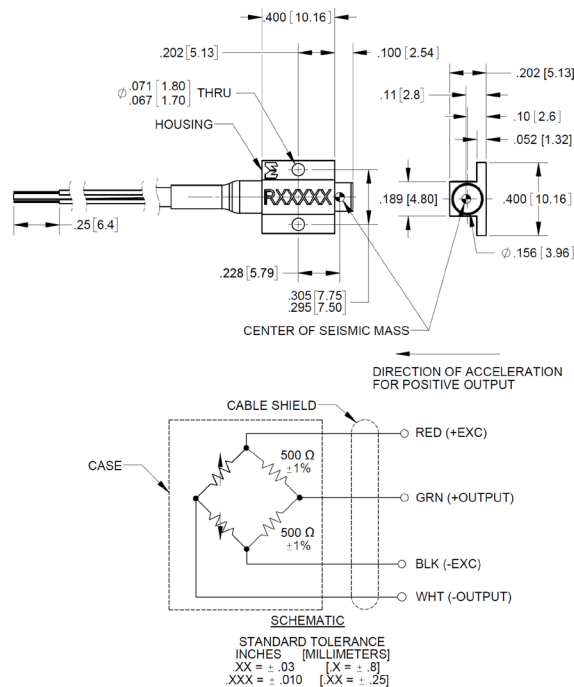
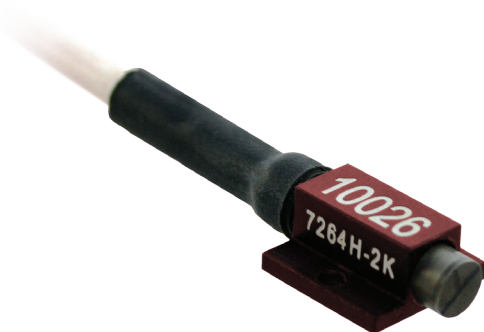


Damped piezoresistive accelerometer

Model 7264H-2K



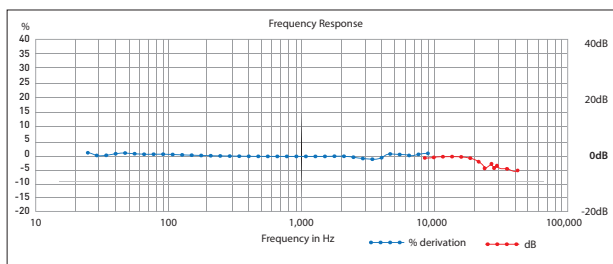
Key features

- DC response and wide bandwidth
- Multi-mode damping
- Mechanical stops
- Passenger safety testing
- SAE J211/J2570 compliant

Model 7264H is a very low mass accelerometer weighing only 1.4 grams. This accelerometer is designed for crash testing and similar applications that require damping, broad frequency response, and minimum zero shift following the event. It is equivalent in form and fit to the Endevco model 7264C-2K in that the location of the center of seismic mass is the same.

Model 7264H utilizes a unique and advanced micro-machined piezoresistive sensor, which includes multi-mode damping for exceptional bandwidth with no significant resonance response in the usable range. This monolithic sensor incorporates the latest MEMS technology for ruggedness, stability and reliability over previous designs. The accelerometer has a two active arm, full bridge circuit with fixed completion resistors to facilitate shunt calibration. Full scale output is 400mV nominal with 10 Vdc excitation. With a frequency response extending down to dc (steady state acceleration), this accelerometer is ideal for measuring long duration transient shocks.

7264H has a full scale range of 2000 g and gas damping. It is available with less than 1% transverse sensitivity and less than ± 25 mV Zero Measurand Output as the "TZ" option. 7264H comes standard with calibration data for 2V, 5V and 10V excitation.



Actual frequency response calibration of 7264H-2000

US patent 6,988,412 applies.

Recommended electronics for signal conditioning and power supply are the Endevco brand model 126 and 136 and model 436, a general purpose three channel DC conditioner and power supply.

Our measurement product competencies:

Piezoelectric accelerometers | Piezoresistive accelerometers | Isotron accelerometers | Variable capacitance accelerometers | Pressure transducers | Acoustic sensors | Electronic instruments | Calibration systems | Shakers | Modal hammers | Cable assemblies

Damped piezoresistive accelerometer

Model 7264H-2K

Specifications

All specifications are referenced at +75°F (+24°C) and 10 Vdc, unless otherwise noted. Sensitivity and zero measurand offset are provided at 2V, 5V and 10V excitation. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Dynamic characteristics		Units	-2K
Range		g	± 2000
Sensitivity (at 100Hz and 10g)			
Minimum/Nominal/Maximum		mV/V/g	.014/.02/.03
Frequency response (Referenced to 100 Hz)			
± 5% maximum		Hz	0 to 6000
Undamped natural frequency		kHz	25
Non-linearity		%	±1
Zero measurand output		mV	±100 maximum, ±25 optional
Transverse sensitivity		% max	3 (1 optional)
Damping ratio (2)		of critical	0.60
Thermal zero shift (nomial)			
10° to 30°C		%FSO/°C	0.05
50° to 86°F		%FSO/°F	0.03
Thermal sensitivity shift (max)			
10° to 30°C		%/°C	0.1
50° to 86°F		%/°F	0.06
Mounting strain sensitivity (per ISA 37.2@ 250 µ strain)		Equiv. g's	0.01
Electrical characteristics			
Excitation		Vdc	2.0, 5.0, 10.0
Resistance			
Input, minimum		ohms	700
Output, maximum		ohms	3000
Fixed resistors		ohms	500 ± 1.0%
Insulation resistance		Mohms	100 min @ 50 Vdc
Physical characteristics			
Case material			Hard anodized aluminum alloy, color red
Electrical connections			Integral 4 conductor, # 32 AWG Teflon insulated leads, braided shield with white Silicone jacket.
Mounting torque			2.6 in-lbf (0.29 N.m) recommended/3.0 in-lbf (0.34 N.m)
Weight			0.05 oz (1.4 gm); cable 0.1 oz/ft (9 gm/m), typical
Environmental			
Acceleration limits (any direction)			
Sinusoidal vibration			1000 g below 5 kHz
Shock (half-sine pulse duration)			10000 g, 200 µsec or longer
Temperature			
Operating			- 18°C to + 66°C (0°F to + 150°F)
Storage			- 54°C to + 121°C (- 65°F to + 250°F)

Damped piezoresistive accelerometer

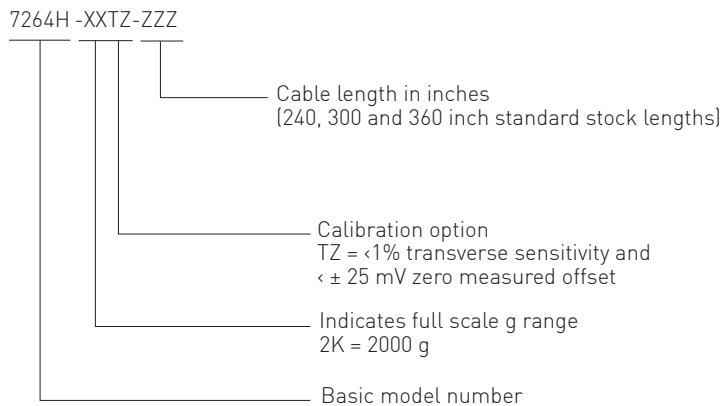
Model 7264H-2K

Accessories

Product	Description	7264H
EHM35	Allen wrench	Included
EHW196	Size-0 flat washers (x2)	Included
EH828	0-80 x 3/16 inch socket head cap screw (x2)	Included
7953A	Triaxial mounting block	Optional

Notes

1. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at +1 (866) 363-3826 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.
2. Damping ratio is intended to provide the user an indication of effective damping ratio. Actual results of Endevco multi-mode damping provide far superior damping response which are evident in the provided frequency sweep to 40kHz.
3. Model number definition:



Contact

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www.endevco.com