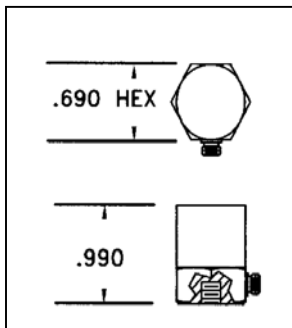


- \*Vibration & Shock
- \*Low Impedance Output
- \*Sensitivity 500 mV/g
- \*Case Grounded
- \*Hermetically Sealed

The Model 8405 Piezoelectric Accelerometer is a completely self-contained vibration measuring system having a built-in amplifier within the housing. It is designed for the measurement of low level, broadband frequency vibrations.

The Model 8405 incorporates a hybrid electronic assembly within a rugged stainless steel body to enhance its operation in humid and dirty environments. Signal ground is connected to the outer case of the unit. Low impedance output of 100 ohms or less allows operation directly into standard readout equipment without auxiliary signal conditioning, and is capable of driving up to 1,000 feet of shielded cable. *Consult the factory for customized versions of this sensor.*



**Specifications**

<b>Transfer / Electrical</b>	<b>8405</b>
Voltage Sensitivity <sup>1</sup>	500 mv/g +/-5%
Range	+/-16 g Peak
Frequency Linearity <sup>2</sup>	+/-10% Max, 2 Hz To 7,500 Hz +/-5% Max, 3 Hz To 5,000 Hz
Mounted Resonant Frequency	15KHz, Nom.
Transverse Sensitivity	5% Max, Typical
Amplitude Linearity	+/-1.0% (BFSL) / 10 g
Electrical Noise	0.03 x 10 <sup>-3</sup> g Equiv., Nom.
Avg Temp Coeff of Sensitivity	0.05% / Deg F
Output Bias Voltage	10.25 +/-1.25 VDC
Output Impedance	100 Ohms Max.
Isolation Resistance	0 (Case Grounded)
Power Requirements	2 To 10 mA DC Constant Current with 18 To 30 VDC Compliance
<b>Environmental</b>	
Vibration Limit	300 g Max. (Sine)
Shock Limit	200 g Max., 1.0 mSec
Temperature Range	-40 To +250 Deg F (-40 To +121 Deg C)
Humidity <sup>3</sup>	0 To 100% R.H.
Base Strain Sensitivity	0.08 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.001 g (Equiv / 100 Gauss)
Acoustic Sensitivity	0.001 g RMS (Equiv @ 150 dB SPL)
<b>Physical</b>	
Configuration	Single-Ended Compression
Size	0.690 In. Hex. x 0.990 In. H (12.7 mm Hex x 16.0 mm H)
Weight	1.8 Oz (51 Gm)
Case Material	18-8 Stainless Steel
Electrical Interface	Coaxial 10-32 Thread
Mounting	10-32 Tapped Base

**Accessories Supplied:**

- (1) Low Noise Cable Assembly (2M) (200 pF)
- (1) #10-32 x 0.375"L Socket Hd Set Screw, 18-8 SS
- (1) Hardwood Storage Case
- (1) Certificate of Calibration Traceable to N.I.S.T.

**NOTES:**

- <sup>1</sup> At +75 Deg F, 10g Peak, 100Hz; Power Supply 2 To 10 mA DC Constant Current with 18 To 30 VDC Compliance
- <sup>2</sup> Referenced to Sensitivity @ 100 Hz.
- <sup>3</sup> With Connector Protected or Sealed, Unit is Hermetically Sealed.

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