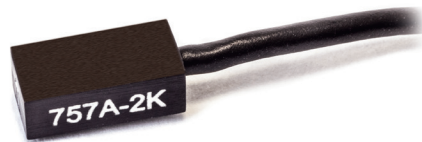


# Piezoresistive accelerometer

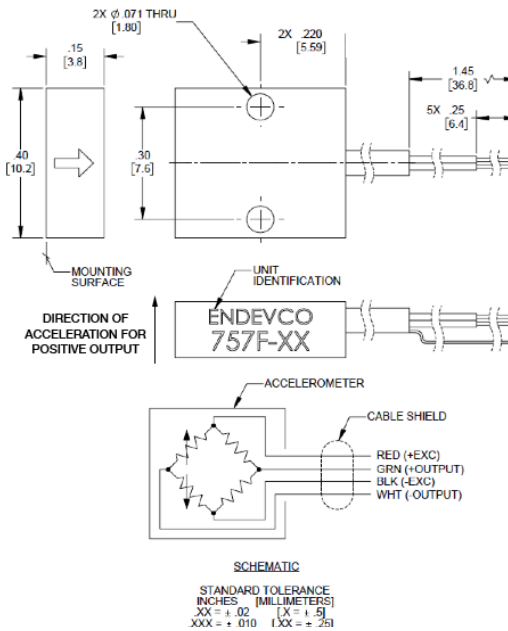
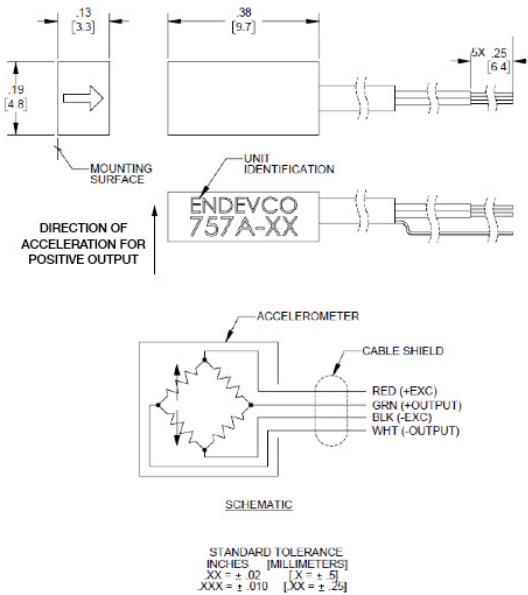
## Model 757A - 757F



757A



757F



### Key features

- DC response - long duration transients
- Mechanical overtravel stops
- Lightly damped
- Small size, rugged
- Crash and shock testing

Model 757A and 757F are small and lightweight piezoresistive accelerometers designed for automotive crash and crush testing. These MEMS accelerometers include mechanical stops and light damping for superior ruggedness in vehicle impact applications. The 757A and 757F feature a full bridge circuit with two active arms and two fixed completion resistors to facilitate shunt calibration. With a frequency response extending down to DC, these accelerometers provide the information needed to measure static acceleration as well as dynamic acceleration.

The Model 757A is designed for adhesive mounting for ultimate flexibility when mounting. The Model 757F is designed for screw mounting with the provided screws.

# Piezoresistive accelerometer

## Model 757A - 757F

### Specifications

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.

Dynamic characteristics	Units	-2K
Range	g	± 2000
Sensitivity (at 100Hz and 10g)		
Minimum/Nominal/Maximum	mV/V/g	.011/.02/.03
Frequency response (Referenced to 100 Hz)		
± 5% maximum	Hz	0 to 3000
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° to 50°C	%/°C	0.2
32° to 122°F	%/°F	0.1

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	Anodized aluminum with stycast fill, black
Electrical connections	Integral 4 conductor, # 32 AWG, PVC insulated leads shielded with black PVC jacket
Mounting	
757A	Adhesive
757F	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	
757A	0.02 oz (0.5 gm); excluding cable
757F	0.03 oz (1 gm); excluding cable

Environmental	
Acceleration limits	
Shock (half-sine pulse duration)	10000 g, 80 µsec or longer
Temperature	
Operating	- 40°C to + 100°C (-40°F to + 212°F)
Storage	Room temperature
Humidity	IP67

Calibration	
Frequency response	10 g, 20 to 3,000, ref. 100 Hz at 10 V
Sensitivity	10 g, 100 Hz at 2, 5 and 10 V
ZMO	@ 2, 5 and 10 V

# Piezoresistive accelerometer

## Model 757A - 757F

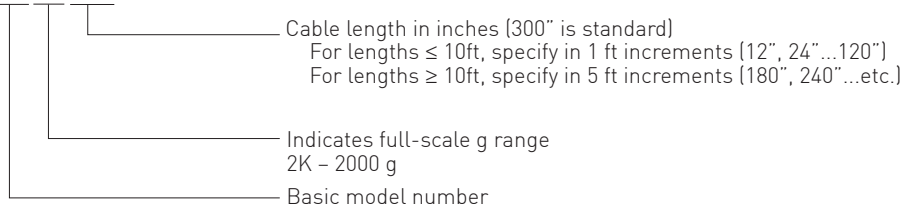
### Accessories

Product	Description	757F
EH861	Screw, socket head, 0 - 80 x ¼ alloy steel blk oxide (x2)	Included
EHM35	Allen wrench, (x1)	Included
7957	Triaxial mounting block for 757A	Optional
7953A	Triaxial mounting block for 757F	Optional
126	3-channel bridge amplifier	Optional
136	3-channel DC differential voltage amplifier	Optional

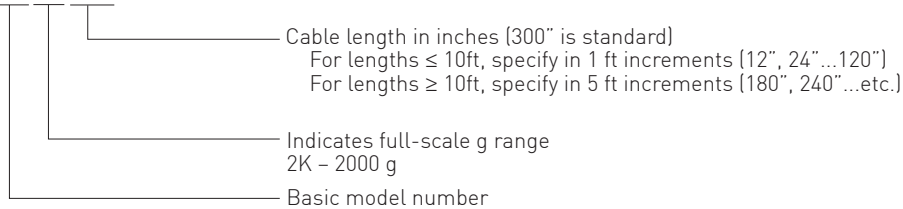
### Notes

1. Maintain high levels of precision and accuracy using Endeveco's factory calibration services. Call Endeveco'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 definition:

757A-XX-ZZZ



757F-XX-ZZZ



### Contact

#### ENDEVCO

[www.endevco.com](http://www.endevco.com)

Tel: +1 (866) ENDEVCO

[+1 (866) 363-3826]