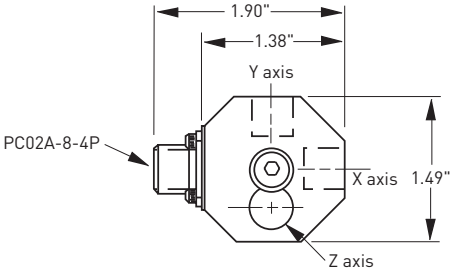
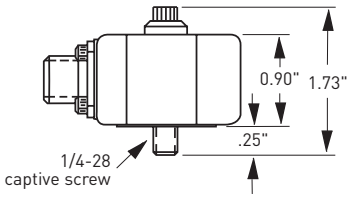
Wilcoxon Research

Model 993A
General purpose, triaxial accelerometer

Features
- Rugged design
- Easy to mount



Top view



Side view

Dynamic

Sensitivity, ±10%, 25°C	100 mV/g
Acceleration range	50 g peak
Amplitude nonlinearity	1%
Frequency response:	
all channels, ±10%	2 - 2,000 Hz
Transverse sensitivity, max.	5% of axial
Temperature response	–50°C +10% +25°C +0% +80°C +3% –120°C –7%

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	150 µg
Spectral 10 Hz	20 µg/√Hz
100 Hz	2 µg/√Hz
1000 Hz	0.6 µg/√Hz
Output impedance, max.	100 Ω
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded

Environmental

Temperature range	–50 to 120°C
Vibration limit	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g.	100 µg/gauss
Sealing	Epoxy
Base strain sensitivity	0.0005 g/µstrain

Physical

Sensing element design	PZT ceramic / shear
Weight	88 grams
Case material	hardcoated aluminum
Mounting	1/4-28 captive socket head screw
Output connector	4 pin, Bendix PC02A-8-4P
Mating connector	R9W
Recommended cabling	J9T4

Connector pin	Function	Cable conductor color
Shell	N/C	shield
A	axis Y, power / signal	green
B	axis X, power / signal	red
C	axis Z, power / signal	white
D	common (all channels)	black

Accessories supplied: #11714-09 captive screw (International customers specify mounting requirements); calibration data (level 2)

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