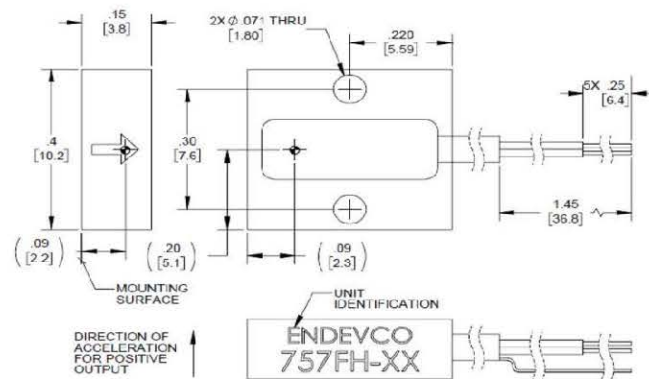


Piezoresistive accelerometer

Model 757FHM2



757FHM2

Key features

- High sensitivity, 0.3 mV/g
- Gas damping
- Miniature for tight spaces
- DC response
- Survives up to 10,000 g's shock

Description

The Endevco® Model 757FHM2 are very low mass accelerometers weighing less than 2 grams. The accelerometer is designed for crash testing and similar applications that require minimal mass loading and broad frequency response.

The Model 757FHM2 feature a unique micro-machined, piezoresistive sensor. Damping ratio of 0-5KHz is less than 0.05. This monolithic sensor incorporates the latest MEMS technology for ruggedness, stability and reliability. The accelerometer has a four active arm, full bridge circuit. Full-scale output is 600 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 Model 757FHM2 is designed for screw mounting with the provided screws.

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

Piezoresistive accelerometer | Model 757FHM2

All specifications are referenced at +75°F (+24°C) and 10 Vdc, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

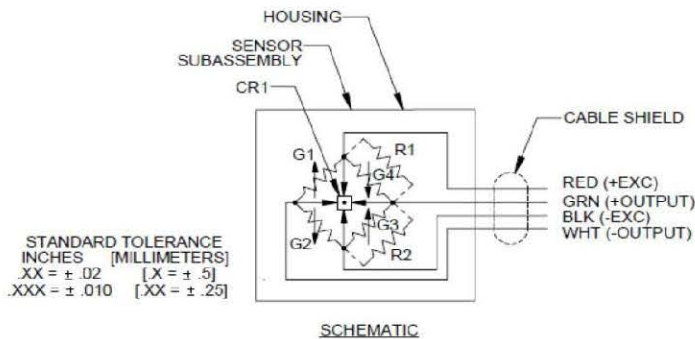
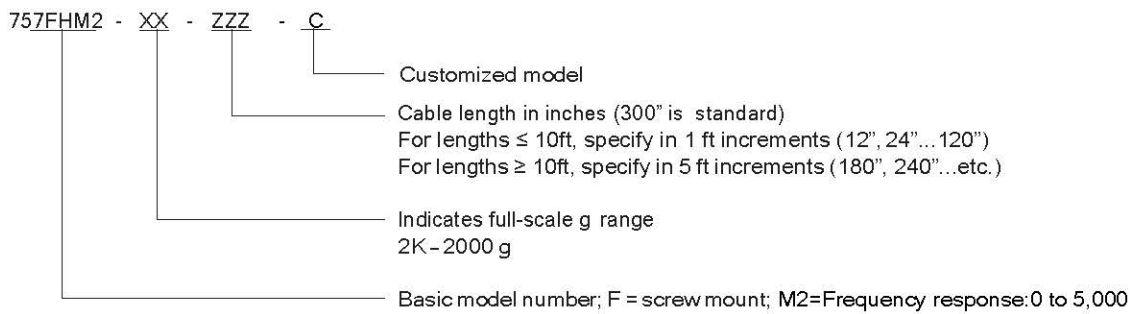
Specifications		
Dynamic characteristics	Units	-2K
Range	g	± 2,000
Sensitivity (at 100Hz and 10g)		
Minimum/Nominal/Maximum	mV/V/g	.015 / .030 / .060
Frequency response (Referenced to 100 Hz)		
± 5%	Hz	0 to 5,000
Non-linearity	%	±1
Repeatability(after full scale shock, max)	g	0.2
Zero measurand output (typ)	mV	±25
Mounted resonance frequency(min)	Hz	26 000
Transverse sensitivity	%	3
Thermal zero shift (typ)		
0° to 50°C	%FSO/°C	0.02
32° to 122°F	%FSO/°F	0.01
Thermal sensitivity shift (typ)		
0° to 50°C	%/°C	0.1
Electrical characteristics		
Excitation	Vdc	2.0, 5.0, 10.0
Resistance		
Input	ohms	6,500 ±2,000
Output	ohms	6,500 ±2,000
Insulation resistance	Mohms	100 min at 50 Vdc
Physical characteristics		
Case material		Anodized aluminum with stycast fill, black
Electrical connections		Integral 4 conductor, # 32 AWG, PVC insulated leads shielded with black PVC jacket
Mounting		
757FHM2		0 - 80 socket head cap screws 2.6 in-lbf (0.29 N.m) recommended/3.0 in-lbf (0.34 N.m) maximum
Weight		
757FHM2		2.0 gm (0.07 oz); excluding cable
Environmental characteristics		
Acceleration limits		
Shock (half-sine pulse duration)		10,000 g, 80 µsec or longer
Temperature		
Operating		- 40°C to + 100°C (-40°F to +212°F)
Storage		Room temperature
Humidity		IP67
Calibration data		
Frequency response		10 g, 20 to 3,000, ref 100 Hz
Sensitivity		10 g, 100 Hz at 2, 5 and 10 V
ZMO		At 2, 5 and 10 V
Input and output resistance		

Piezoresistive accelerometer | Model 757FHM2

Accessories		
Product	Description	757FHM2
EH861	Screw, socket head, 0 - 80 x ¼ alloy steel blk oxide (x2)	Included with 757FH
EHM35	Allen wrench, (x1)	Included with 757FH
7957	Triaxial mounting block for 757A	Optional
7953A	Triaxial mounting block for 757F	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 definitions:



www.endevco.com | Tel: +1 (866) ENDEVCO [+1 (866) 363-3826] | 10869 NC-903, Halifax, NC 27839 USA

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