

# Low-frequency accelerometer

## 786-500-M12

### SPECIFICATIONS

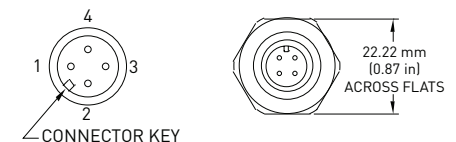
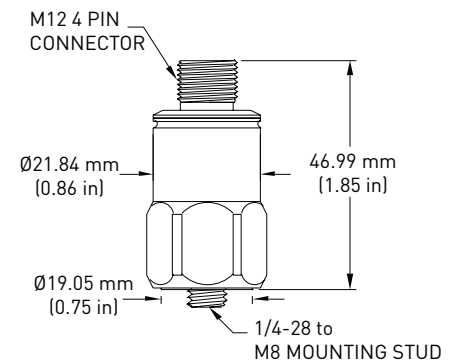
<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>		500 mV/g
<b>Acceleration range, VDC &gt; 22 V</b>		10 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response<sup>1</sup>:</b>	<b><math>\pm 5\%</math></b>	0.7 - 5,000 Hz
	<b><math>\pm 10\%</math></b>	0.5 - 9,000 Hz
	<b><math>\pm 3</math> dB</b>	0.2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

**Notes:** <sup>1</sup> Frequency response limits and spectral noise values are typical.  
**Accessories supplied:** SF6M-1 mounting stud; calibration data (level 2)



### Key features

- High sensitivity
- Certified versions available for use in hazardous areas
- Manufactured in ISO 9001 facility



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



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