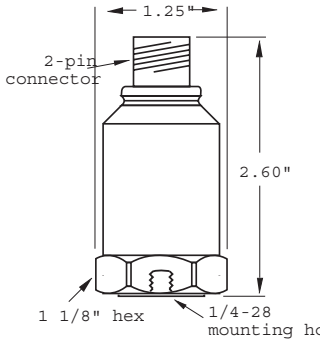
Wilcoxon Research

Model 799M
Low frequency, high sensitivity, filtered accelerometer

Features

- High sensitivity
- Ultra low-noise electronics for clear signals at very low vibration levels
- Optimized for 15V supply
- Low pass filtered to eliminate high frequencies
- Hermetic seal
- ESD protection
- Reverse wiring protection



Dynamic

Sensitivity, ±5%, 25°C	1,000 mV/g
Acceleration range	5 g peak
Amplitude nonlinearity	1%
Frequency response:	
–5%	0.6 - 1,200 Hz
–10%	0.4 - 1,600 Hz
–3 dB	0.2 - 2,500 Hz
Resonance frequency	18 kHz
Transverse sensitivity, max	5% of axial
Temperature response	–50°C –7% +80°C +5%

Electrical

Power requirement: voltage source	15 - 30 VDC
current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Spectral 0.10 Hz	15 µg/√Hz
1 Hz	3 µg/√Hz
10 Hz	1 µg/√Hz
100 Hz	1 µg/√Hz
Output impedance, max	400 Ω
Bias output voltage	8.0 VDC
Grounding	case isolated, internally shielded

Environmental

Temperature range	–50 to 80°C
Vibration limit	250 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g	150 µg/gauss
Sealing	hermetic
Base strain sensitivity	0.0005 g/µstrain

Physical

Sensing element design	PZT ceramic / shear
Weight	205 grams
Case material	316L stainless steel
Mounting	1/4-28 tapped hole
Output connector	2 pin, MIL-C-5015 style
Mating connector	R6 type
Recommended cabling	J9T2A

Connector pin	Function
Shell	ground
A	power/ signal
B	common

Accessories supplied: SF6 mounting stud (International customers specify mounting requirements); calibration data (level 3)

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