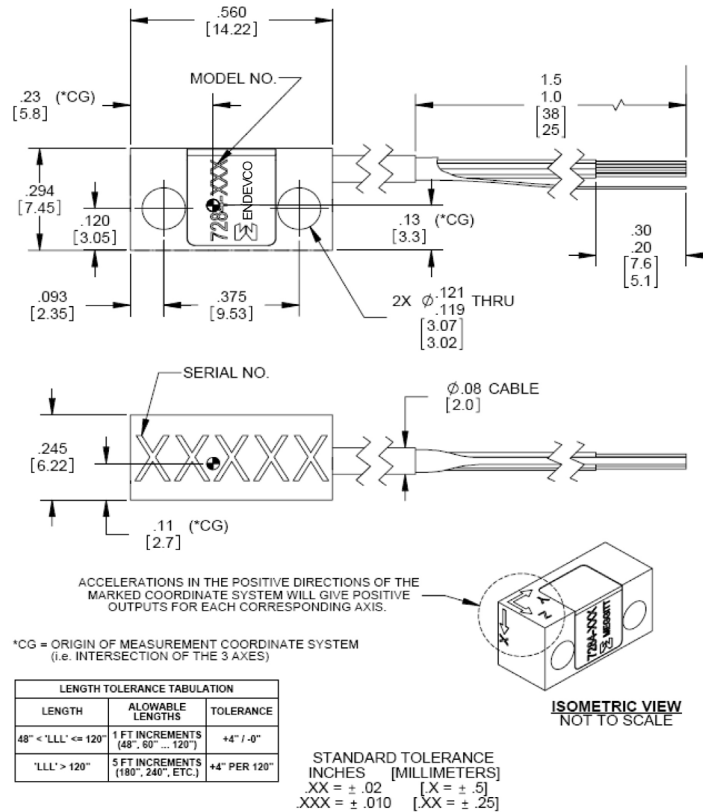
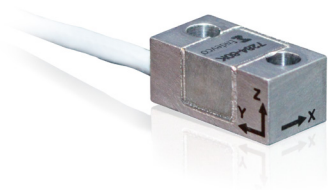


## Triaxial piezoresistive accelerometer Model 7284



### Key features

- > 20K and 60K g full scale ranges
- > Lightly damped for exceptional survivability
- > DC response
- > Low power consumption
- > Minimal zero shift after shock

The Endevco Model 7284 series is a family of rugged, lightly damped, piezoresistive triaxial accelerometers designed for high-acceleration shock measurements in three mutually perpendicular axes. This family uses three sensors that are packaged in a mutually orthogonal arrangement in a bolt-mount package which shares the same footprint and bolt pattern as Endevco's legacy Model 7270A and 7280A product families. The design boasts a robust eight conductor cable that can repeatedly withstand the high-acceleration shock environment.

The Model 7284 utilizes the same sensing element as the Model 72 & 7280A. Each axis uses a unique micro-machined, piezoresistive sensor with light gas damping to attenuate resonant amplitudes, and mechanical stops to reduce breakage under over load conditions. All three axes have the same range. Selectable ranges per axis are available by special request.

**60,000 g ranges are subject to International Traffic in Arms Regulations (ITAR), and as such a license is required for shipments outside the U.S. and other restrictions may apply.**

## Triaxial piezoresistive accelerometer

### Model 7284

#### Specifications

All specifications are referenced at +75°F (+24°C) and 5 Vdc, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

| Dynamic characteristics                                    | Units    | 20K   | 60K      |
|--|----------|---|----------|
| Linear range   | g        | 20,000  | 60,000   |
| Sensitivity min/typ [1]                                    | μV/g     | 4/8   | 1.25/2.5 |
| Natural frequency (typ)                                    | kHz      | 100   | 130      |
| Shock limit [max]  | g        | 60,000  | 180,000  |
| Zero measureand output (max)                               | mV       | ±50   | ±50      |
| Transverse sensitivity (max)                               | %        | 5   | 5        |
| Thermal zero shift (typ)<br>0°F to +150°F (-18°C to +66°C) | % FSO/°C | 0.06  | 0.06     |
| Thermal sensitivity shift (typ)                            | %/C      | -0.2  | -0.2     |
| <b>Electrical characteristics</b>                          |          |   |          |
| Excitation   | Vdc      | 5 to 12 (5 standard)  |          |
| Resistance   |          |   |          |
| input  | Ω        | 2200 ± 700  |          |
| output   | Ω        | 6500 ± 2000   |          |
| Isolation resistance                                       |          | 100 MΩ min at 50 VDC between cable leads and cable shield or case   |          |
| <b>Physical characteristics</b>                            |          |   |          |
| Case material  |          | 17-4 PH CRES  |          |
| Weight (excluding cable)                                   |          | 3.6 grams (0.13 ounces)   |          |
| Cable weight   |          | 10.2 grams/meter [0.11 ounces/foot]   |          |
| Cable  |          | (8) 34 AWG SPC alloy conductors, with SPC braided shield and FEP jacket   |          |
| Mounting   |          | 4-40 high strength screws (x2)  |          |
| Recommended mounting torque                                |          | 8 ± 2 lbf-in [0.9 N-m]  |          |
| <b>Environmental</b>                                       |          |   |          |
| Temperature  |          |   |          |
| Operating  | °C [F°]  | - 55 to + 121 [- 67 to + 250]   |          |
| Storage  | °C [F°]  | - 55 to + 121 [- 67 to + 250]   |          |
| <b>Calibration data</b>                                    |          | Data for sensitivity, ZMO, input and output resistance are supplied on the calibration certificate. Unless specified by the customer at time of order, the default calibration will be performed at 5 Vdc excitation. |          |

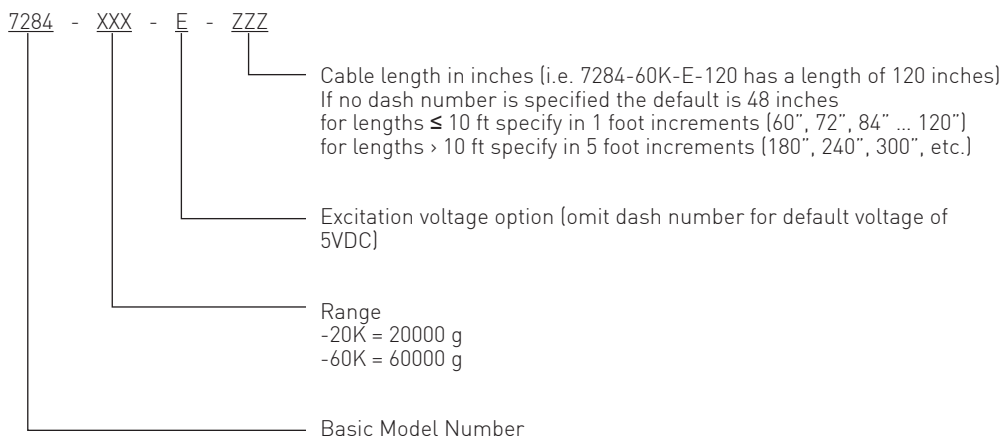
## Triaxial piezoresistive accelerometer Model 7284

### Accessories

| Product | Description                   | 7284     |
|---------|-------------------------------|----------|
| EH815   | [2] 4-40 high strength screws | Included |
| EHW265  | [2] No. 4 washers             | Included |

### Notes

1. Sensitivity measured at 5,000g.
2. 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.
3. Model number definition:



### Contact

#### ENDEVCO

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