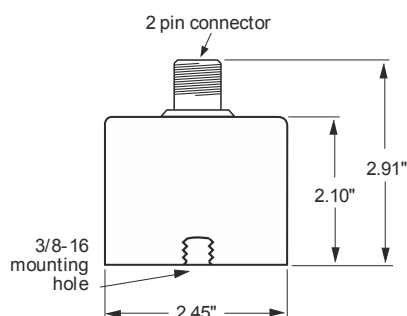


Model 731A Ultra-quiet, ultra low frequency, seismic accelerometer



Features

- Ultra high sensitivity
- Ultra low-noise electronics for clear signals at sub micro-g levels
- Low frequency capable
- Low pass filtered to eliminate high frequencies
- Reverse wiring protection



Dynamic

Sensitivity, $\pm 10\%$, 25°C.....	10 V/g
Acceleration range.....	0.5 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 10\%$	0.10 - 300 Hz
± 3 dB.....	0.05 - 500 Hz
Resonance frequency.....	815 Hz
Transverse sensitivity, max.....	1% of axial
Temperature response:	
-10°C.....	-12%
+65°C.....	+5%

Electrical

Power requirement:	voltage source	18 - 30 VDC
	current regulating diode	2 - 10 mA
Electrical noise, equiv. g:		
Broadband	2.5 Hz to 25 kHz.....	0.5 μ g
Spectral	2 Hz.....	0.03 μ g/ $\sqrt{\text{Hz}}$
	10 Hz.....	0.01 μ g/ $\sqrt{\text{Hz}}$
	100 Hz.....	0.004 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max.		100 Ω
Bias output voltage.....		9 VDC
Grounding.....		case isolated

Environmental

Temperature range	-10 to 65°C
Vibration limit.....	10 g peak
Shock limit	fragile
Electromagnetic sensitivity @60 Hz.....	20 μ g/gauss
Sealing	Hermetic
Base strain sensitivity.....	0.0001 g/ μ strain

Physical

Sensing element design.....	PZT ceramic / flexure
Weight	670 grams
Case material	316L stainless steel
Mounting	3/8 - 16 tapped hole
Output connector.....	2 pin, MIL-C-5015 style
Mating connector	R6 type
Recommended cabling	J9 / J9T2A

Connector pin	Function
Shell	ground
A	power/ signal
B	common

Note: Special handling required due to sensitivity

Accessories supplied: SF7 mounting stud; calibration data (level

3) Options: Power unit/amplifier P31