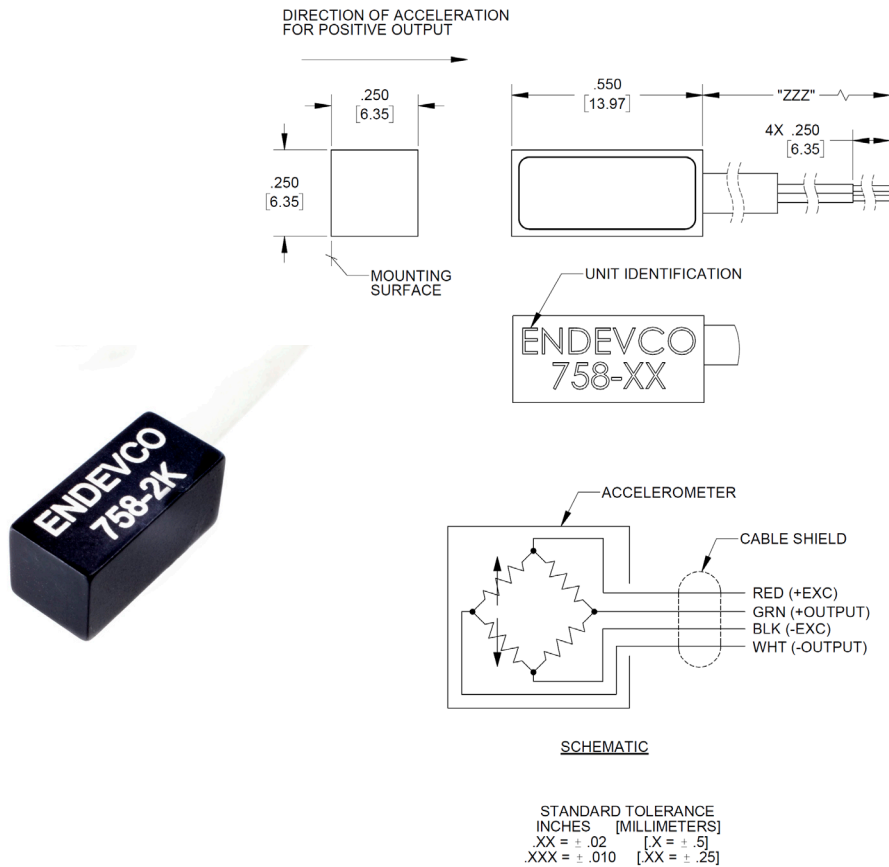


## Piezoresistive accelerometer

### Model 758



#### Key features

- 2,000 g range
- Multi-mode damping
- 400 mV full scale
- Adhesive mount
- Rugged to 10,000 g's

The ENDEVCO® Model 758 is a very low mass accelerometer designed for crash testing and similar applications that require minimal mass loading and broad frequency response.

The Model 758 uses a unique micro-machined, piezoresistive sensor with multi-mode gas damping. This monolithic sensor incorporates the latest MEMS technology for ruggedness, stability and reliability. The accelerometer has a two active arm, full bridge circuit with two fixed completion resistors to facilitate shunt calibration. Full-scale output is 400 mV 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.

The 758 comes standard with calibrations performed at 2V, 5V, and 10V excitation.

U.S. Patent 6,988,412 applies.

## Piezoresistive accelerometer

### Model 758

### Specifications

All specifications assume +75°F (+24°C) and 10 Vdc excitation, unless otherwise specified. Calibration data, traceable to the National Institute of Standards and Technology (NIST), are supplied.

<b>Dynamic characteristics</b>	<b>Units</b>	<b>-2K</b>
Range	g	± 2000
Sensitivity (Minimum/Nominal/Maximum)	mV/g	.11/.20/.30
	mv/V/g	.011/.02/.03
Frequency response (Ref. to 100 Hz, ± 5% maximum)	Hz	0 to 4000
Zero measurand output at any excitation voltage	mV	±40mV
Non-linearity	%	1
Thermal zero shift		
0° to 50°C	%FSO/°C	0.02
32° to 122°F	%FSO/°F	0.01
Thermal sensitivity shift		
0° to 50°C	%/°C	0.2
32° to 122°F	%/°F	0.1
Transverse sensitivity	%	3
<b>Electrical</b>		
Excitation voltage	Vdc	2.0, 5.0, 10.0
Max. Excitation voltage without damage	Vdc	12.0
Resistance		
Input, minimum	Ω	700
Output, maximum	Ω	3000
Fixed completion resistors	Ω	500 ± 1.0%
Isolation (leads to case or shield)	MΩ	100 min. at 50 Vdc
<b>Physical</b>		
Case, material	Hard anodized aluminum alloy housing with Stycast fill, color black	
Cable, integral	Integral 4 conductor, # 28 AWG Teflon insulated leads, shielded with white polyurethane jacket	
Mounting	Adhesive	
Weight (excluding cable)	0.07 oz (2.0 gm); cable 0.2 oz/ft (19 gm/m), typical	
<b>Environmental</b>		
Temperature		
Operating	- 40°C to + 100°C [- 40°F to + 212°F]	
<i>Note: Model 758 can operate during excursions down to -55°C (-67°F) with limited lifetime.</i>		
Storage	Room temperature	
Acceleration limits (sensitive direction)		
Sinusoidal	1000 g below 5 kHz	
Shock	10000 g	
Minimum haversine shock pulse duration	80 μS	
Humidity	IP67	
<b>Calibration data</b>		
Sensitivity (10 g, 100 Hz at 2V, 5V and 10V)		
ZMO (at 2V, 5V and 10V)		
Frequency Response (20 to 4000 Hz, Ref 100 Hz)		

## Piezoresistive accelerometer

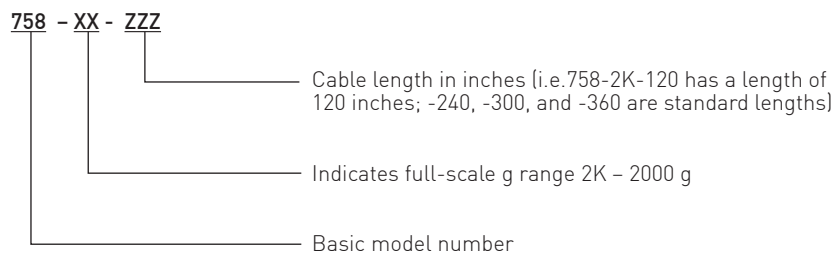
### Model 758

#### Accessories

Product	Description	758
136	DC Differential Voltage Amplifier	Optional
436	Signal Conditioner	Optional

#### Notes

- 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.
- Model number definition:



#### Contact

##### ENDEVCO

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