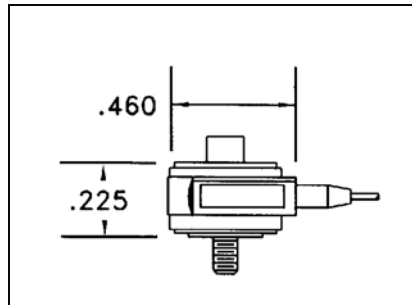


- \*Vibration & Shock
- \*Extreme Small Size
- \*Frequency Response to 10KHz
- \*Low Base Strain Sensitivity
- \*Electrical Isolation
- \*Detachable Micro-Cable Assy.

The Model 7005 Piezoelectric Accelerometer is an excellent choice for general-purpose shock and vibration measurement work, and is especially well suited for testing of small specimens. It is designed for the measurement of medium frequency, moderate to high-level shock and vibration.

The Model 7005 incorporates a ring-shear crystal mass assembly within a stainless steel body to provide an extremely reliable sensor that is insensitive to environmental inputs such as base bending and thermal transients. The isolated case construction provides exceptional electrical isolation which yields accurate, wideband shock and vibration data. This unit is supplied with Columbia's exclusive micro-miniature detachable cable and connector assembly. Mounting is accomplished with a single center 2-56 mounting screw. *Consult the factory for customized versions of this sensor.*



**Specifications**

Transfer / Electrical	7005
Charge Sensitivity <sup>1</sup>	3.3 +/-0.3 pC/g
Capacitance	250 +/-50 pF
Frequency Linearity <sup>2</sup>	+/-5% Max 2 Hz To 10,000 Hz
Mounted Resonant Frequency	55 KHz, Nom.
Transverse Sensitivity	5% Max
Amplitude Linearity	+/-1.0% (BFSL) / 300 g
Insulation Resistance	20,000 M Ohm Min, 50 VDC Test
Isolation Resistance	100 M Ohm, Min.
<b>Environmental</b>	
Vibration Limit	500 g Max (Sine)
Shock Limit	2,000 g Max, 0.25 mSec
Temperature Range	-65 To +250 Deg F (-55 To +125 Deg C)
Humidity <sup>3</sup>	0 To 98% R.H. (Non-Condensing)
Base Strain Sensitivity	0.008 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.01 g (Equiv / 100 Gauss)
<b>Physical</b>	
Configuration	Ring Shear
Size	0.460 In. Hex x 0.48 In. x 0.225 In. H 11.7 mm Hex x 12.2 mm x 5.6 mm H
Weight	0.14 Oz (4.0 Gm)
Case Material	18-8 Stainless Steel
Electrical Interface	Coaxial 10-32 Thread
Mounting	#2-56 Cap Screw

**Accessories Supplied:**

- (1) Micro-miniature Cable Assy., MMHR-6"
- (1) Miniature Cable Assembly, LNHT-3'
- (1) 10-32 Coaxial Coupler
- (1) #2-56 x 9mm Socket Head Cap Screw
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

**NOTES:**

- <sup>1</sup> At +75 Deg F, 10g Peak, 100Hz; Lower Frequency Limit is Determined by Associated Electronics
- <sup>2</sup> Referenced to Sensitivity @ 100 Hz.
- <sup>3</sup> With Connector Protected or Sealed, Unit is Epoxy Sealed