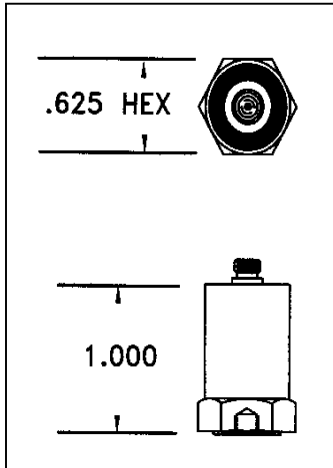


- *Extreme Cold Temperature
Vibration & Shock Measurements
- *Electrical Isolation
- *Low Base Strain Sensitivity
- *Hermetically Sealed

The Model 876 Piezoelectric Accelerometer is intended for those vibration measurement or monitoring applications requiring operation at extremely cold temperatures. The accelerometer is suitable for event and vibration monitoring of valves and pumps employed in cryogenic service.

The shear plate construction provides optimal mechanical isolation from strain-induced inputs and thermal shock transients. The electrically isolated, double case construction provides electrostatic shielding as well as minimizing power line frequency noise caused by multi-point grounding. The accelerometer features a 10-32 top connector. *Consult the factory for customized versions of this sensor.*



Specifications

Transfer / Electrical	876
Charge Sensitivity ¹ @ 75 Deg F Nominal @ -420 Deg F to -295 Deg F	50 +/-10 pC/g 25 pC/g +/-5%
Capacitance @ 75 Deg F Nominal @ -420 Deg F To -295 Deg F	4,200 +/-100 pF 1,700 pF +/-5%
Frequency Linearity ²	+/-5% Max 2 Hz To 4,000 Hz
Mounted Resonant Frequency	20 KHz, Min.
Transverse Sensitivity	5% Max
Amplitude Linearity	+/-1.0% (BFSL) / 2,000 g
Insulation Resistance	10,000 M Ohm Min, 50 VDC Test
Isolation Resistance	50 M Ohm, Min. Housing to Signal Output Terminals Shorted
Environmental	
Vibration Limit	3,000 g Max (Sine)
Shock Limit	10,000 g Peak ½ Sine
Temperature Range	-450 To +300 Deg F (-267 To +149 Deg C)
Humidity ³	0 To 100% R.H.
Base Strain Sensitivity	0.005 g/uE Equiv, Typical
Electromagnetic Sensitivity	0.005 g (Equiv / 100 Gauss)
Acoustic Sensitivity	1.0 g Max @ 170 dB Whitenoise 75 To 960 Hz
Physical	
Configuration	Bolted Shear Plate
Size	0.625 In. Hex. x 1.000 In. H (15.9 mm Hex x 25.4 mm H)
Weight	1.2 Oz (33 Gm)
Case Material	18-8 Stainless Steel
Electrical Interface	Coaxial 10-32 Thread
Mounting	10-32 UNF Tapped Base

Accessories Supplied:

- (1) 10-32 x 0.5" Mounting Stud, St Stl
- (1) Hardwood Storage Case
- (1) Standard Room Temperature Calibration Data
- (1) Certificate of Calibration Traceable to N.I.S.T.

Optional Accessories:

- Low Temperature Calibration Data

NOTES:

- ¹ At +75 Deg F, 10g Peak, 100Hz; Lower Frequency Limit is Determined by Associated Electronics
- ² Referenced to Sensitivity @ 100 Hz.
- ³ Unit is Hermetically Sealed.