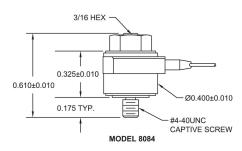
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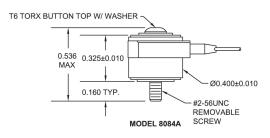
Integrated Accelerometers

Models 8084-1, 8084-2, 8084-3 & 8084-4

- Vibration & Shock
- * Low Impedance Output
- * Sensitivity 5,10 or 20mV/g
- * 360 Deg Orientation
- * Detachable Micro-Cable Assy
- * Electrical Isolation
- * Noise Monitor Version







Accessories Supplied:

- (1) Micro-miniature Cable Assy., MMHR-6" Std
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

The Models 8084-1, -2 -3 or -4 Piezoelectric Accelerometers are small, completely self-contained vibration measuring systems having a built-in amplifier within the housing. These units are offered with sensitivities of 5, 10 or 20mV/g for the measurement of low to medium level broadband frequency vibrations. The Model 8084-4 utilizes a crystal that is insensitive to vibration connected to the standard integrated electronics rendering a *Noise Monitor Sensor* to evaluate downstream instrumentation noise and data connections.

All units incorporate an electrically isolated ring-shear mass assembly within a rugged stainless steel body to provide an extremely reliable sensor that is virtually insensitive to unwanted environmental inputs. Each sensor is provided with a micro-miniature detachable cable with it's length designated by the customer adding a dash number in inches after the model number designation. The standard length is 6 inches if not designated. *Consult the factory for customized versions to meet your needs.*

Specifications Transfer / Electrical	8084-1	8084-2	8084-3	8084-4
Voltage Sensitivity ¹	5.0mV/g +/-5%	10mV/g +/-5%	20mV/g +/-5%	NA
Range	+/- 1000g Peak	+/-500 g Peak	+/- 250g Peak	+/- 1000g Peak
Frequency Linearity ²	+/-5% Max, 5 Hz To 5,000 Hz ±8% to 10,000 Hz			NA
Mounted Resonant Frequency	40KHz, Nom.			NA
Transverse Sensitivity	5% Max, Typical			NA
Amplitude Linearity	+/-1.0% (BFSL) / 100 g		NA	
Avg Temp Coeff of Sensitivity	+/-5% max	+/-10% max	+/-15% max	NA
Output Bias Voltage	8.0 VDC ±1.5VDC			
Output Impedance	100 Ohms Max.			
Isolation Resistance	100M Ohm Min.			
Power Requirements	3 To 10 mA DC Constant Current with 12 To 30 VDC Compliance			

Environmental

Vibration Limit	1000 g Max. (Sine)		
Shock Limit	1,000 g Max.		
Temperature Range	0 To +165 Deg F		
Humidity ³	0 To 98% R.H. (Non-Condensing)		
Strain Sensitivity	<13 Equiv g @ 250 micro In. Strain	NA	

Physical

Configuration	Ring Shear	
Size	0.400 In. Dia x 0.325 In. H (10.2 mm Dia. x 8.26 mm H)	
Weight	0.21 Oz (6 Gm)	
Case Material	18-8 Stainless Steel	
Electrical Interface	Miniature 2-56 Connector	
Mounting	4-40 Screw @ 3.0 in -lbs Typical	

NOTES:

Columbia Research Laboratories, Inc. 1925 Mac Dade Blvd. Woodlyn, PA 19094 USA Phone: 1-800-813-8471 / Fax: 610-872-3882 / email: sales@crlsensors.com

¹ At +75 Deg F, 10g Peak, 100Hz; Power Supply 3 To 10 mA DC Constant Current with 12 To 30 VDC Compliance ² Referenced to Sensitivity @ 100 Hz.

³ With Connector Protected or Sealed, Unit is Epoxy Sealed.