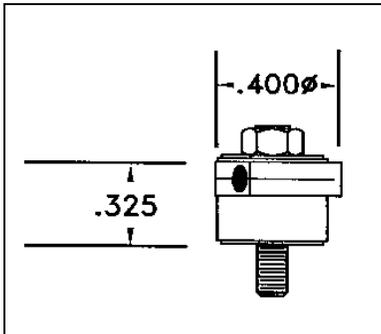
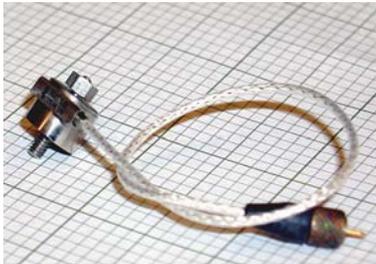


- *Vibration & Shock
- *Low Impedance Output
- *Sensitivity 5 mV/g or 10 mV/g
- *360 Deg Orientation
- *Detachable Micro-Cable Assy.
- *Electrical Isolation

The Models 8201-M5 and 8201-M10 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 mv/g and 10 mv/g for the measurement of low to medium level broadband frequency vibrations.

Both units incorporate a ring-shear crystal mass assembly within a rugged, stainless steel body to provide an extremely reliable sensor that is virtually insensitive to environmental inputs such as base bending and thermal transients. The isolated case construction provides exceptional electrical isolation. The units are supplied with Columbia's exclusive micro-miniature detachable cable and connector assembly as well as a 3-foot low-noise coaxial cable. *Consult the factory for customized versions of these sensors.*



Specifications

Transfer / Electrical	8201-M5	8201-M10
Voltage Sensitivity ¹	5 mv/g +/-5%	10 mv/g +/-5%
Range	+/-500 g Peak	+/-250 g Peak
Frequency Linearity ²	+/-5% Max, 2 Hz To 8,000 Hz <10% @ 10,000 Hz	
Mounted Resonant Frequency	40KHz, Nom.	
Transverse Sensitivity	5% Max, Typical	
Amplitude Linearity	+/-1.0% (BFSL) / 100 g	
Electrical Noise	0.005 g RMS Equiv., Nom.	
Avg Temp Coeff of Sensitivity	0.05% / Deg F	
Output Bias Voltage	5.0 VDC	
Output Impedance	100 Ohms Max.	
Isolation Resistance	100M Ohm Min.	
Power Requirements	2 To 10 mA DC Constant Current with 12 To 30 VDC Compliance	

Environmental

Vibration Limit	500 g Max. (Sine)
Shock Limit	1,000 g Max.
Temperature Range	-65 To +250 Deg F (-54 To +121 Deg C)
Humidity ³	0 To 98% R.H. (Non-Condensing)
Base Strain Sensitivity	0.003 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.01 g (Equiv / 100 Gauss)
Acoustic Sensitivity	0.05 g RMS (Equiv @ 150 dB SPL)

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

Accessories Supplied:

- (1) Micro-miniature Cable Assy., MMHR-6"
- (1) Miniature Cable Assembly, LNHT-3 Ft.
- (1) Microdot™ 10-32 Coupler (F/F)
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

NOTES:

- ¹ At +75 Deg F, 10g Peak, 100Hz; Power Supply 2 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.