

### Tri-axial low frequency accelerometer



### Features

- Low frequency response
- Rugged design
- High sensitivity
- Hermetic seal
- Case isolated
- ESD protection
- Reverse wiring protection
- EMI / RFI shielded

### Dynamic

Sensitivity, $\pm 10\%$ , $25^{\circ}\text{C}$ .....	100 mV/g
Acceleration range .....	50 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 5\%$ .....	0.3 - 4,000 Hz
$\pm 3$ dB.....	0.1 - 6,000 Hz
Resonance frequency.....	24 kHz
Transverse sensitivity, max.....	5% of axial
Temperature response:	
$-50^{\circ}\text{C}$ .....	-10%
$+120^{\circ}\text{C}$ .....	+10%

### Electrical

Power requirement: voltage source .....	18 - 30 VDC
current regulating diode .....	2 - 10 mA
Electrical noise, Broadband Spectral(g):	
2.5 Hz to 25 kHz.....	100 $\mu\text{g}$
10 Hz.....	2 $\mu\text{g}/\sqrt{\text{Hz}}$
100 Hz.....	1 $\mu\text{g}/\sqrt{\text{Hz}}$
1000 Hz.....	0.5 $\mu\text{g}/\sqrt{\text{Hz}}$
Output impedance, max.....	100 $\Omega$
Bias output voltage.....	12 VDC
Grounding.....	case isolated, Internally shielded

### Environmental

Temperature range.....	$-50$ to $120^{\circ}\text{C}$
Vibration limit.....	100 g peak
Shock limit.....	2,000 g peak
Electromagnetic sensitivity, equiv g, max .....	70 $\mu\text{g}/\text{gauss}$
Sealing .....	Hermetic
Base strain sensitivity, max.....	0.0002 g/ $\mu\text{strain}$

### Physical

Sensing element design.....	PZT ceramic/shear
Weight.....	400 grams
Case material.....	316 stainless steel
Mounting.....	M8 stud
Output connector.....	5 pin, M12

### Accessories

M8 to M8 mounting stud (or customers specified)

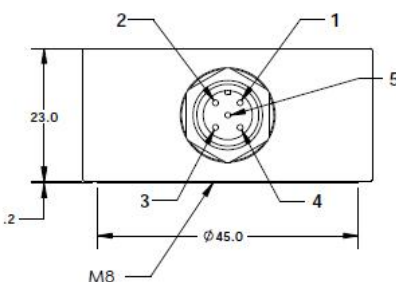
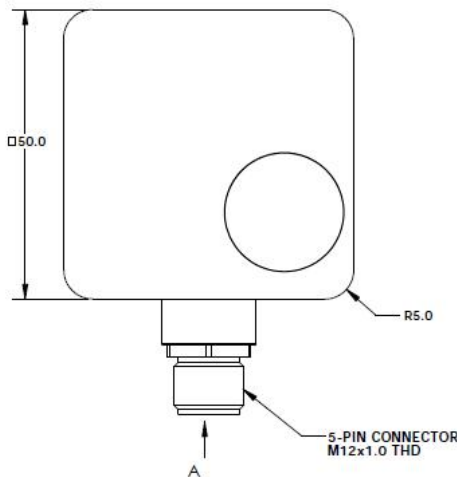
Calibration certificate

Mating cable optional, Model number as (Below LL is cable length in meter):

19A-LL (M12 to Pigtail)

19A-LL-B (M12 to 3x BNC)

Note: Frequency response limits spectral and noise values are typical



#### A向

连接器针功能表:  
 针2 = 加速计X信号+  
 针3 = 加速计Y信号+  
 针4 = 加速计Z信号+  
 针1 = 加速计XYZ共-

#### 配套线缆定义

线缆颜色:  
 蓝色  
 灰色  
 棕色  
 黑色

### Ordering Information

331A-50-LF

