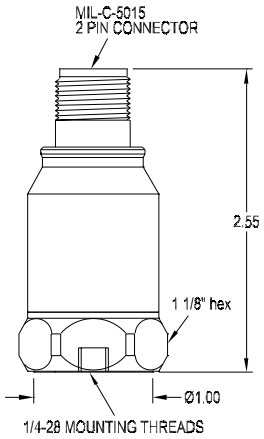
Wilcoxon Research model 799M
Premium, high sensitivity, filtered accelerometer

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, shear
Weight	205 g
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

Connections

Function	Connector pin
ground	shell
power / signal	A
common	B

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

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smart engineering for extreme environments

Due to continued research and product development, Meggitt Sensing Systems reserves the right to amend this specification without notice.
This document is cleared for public release.

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