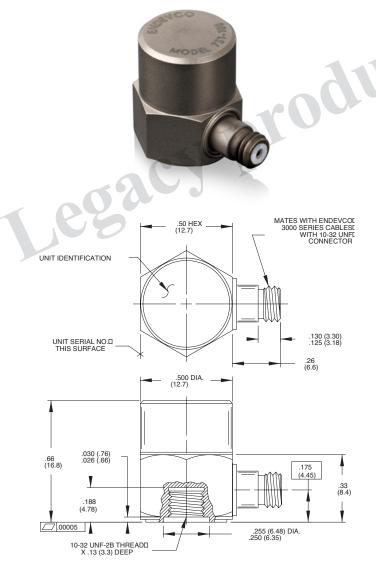


Model 751 Isotron[®] accelerometer

Features

- NEW! 751-10-R and 751-100-R available as replacement sensors
- High frequency measurement
- Wide bandwidth
- Light weight
- Outstanding signal-to-noise
- Hermetically sealed



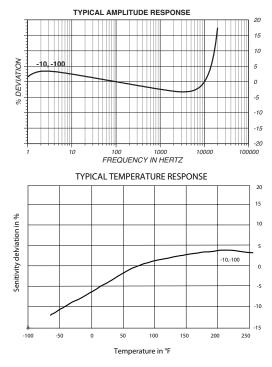
STANDARD TOLERANCE□ INCHES (MILLIMETERS)□ .XX = +/- .03 (.X = +/- .8)□ .XXX = +/- .010 (.XX = +/- .25)

Description

The Endevco® model 751 is a low-cost, lightweight piezoelectric accelerometer with integral electronics, designed specifically for measuring vibration on small structures. This unit is hermetically sealed against environmental contamination. The 751 features a high output sensitivity, high signal-to-noise ratio, and a wide bandwidth. Model 751 is the best value in accelerometers on the market today.

The model 751 features Endevco's Piezite® Type P-8 crystal element, operating in annular shear mode, which exhibits low base strain sensitivity and excellent output stability over time. This accelerometer incorporates an internal hybrid signal conditioner in a two-wire system, which transmits its low impedance voltage output through the same cable that supplies the constant current power. Signal ground is connected to the outer case of the unit. When used with an isolated mounting stud, it can be electrically isolated from ground. A model number suffix indicates acceleration sensitivity in mV/g; i.e., 751-100 features output sensitivity of 100 mV/g.

Endevco signal conditioner models 133, 2793, 2775B, or 4416B are recommended for use with these accelerometers.



Model 751 Isotron[®] accelerometer

Sndevco

Specifications

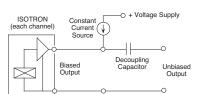
The following performance specifications conform to ISA-RP-37.2 (1964) and are typical values, referenced at +75°F (+24°C), 4 mA, and 100 Hz, unless otherwise noted. Calibration data, traceable to National Institute of Standards and Technology (NIST), is supplied.

Dynamic characteristicsUnits-10-100Rangeg4500450Rangeg4500450Voltage sensitivitym/Vig Typ10100Frequency responseSee typical amplitude response50Resonance frequencykHz500.5Amplitude response 21 dBHz0.3 to 15K0.3 to 15KTransverse sensitivity%4.5500.5Output characteristics-0.5-0.5Output plantyAcceleration directed into base produces positive outputDC output blas voltageVdc 4.5 to $+1.5$ 4.5 to $+1.5$ Output plantyAcceleration directed into base produces positive outputDC output blas voltageVdc 4.5 to $+1.5$ 4.5 to $+1.5$ Full scale output voltageequix grms0.003signal ground connected to casePower requirementCompliance voltageVdc $+1.8$ to $+2.4$ $+2$ to $+20$ Compliance voltageVdc $+1.8$ to $+2.4$ $+2$ to $+20$ Supply currentmA $+2$ to $+20$ $+2$ to $+20$ Warm-upsec $+2$ $-67^{\circ}F$ to $+25^{\circ}F$ ($t + 125^{\circ}C$) $+1.5$ to $+20$ Sinsolad tubration limitg pk5005000Shock limitg pk5005000Base strain sensitivityequix g pk/1 ^o F -0.012 -0.022 Physical characteristicsTrainium alloy100050.0020Physical characteristicSee outline drawingY8 (2.5 Y		Demonstration	11. to	-10	-100	
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Thermal transient sensitivityequiv. g pk/°F<0.01						
Electromagnetic sensitivityequiv. g rms/gauss0.00020.0002Physical characteristics DimensionsSee outline drawing YeightSee outline drawing Titanium alloy 10-32 Microdot, side connector7.8 (0.25) Titanium alloy 10-32 Microdot, side connectorMounting torquelbf-in (Nm)18 (2)18 (2)Calibration Supplied: Voltage sensitivitymV/g %at 100 Hz 12 Hz and 7 G 20 Hz to 10 000 Hzat 100 Hz 20 Hz to 10 000 Hz		,				
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Accessories						
		Accessories				

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Product	Description	751-10, -100	751-10-R, -100-R		
2981-12	Mounting stud, 10-32 to 10-32	Included	Included		
3061A-120	Cable assembly, 10 ft	Included	Optional		
2986B	Insulated mounting stud, 10-32 to 10-32	Optional	Optional		
2950	Triaxial mounting block	Optional	Optional		
EHM464	Wrench	Included	Optional		
2981-4	Mounting stud, 10-32 to M5	Optional	Optional		
15071	Adapter stud, 1/4-28 to 10-32	Optional	Optional		
133	PE and IEPE signal conditioner	Optional	Optional		
2775B	Signal conditioner	Optional	Optional		
2793	Isotron signal conditioner	Optional	Optional		
4416B	Battery powered Isotron conditioner	Optional	Optional		



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. Maintain high levels of precision and accuracy using Endevco's factory calibration services. Call Endevco's inside sales force at 800-982-6732 for recommended intervals, pricing and turn-around time for these services as well as for quotations on our standard products.

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