Wilcoxon Research

Model 787F
Low profile, general purpose accelerometer

Features

- Corrosion resistant
- Hermetic design
- Ground isolated
- ESD protection
- EMI / RFI protection
- Reverse wiring protection
- Mounts in any orientation

Dynamic

Sensitivity, ±10%, 25°C		100 mV/g
Acceleration range		80 g peak
Amplitude nonlinearity		1%
Frequency response:		
±10%		1.0 - 5,000 Hz
±3 dB		0.7 - 10,000 Hz
Resonance frequency		22 kHz
Transverse sensitivity, max		5% of axial
Temperature response:		
–50°C		–5%
+120°C		+5%

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	700 µg
Spectral	10 Hz	10 µg/√Hz
	100 Hz	5 µg/√Hz
	1000 Hz	5 µg/√Hz
Output impedance, max		100 Ω
Bias output voltage		12 VDC
Grounding		case isolated, internally shielded

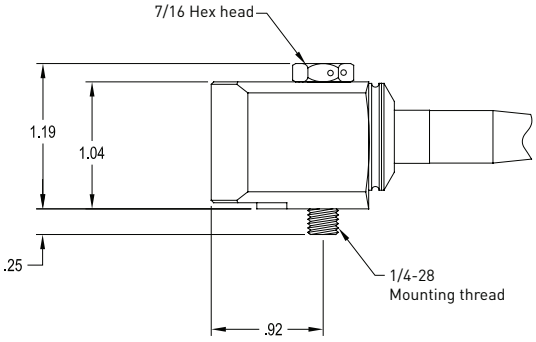
Environmental

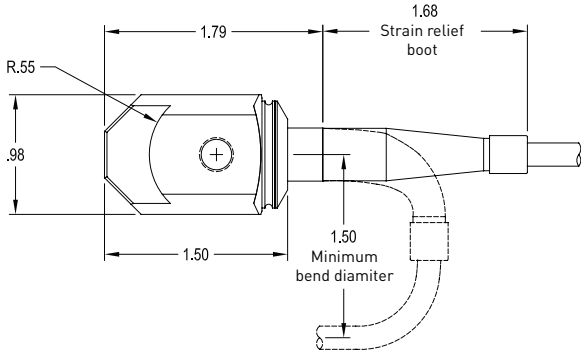
Temperature range	–50 to 120°C
Vibration limit	500 g
Shock limit, min	5,000 g
Electromagnetic sensitivity, equiv. g, max	70 µg/gauss
Sealing	hermetic
Base strain sensitivity, max	0.002 g/µstrain
Hydrostatic pressure	100 psi

Physical

Sensing element design	PZT ceramic / shear
Weight	145 grams
Case material	316L stainless steel
Mounting	1/4 - 28 captive hex head screw with 0.046" diameter safety wire hole
Integral cabling	J9T2A, 16 ft., blunt cut

Function	Cable conductor color
Case	shield
Power/ signal	white
Common	black





Accessories supplied: #80165-01 captive hex head screw; calibration data (level 2).

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Due to continued research and product development, Wilcoxon Research reserves the right to amend this specification without notice.