

# Ultra quiet, ultra low-frequency accelerometer

## 731A

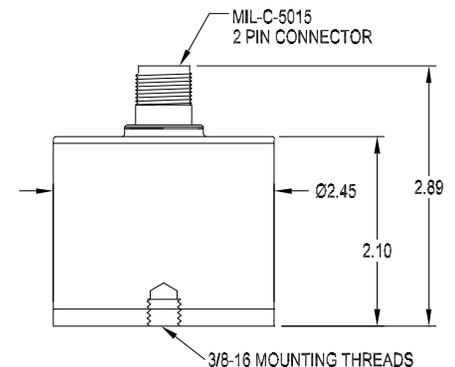


### SPECIFICATIONS

<b>Sensitivity, ±10%, 25°C</b>		10 V/g
<b>Acceleration range</b>		0.5 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	<b>±10%</b>	0.10 - 300 Hz
	<b>±3 dB</b>	0.05 - 450 Hz
<b>Resonance frequency</b>		750 Hz
<b>Transverse sensitivity, max</b>		1% of axial
<b>Temperature response:</b>	<b>-10°C</b>	-12%
	<b>+65°C</b>	+5%
<b>Power requirement:</b>		
<b>Voltage source</b>		18 - 30 VDC
<b>Current regulating diode</b>		2 - 10 mA
<b>Electrical noise, equiv. g:</b>		
<b>Broadband</b>	<b>2.5 Hz to 25 kHz</b>	0.5 µg
<b>Spectral</b>	<b>2 Hz</b>	0.03 µg/√Hz
	<b>10 Hz</b>	0.01 µg/√Hz
	<b>100 Hz</b>	0.004 µg/√Hz
<b>Output impedance, max</b>		100 Ω
<b>Bias output voltage</b>		9 VDC
<b>Grounding</b>		case isolated
<b>Temperature range</b>		-10° to +65°C
<b>Vibration limit</b>		10 g peak
<b>Shock limit</b>		fragile
<b>Electromagnetic sensitivity at 60 Hz</b>		20 µg/gauss
<b>Sealing</b>		hermetic
<b>Base strain sensitivity, max</b>		0.0001 g/µstrain
<b>Sensing element design</b>		PZT ceramic / flexure
<b>Weight</b>		760 grams
<b>Case material</b>		316L stainless steel
<b>Mounting</b>		3/8-16 tapped hole
<b>Output connector</b>		2 pin, MIL-C-5015 style
<b>Mating connector</b>		R6 type
<b>Recommended cabling</b>		J9 / J9T2A

### Key features

- Ultra low-noise electronics for clear signals at sub-µg levels
- Ultra high sensitivity
- Manufactured in ISO 9001 facility



**Note:** Special handling required due to sensitivity; wooden protective case included.

**Accessories supplied:** SF7 mounting stud; calibration data (level 3)

**Options:** Power unit/amplifier model P31



Connections	
Function	Connector pin
power/signal	A
common	B
ground	shell

Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.