

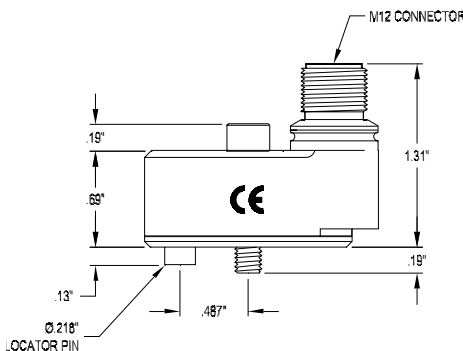
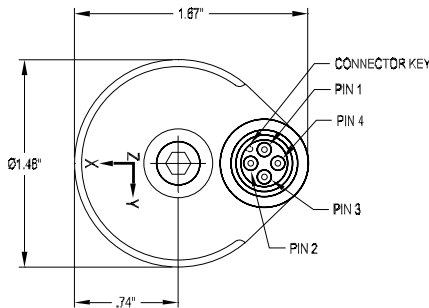


## Wilcoxon Research model 993B-7-M12 General purpose, hermetic triaxial accelerometer



### Features

- Rugged hermetic design
- 3-axis simultaneous sensing
- Broad frequency response
- Captive mounting screw
- EMI/RFI protection
- ESD protection
- Reverse wire protection
- Low noise



### Dynamic

Sensitivity, $\pm 10\%$ , 25° C .....	100 mV/g
Acceleration range .....	60 g peak
Amplitude nonlinearity .....	1%
Frequency response <sup>1</sup> :	
Z Axis $\pm 3$ dB .....	2 - 10,000 Hz
X and Y axis $\pm 3$ dB .....	2 - 7,000 Hz
Transverse sensitivity, max .....	7% of axial

### Electrical

Power requirement:	
Voltage source .....	18 - 30 VDC
Current regulating diode .....	2 - 5 mA
Electrical noise, equiv. g nominal:	
Broadband 2.5 Hz to 25 kHz .....	160 $\mu$ g
Spectral	
10 Hz .....	10 $\mu$ g/√Hz
100 Hz .....	2.0 $\mu$ g/√Hz
1000 Hz .....	1.5 $\mu$ g/√Hz
Output impedance, max. ....	400 $\Omega$
Bias output voltage .....	12 VDC
Grounding .....	case isolated, internally shielded
Turn-on time .....	<1 sec

### Environmental

Temperature range .....	-50 to 120° C
Vibration limit .....	500 g peak
Shock limit .....	5,000 g peak
Electromagnetic sensitivity, equiv. g. ....	100 $\mu$ g/gauss
Sealing .....	hermetic
Base strain sensitivity, max. ....	0.0005 g/ $\mu$ strain

### Physical

Weight .....	124 g
Case material .....	316L stainless steel
Mounting .....	10-32 tapped hole
Output connector .....	4 pin, M12 style
Mating connector .....	M12S
Recommended cabling .....	4 conductor, shielded

### Connections

Function	Connector pin
Axis X, power / signal	1
Axis Y, power / signal	2
Axis Z, power / signal	3
common (all channels)	4
ground	shell

Notes: <sup>1</sup> As measured using the TCC-993 mounting cube  
Accessories supplied: captive screw, calibration data

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