

# Triaxial accelerometer with positioning pin

## 993A-3

### SPECIFICATIONS

Sensitivity, $\pm 10\%$ , 25°C	100 mV/g
Acceleration range <sup>1</sup>	50 g peak
Amplitude nonlinearity	1%
Frequency response <sup>2</sup> :	
all channels, $\pm 10\%$	2 - 2,000 Hz
Transverse sensitivity, max	5% of axial
Temperature response:	
-50°C	+10%
+120°C	-7%
Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode <sup>3</sup>	2 - 10 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz	150 $\mu\text{g}$
Spectral 10 Hz	20 $\mu\text{g}/\sqrt{\text{Hz}}$
100 Hz	2.0 $\mu\text{g}/\sqrt{\text{Hz}}$
1,000 Hz	0.6 $\mu\text{g}/\sqrt{\text{Hz}}$
Output impedance, max	100 $\Omega$
Bias output voltage, nominal	12 VDC
Grounding	case isolated, internally shielded
Temperature range	-50° to +120°C
Vibration limit	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g	250 $\mu\text{g}/\text{gauss}$
Base strain sensitivity	0.002 g/ $\mu\text{strain}$
Weight	90 grams
Case material	hardcoated aluminum
Mounting	1/4-28 captive screw
Output connector (at end of cable)	PC02A-8-4P
Mating connector	R9W
Recommended cabling	J9T4

**Notes:** <sup>1</sup> To minimize the possibility of signal distortion for high vibration signals, 24 to 30 VDC powering is recommended. The higher level constant current source should be used when driving long cables.

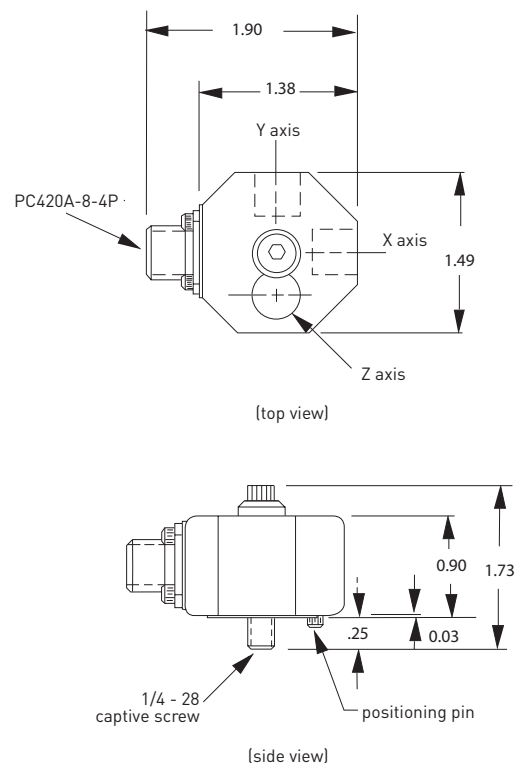
<sup>2</sup> As measured using the mounting screw.

<sup>3</sup> A maximum current of 6 mA is recommended for operating temperatures in excess of 100°C.

**Accessories supplied:** 1/4-28 captive screw; calibration data

### Key features

- Triaxial measurements provide more data from a single sensor
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
x	A
y	B
z	C
common	D



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