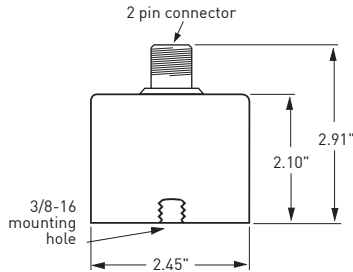


Model 731A Ultra-quiet, ultra low frequency, seismic accelerometer



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, ±10%, 25°C	10 V/g
Acceleration range	0.5 g peak
Amplitude nonlinearity	1%
Frequency response:	
±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 µg
Spectral	2 Hz	0.03 µg/√Hz
	10 Hz	0.01 µg/√Hz
	100 Hz	0.004 µg/√Hz
Output impedance, max.		100Ω
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 µg/gauss
Sealing	hermetic
Base strain sensitivity	0.0001 g/µstrain

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, wooden protective case included
 Accessories supplied: SF7 mounting stud; calibration data (level 3)
 Options: Power unit/amplifier P31

Due to continued research and product development, Wilcoxon Research reserves the right to amend this specification without notice.