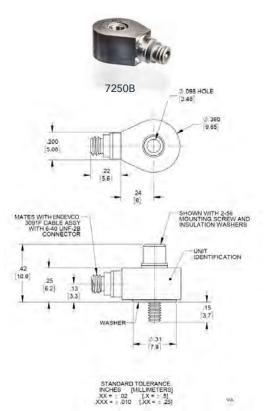
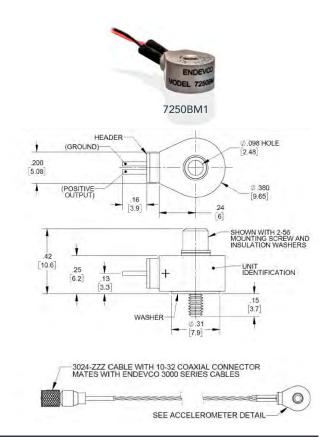


High frequency IEPE accelerometer

Model 7250B/7250BM1





Key features

- Excellent for very high frequency vibration measurements
- Hermetically sealed
- 360° cable orientation
- Light weight (1.9 gm)

Description

The Endevco® model 7250B is a subminiature, piezoelectric accelerometer with integral electronics, designed specifically for measuring vibration on small objects. The unit is hermetically sealed for use in extreme environments and to ensure long term stability. This accelerometer offers high resonance frequency and wide bandwidth, and its' light weight (1.9 gm) effectively eliminates mass loading effects.

The Model 7250B features an annular shear design, which exhibits excellent output sensitivity stability over time. Signal ground is connected to the outer case of the unit and, when used with the supplied isolated mounting screw/washer, it is electrically isolated from ground. The centrally located mounting bolt permits 360° cable orientation, however, the unit may also be adhesively mounted. A model number suffix indicates acceleration sensitivity in mV/g; i.e., 7250B-10 features output sensitivity of 10 mV/g. A special version, model 7250BM1, features two solderable terminals with a light weight cable attached and is terminated with a 10-32 connector.



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

Dimonia abanastanisti:-	Lluite	2	10	
Dynamic characteristics	Units	-2	-10	
Range	g	±2500	±500	
Voltage sensitivity ±10%	mV/g	2	10	
Frequency response			See typical curve, page 3	
Resonance frequency	kHz		85	
Amplitude response	Hz			
±5%			3 to 20 000	
±10%			2 to 30 000	
±3dB			1 to 40 000	
Temperature response			See typical curve	
Transverse sensitivity	%		≤ 5	
Amplitude linearity	%		1 to full scale	
Output characteristics				
Output polarity		Acceleration dire	ected into base of unit produces positive output	
DC output bias voltage	Vdc		+11.0 to +14.0	
Output impedance	Ω		≤ 200	
Full scale output voltage	V		±5	
Resolution (1 Hz to 10 kHz)	equiv. g rms	0.0035	0.001	
Grounding	. 0	Signal ground conr	nected to case. Isolation achieved via isolated	
-			mounting washer and isolated screw	
Power requirement				
Supply voltage	Vdc	+24 to +28	+18 to +28	
Supply current	mA		+2 to +20	
Warm-up time (to 10% of final bias level)	sec		< 3	
Environmental characteristics				
Temperature range			67°F to +257°F (-55°C to +125°C)	
Humidity			Hermetically sealed	
Sinusoidal vibration limit	g pk		2000	
Shock limit [1]	g pk		10 000	
Base strain sensitivity	31			
Screw mounted	eq. g pk/μ strain		0.8	
Adhesive mounted	eq. g pk/μ strain		0.0004	
Thermal transient sensitivity	eq. g pk/°F (°C)		0.5 (0.9)	
•				
Electromagnetic sensitivity	eq. g rms/gauss		0.2	
Accoustic sensitivity (at 155 dB SPL)	equiv. g		0.1	
Physical characteristics				
Dimensions			See outline drawing	
Weight	, ,		4.0.(0.0(7)	
Without mounting screw	gm (oz)		1.9 (0.067)	
With mounting screw	gm (oz)		2.4 (0.085)	
Case material			Titanium	
Connector		4 10		
7250B		•	6-40 receptacle Solder terminals with attached cable assembly	
7250BM1		terminated with a 1	· · · · · · · · · · · · · · · · · · ·	
Mounting torque	lbf-in (Nm)	terminated with a 1	5 (0.57)	
Calibration	//		- (5.5.)	
Supplied:				
Sensitivity	mV/g			
Maximum transverse sensitivity	%			
Frequency response	dB		20 Hz to 40 kHz	

High frequency IEPE accelerometer | Model 7250B/7250BM1

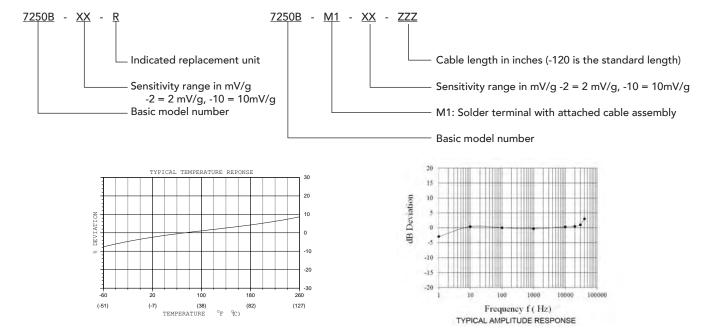
Accessories						
Product	Description	7250B	7250BM1	7250B-R		
3091F-120	Cable assembly, 6-40 to 10-32, 10ft	Included	Optional	Optional		
3024-XXX	Cable assembly, pigtail to 10-32XXX defines cable length in inches120 is standard.	Optional	Attached	Optional		
EHM178	Hex wrench	Included	Included	Optional		
12746	Insulated mounting screw assembly	Included	Included	Included		
EH96	Screw cap, hex socket, 2.56 x 3/8	Optional	Optional	Optional		
EHN64	Nut, 2-56	Optional	Optional	Optional		
EHW95	Washer	Optional	Optional	Optional		
2950M18	Triaxial mounting block	Optional	Optional	Optional		
133	Signal conditioner	Optional	Optional	Optional		
4416C	Signal conditioner	Optional	Optional	Optional		

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.

Notes

- 1. Short duration shock pulses, such as those generated by metal-tometal impacts, may excite transducer resonance and cause linearity errors. Read TP290 for more details.
- 2. Model number definitions:





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