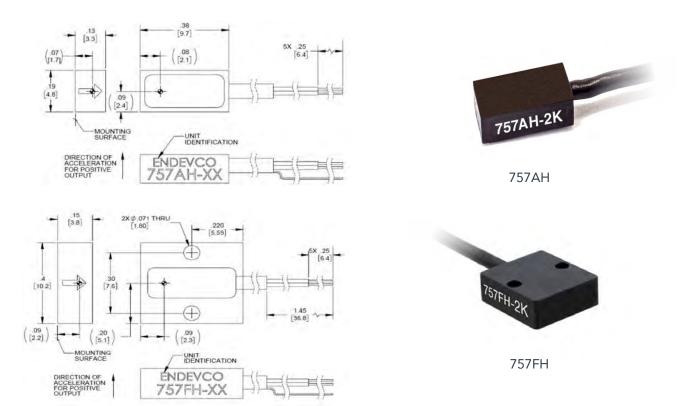


Piezoresistive accelerometer

Model 757AH - 757FH



Key features

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

Description

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

The Model 757AH and 757FH feature a unique micro-machined, piezoresistive sensor with gas damping. 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 757AH is designed for adhesive mounting for ultimate flexibility when mounting. The Model 757FH is designed for screw mounting with the provided screws.

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



Piezoresistive accelerometer | Model 757AH - 757FH

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

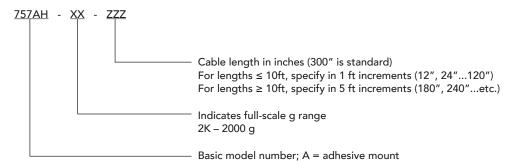
Dynamic characteristics	Units	-2K	
Range	g	± 2,000	
Sensitivity (at 100Hz and 10g)	3	•	
Minimum/Nominal/Maximum	mV/V/g	.015 / .030 / .060	
Frequency response (Referenced to 100 Hz)	9		
± 5% maximum	Hz	0 to 3,000	
Non-linearity	%	±1	
Zero measurand output (max)	mV	±50	
Transverse sensitivity	%	3	
Thermal zero shift (typ)			
0° to 50°C	%FSO/°C	0.02	
32° to 122°F	%FSO/°F	0.01	
Thermal sensitivity shift (typ)	,0.00, .		
0° to 50°C	%/°C	0.2	
32° to 122°F	%/°F	0.1	
Electrical characteristics		***	
Excitation	Vdc	2.0, 5.0, 10.0	
Resistance	vac	2.0, 3.0, 10.0	
	ohms	6,500 ±2,000	
Input	ohms		
Output Insulation resistance	Mohms	6,500 ±2,000 100 min at 50 Vdc	
	ivionms	100 min at 50 vac	
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		,	
757AH		Adhesive	
757FH		0 - 80 socket head cap screws	
73/111		2.6 in-lbf (0.29 N.m) recommended/3.0 in-lbf (0.34 N.m) maximum	
Weight			
757AH		1.5 gm (0.05 oz); excluding cable	
757FH		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			

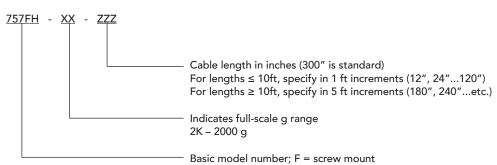
Piezoresistive accelerometer | Model 757AH - 757FH

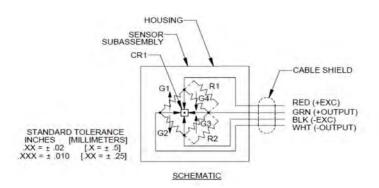
Accessories		
Product	Description	757AH - 757FH
EH861	Screw, socket head, 0 - 80 x $\frac{1}{4}$ alloy steel blk oxide (x2)	Included with 757FH
EHM35	Allen wrench, (x1)	Included with 757FH
7957	Triaxial mounting block for 757A	Optional
7953A	Triaxial mounting block for 757F	Optional

Notes

- 1. 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.
- 2. Model number definitions:









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