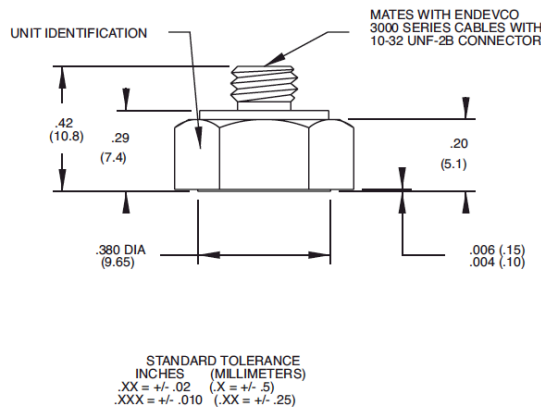
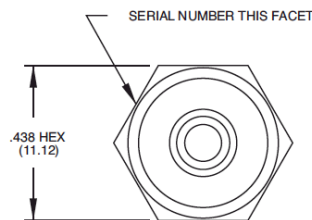
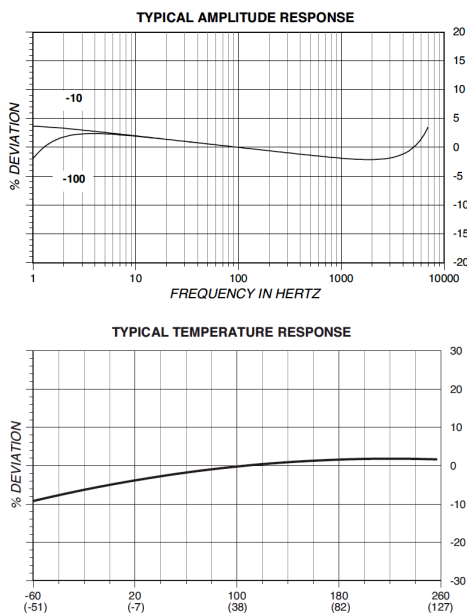


## Isotron® accelerometer Model 2256A



### Key features

- Low impedance output
- Light weight (4.3 gm)
- Hermetically sealed
- Milli-g's resolution
- Adhesive mounting
- Ground isolated

The Endevco® Model 2256A is a small, hermetically sealed piezoelectric accelerometer with integral electronics, designed specifically for measuring vibration on small structures. The transducer features a hermetically sealed 10-32 top connector, and has a titanium hex base designed for adhesive mounting. Its light weight (4.3 gm) effectively minimizes mass loading effects.

The Model 2256A features Endevco's Piezite® Type P-8 or P-10 crystal element, operating in annular shear mode, which exhibits excellent output sensitivity stability over time.

This accelerometer incorporates an internal low noise hybrid signal conditioner, using a two-wire system, which transmits its low impedance voltage output through the same cable that supplies the required constant current power. Signal ground is isolated from the mounting surface of the unit. A model number suffix indicates acceleration sensitivity in mV/g; i.e., 2256A-10 features output sensitivity of 10 mV/g.

Endevco signal conditioner Models 4416B, 133, 2792B, 2793, 2775A or Oasis 2000 computer-controlled system are recommended for use with this accelerometer.

## Isotron® accelerometer Model 2256A

### Specifications

The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C), 4 mA, and 100 Hz, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Dynamic characteristics	Units	-2.5	-10	-100
Range	g	±2000	±500	±50
Voltage sensitivity ±10%	mV/g	2.5	10	100
Frequency response		See typical amplitude response		
Resonance frequency	kHz	25	20	20
Amplitude response ±10% ±1 dB	Hz	1 to 9000		
Temperature response		2 to 7000	See typical curve	
Transverse sensitivity	%		≤ 5	
Amplitude linearity	%		< 1 to full scale	
<b>Output characteristics</b>				
Output polarity		Acceleration directed into base of unit produces positive output		
DC output bias voltage	Vdc	+8.5 to +12.7	+8.5 to +12.7	+12.3 to +13.5
Output impedance	Ω		≤200	
Full scale output voltage	V		±5.0	
Residual noise	equiv. g rms	0.001	0.001	0.001
.5 Hz to 10kHz, broadband				
Overload recovery	μ sec	≤10	≤45	≤45
Grounding		Signal ground connected to inner case but isolated from outer housing		
<b>Power requirement</b>				
Supply voltage	Vdc		+23 to +30	
Supply current	mA		+2 to +20	
Warm-up time	sec	≤5	8	8
To within 10% of final bias				
<b>Environmental characteristics</b>				
Temperature range		-67°F to +257°F (-55°C to +125°C)		
Humidity		Hermetic		
Sinusoidal vibration limit	g pk	1000	1000	1000
Shock limit [1]	g pk	2000	2000	2000
Base strain sensitivity	eq. g pk / μ strain		0.0008	
Thermal transient sensitivity	eq. g pk/°F (°C)	0.1	0.5	0.5
Electromagnetic sensitivity	eq. g rms/gauss		0.0001	
<b>Physical characteristics</b>				
Dimensions		See outline drawing		
Weight	gm (oz)	4.3 (.15)		
Case material		Stainless steel case, titanium hex housing		
Connector		Coaxial, 10-32 thread, mates with Endevco 300 Series cable		
Mounting [3]		Flat finish provided for adhesive mounting		
<b>Calibration</b>				
Supplied:				
Sensitivity	mV/g			
Maximum transverse sensitivity	%			
Frequency response	%	20 Hz to 5 kHz	20 Hz to 10 kHz	
	dB	5 Hz to 30 kHz	10 kHz to 50 kHz	

## Isotron® accelerometer

### Model 2256A

#### Accessories

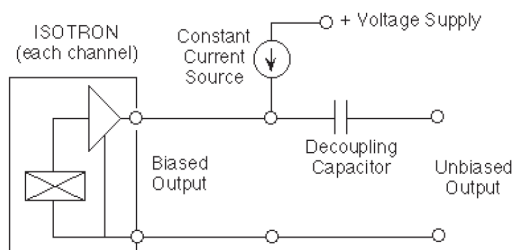
Product	Description	2256A
3061A-120	(10 ft)CABLE ASSEMBLY[2]	Included

#### Notes

1. Short duration shock pulses, such as those generated by metal-to-metal impacts, may excite transducer resonance and cause linearity errors. Send for TP290 for more details.
2. Depending on the dynamic and environmental requirements, adhesives such as petro-wax, hot-melt glue, and cyanoacrylate epoxy (super glue) may be used to mount the accelerometer temporarily to the test structure. An adhesive mounting kit (P/N 31849) is available as an option from Endevco.
3. Flexible cable, such as the supplied 3060A, should be used to mini-mize cable-strain errors.

#### Ordering information

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.



#### Contact

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