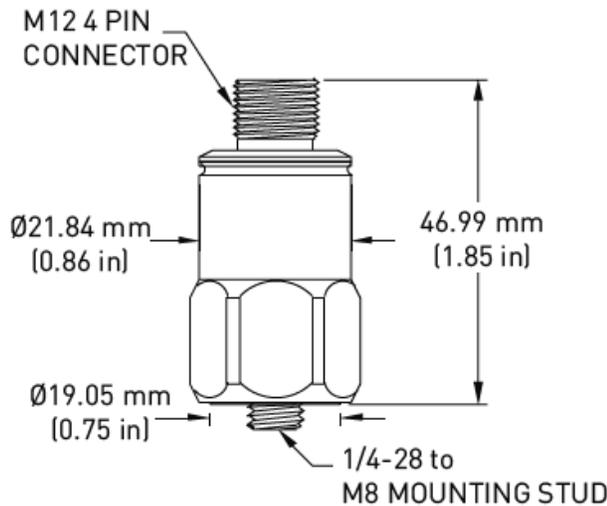
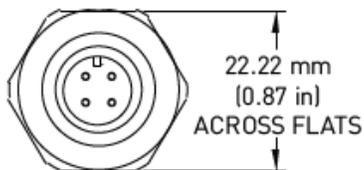
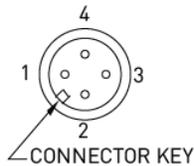


General purpose low-frequency accelerometer

786-500-M12



Wilcoxon's top-exit 786-500-M12 sensor offers clear signals at low vibration levels. The sensor is designed with extended low-end frequency response and improved signal-to-noise ratio compared to other general purpose models. It can be used to detect both low- and high-speed vibrations and is optimized for detecting vibration on slow turning machinery such as cooling tower fans and slow-speed gearboxes. The sensor comes with the popular M12 connector.



Connections	
Function	Connector pin
ground	shell
power/signal	1
common	2
N/C	3
N/C	4

Key features

- Rugged design
- Comes with industry popular M12 connector
- High sensitivity
- Hermetically sealed
- ESD protected
- Reverse wiring protection

Certifications



Note: Due to continuous process improvement, specifications are subject to change without notice. This document is cleared for public release.

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Wilcoxon Sensing Technologies
An Amphenol Company

General purpose low-frequency accelerometer

786-500-M12

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25° C	500 mV/g
Acceleration range, VDC > 22V	10 g peak
Amplitude nonlinearity	1%
Frequency response¹:	
$\pm 5\%$	0.7 - 5,000 Hz
$\pm 10\%$	0.5 - 9,000 Hz
± 3 dB	0.2 - 14,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-50° C	-5%
+120° C	+5%
Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g¹:	
Broadband	2.5 Hz to 25 kHz
Spectral	10 Hz
	100 Hz
	1,000 Hz
	250 μ g
	2.5 μ g/ $\sqrt{\text{Hz}}$
	1.5 μ g/ $\sqrt{\text{Hz}}$
	1.5 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max	100 Ω
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Temperature range	-50 to +120° C
Vibration limit	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g, max	70 μ g/gauss
Sealing	hermetic
Base strain sensitivity, max	0.0002 g/ μ strain
Sensing element design	PZT, shear
Weight	90 grams
Case material	316L stainless steel
Mounting	1/4-28 UNF tapped hole
Mating connector	M12 style, 4 or 5 pin
Recommended cabling	J10 / J9T2A

Contact

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Accessories supplied:

- Calibration data (level 2)
- SF6M mounting stud

Note: ¹ Frequency response limits and spectral noise values are typical.

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