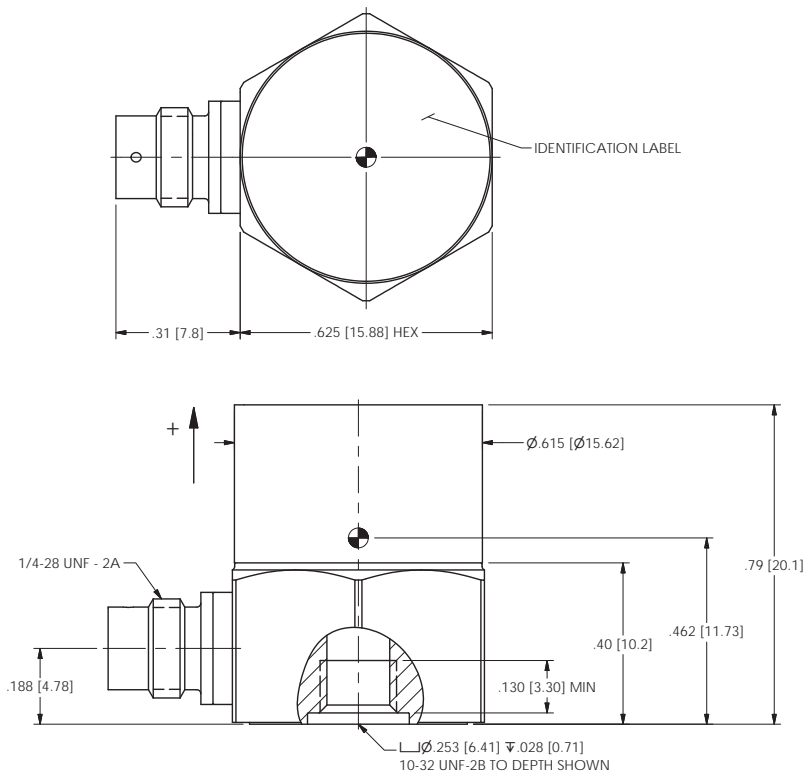


# Piezoresistive accelerometer

## Model 2262B

### WIRING DIAGRAM



UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	
DIMENSIONS IN INCHES	DIMENSIONS IN MILLIMETERS [ IN BRACKETS ]
DECIMALS XX ±.03 XXX ±.010	DECIMALS X ± 0.8 XX ± 0.25
ANGLES ± 2 DEGREES	ANGLES ± 2 DEGREES
FILLETS AND RADII .003 - .005	FILLETS AND RADII 0.07 - 0.13

### Key features

- High sensitivity
- Rugged to 10,000 g shocks
- Multi-mode damping
- DC response and wide bandwidth

### Description

The Endevco Model 2262B Piezoresistive Accelerometers are rugged, gas damped transducers designed for shock environments. 2262B utilizes a unique and advanced multi-mode damped silicon MEMS sensor for exceptional bandwidth with no significant resonance response up to 40 kHz. With a frequency response extending down to DC, this accelerometer is ideal for measuring long duration transient shocks. The hermetically sealed stainless steel package includes an integral hermetic 4-pin receptacle that mates with our 3915 detachable shielded cable assembly that is specifically designed for high shock environments, sold separately.

2262B comes standard with an A2LA accredited frequency response calibration at 10V with sensitivity and ZMO provided.

US patent 6,988,412 applies.

## Piezoresistive accelerometer | Model 2262B

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.

<b>Specifications</b>				
<b>Dynamic characteristics</b>	<b>Units</b>	<b>-1000</b>	<b>-2000</b>	<b>-6000</b>
Range	g	±1000	±2000	±6000
Sensitivity (at 100Hz and 10g)	mV/g typ (min)	0.45 to 0.35	0.30 (0.15)	0.015 (0.008)
Frequency Response				
±5% maximum	Hz	0 to 3000	0 to 3000	0 to 3000 (±1dB)
<+3dB	Hz	Up to 40,000	Up to 40,000	Up to 40,000
Non-linearity	%FSO	±3	±3	±3
Zero Measurand Output	m/V max	±25	±25	±50
Transverse Sensitivity	%	3	3	3
Resonance Frequency [1]	Hz	25,000	25,000	100,000
Thermal Zero shift				
-18° to +93°C	%FSO/°C	0.04	0.04	0.04
0° to +200°F	%FSO/°F	0.02	0.02	0.02
Thermal Sensitivity Shift				
-18° to +93°C	%/°C	-0.2	-0.2	-0.2
0° to +200°F	%/°F	-0.1	-0.1	-0.1
<b>Electrical characteristics</b>				
Warm-up Time	2 minutes			
Excitation	10 VDC			
Input Resistance	6500 ohms ±2000			
Output Resistance	6500 ohms ±2000			
Insulation Resistance	100 Mohms min @ 50 VDC			
Residual Noise [2]	<10 µV RMS			
<b>Physical characteristics</b>				
Case, material	304L CRES Stainless Steel			
Electrical, connections	4-pin 1/4 connector; Mating cable Model 3915 (purchased separately) is a 4-conductor, 28 AWG, low noise, shielded silicon jacketed cable			
Mounting	Provision for 10-32 UNF x 1/8" stud, recommended mounting torque 18 lbf-in (2 N-m)			
Weight	22 grams			
<b>Environmental</b>				
Acceleration limits (in any direction)				
Shock (half-sine pulse duration)	10,000 g, 80 µsec or longer			
Temperature				
Operating	-55° to +125°C (-67° to +257°F)			
Storage	-55° to +125°C (-67° to +257°F)			
Humidity	Hermetically sealed			
<b>Calibration [3]</b>				
Each sensor includes an ISO 17025 calibration with the below information:				
Sensitivity (ref 10g, 100Hz) @ 10 VDC				
ZMO @ 10 VDC				
Frequency Response (20 to 5000Hz, ref 100Hz)				
Input and Output Resistance				

# Piezoresistive accelerometer | Model 2262B

Accessories		
Options	Description	2262B
2981-12	10-32 mounting stud	Included
3915/XXX	Mating cable assembly	Optional

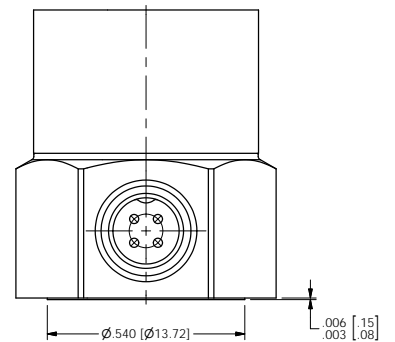
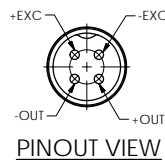
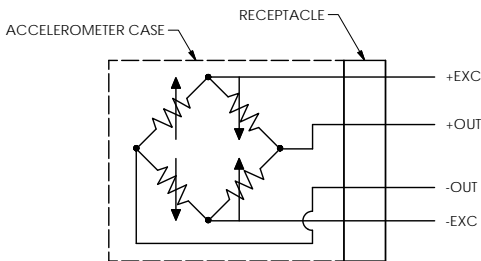
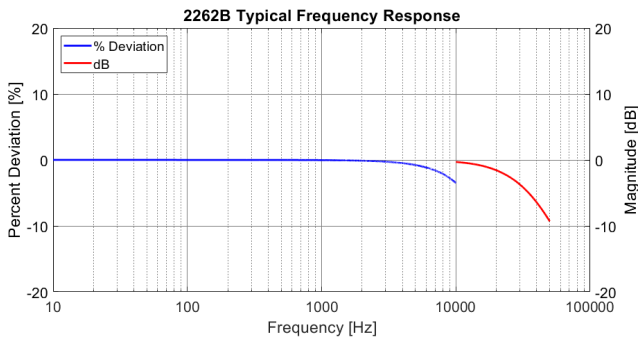
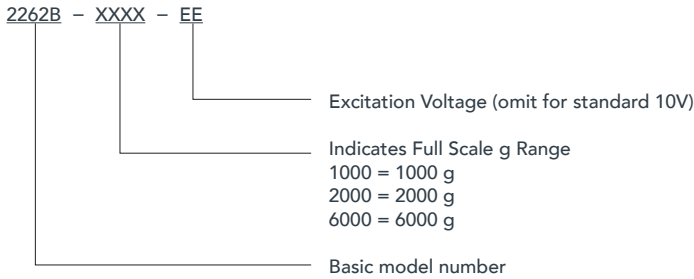
## Notes

[1] The primary resonance (25kHz) and the secondary resonance (36kHz) are both heavily damped. Using our proprietary multi-mode damping technique, these resonance peaks are completely suppressed or minimized to a significant degree, leaving the sensor virtually resonance free in practice. See the chart below for typical frequency response.

[2] Theoretical noise floor measured using a low-noise Op-amp. In practice, noise performance is dominated by the characteristics of the interfacing bridge amplifier.

[3] 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:





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Aufgrund laufender Weiterentwicklungen sind Änderungen der Spezifikationen vorbehalten. Alle Angaben vorbehaltlich Satz- und Druckfehler.

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