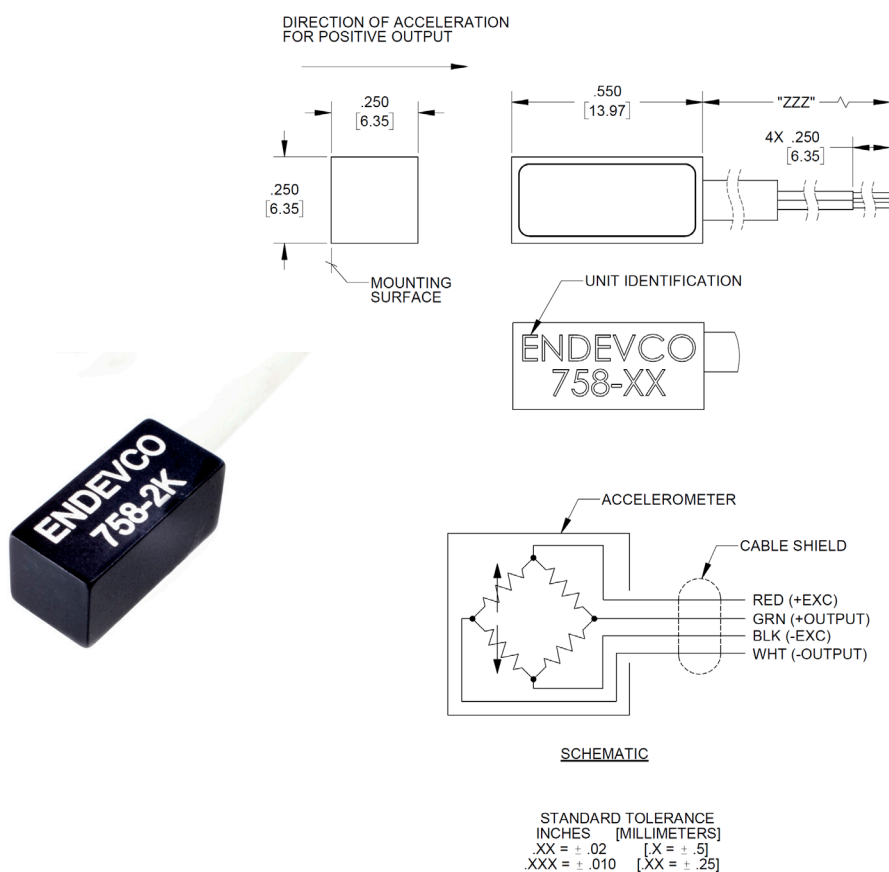


Endevco®

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.

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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.

Dynamic characteristics		Units	-2K
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		%FS0/°C	0.02
32° to 122°F		%FS0/°F	0.01
Thermal sensitivity shift			
0° to 50°C		%/°C	0.2
32° to 122°F		%/°F	0.1
Transverse sensitivity		%	3
Electrical			
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
Physical			
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		
Environmental			
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		
Calibration data			
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)			

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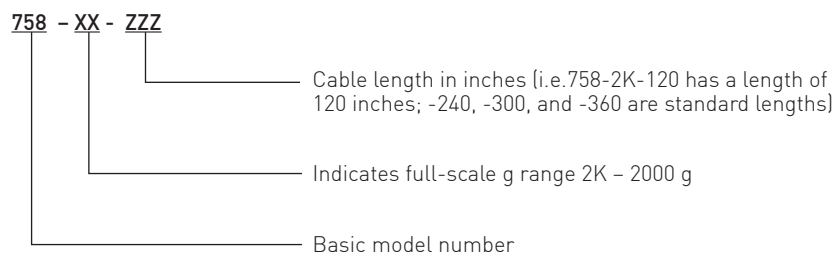
Model 758

Accessories

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

Notes

- Model number definition:



Contact

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