Columbia Research Laboratories, Inc.

Industrial Accelerometer Models 481-1

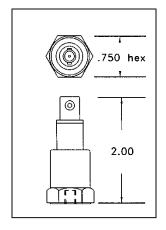
***Vibration & Shock**

*Sensitivity 60 pC/g

*Case Grounded

***BNC Connector**





Accessories Supplied:

- (1) 10-32 x 0.375"L Mounting Stud, St Stl
- (1) Hardwood Storage Case
- (1) Standard Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

The Model 481-1 Piezoelectric Accelerometer is unsurpassed for general-purpose test work in adverse environments. This sensor features a BNC top connector and has been utilized extensively in the oil industry.

The internal construction of the piezoelectric seismic system ensures that this unit has no discernible spurious response to mounting torque, body strains, cable vibration, cable whip, pressure variations and most heat transients. The stainless steel housing provides an environmentally rugged unit, while the epoxy seal offers protection against industrial environments. Its grounded case construction provides tight mechanical coupling which yields accurate, wideband shock and vibration data.

Specifications

Transfer / Electrical	481-1
Charge Sensitivity ¹	60 +/-10 pC/g
Capacitance	725 +/-60 pF
Frequency Linearity ²	+/-5% Max
	2 Hz To 5,000 Hz
Mounted Resonant Frequency	25 KHz, Min.
Transverse Sensitivity	5% Max
Amplitude Linearity	+/-1.0% (BFSL) / 500 g
Insulation Resistance	10,000 M Ohm Min, 50 VDC Test
Isolation Resistance	0 (Case Grounded)
Environmental	
Vibration Limit	1,000 g Max (Sine)
Shock Limit	2,000 g Max
Temperature Range	-100 To +350 Deg F (-73 To +175 Deg C)
Humidity ³	0 To 98% R.H. (Non-Condensing)
Base Strain Sensitivity	0.05 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.005 g (Equiv / 100 Gauss)
Acoustic Sensitivity	0.005 g RMS (Equiv @ 124 dB SPL)
Physical	
Configuration	Single Ended Compression
Size	0.750 In. Hex x 2.00 In. H (19.0 mm Hex x 53.3 mm H)
Weight	1.9 Oz (55 Gm)
Case Material	18-8 Stainless Steel
Electrical Interface	BNC Connector
Mounting	10-32 Removable Stud
NOTES	

NOTES:

¹ At +75 Deg F, 10g Peak, 100Hz; Lower Frequency Limit is Determined by Associated Electronics ² Referenced to Sensitivity @ 100 Hz.

³ With Connector Protected or Sealed, Unit is Epoxy Sealed

Columbia Research Laboratories, Inc. 1925 Mac Dade Blvd. Woodlyn, PA 19094 Phone: 1.800.813.8471 / Fax: 610.872.3882 / email: sales@columbiaresearchlab.com