

Ultra low-frequency accelerometer

786LF-M12 series

SPECIFICATIONS

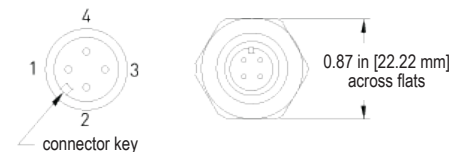
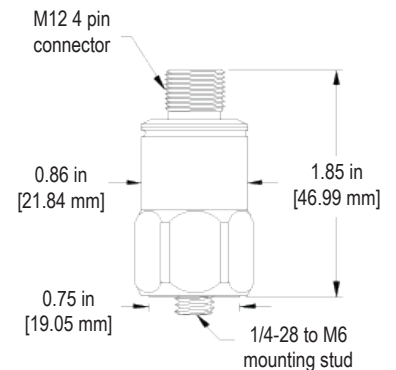
	786LF-M12	786LF-250-M12	786LF-500-M12
Sensitivity, $\pm 5\%$, 25°C	100 mV/g	250 mV/g	500 mV/g
Acceleration range, VDC > 22 V	50 g peak	20 g peak	10 g peak
Amplitude nonlinearity	1%		
Frequency response:			
$\pm 5\%$	0.35 - 5,000 Hz		
$\pm 10\%$	0.25 - 8,000 Hz		
± 3 dB	0.10 - 13,000 Hz		
Resonance frequency, nominal	30 kHz		
Transverse sensitivity, max	5% of axial		
Temperature response:			
-25°C	-10%		
+120°C	+15%		
Power requirement:			
Voltage source	18 - 30 VDC		
Current regulating diode	2 - 10 mA		
Electrical noise, equiv. g:			
Broadband 2.5 Hz to 25 kHz	400 μ g rms	350 μ g rms	250 μ g rms
Spectral			
10 Hz	5.0 μ g/ $\sqrt{\text{Hz}}$	4.0 μ g/ $\sqrt{\text{Hz}}$	3.0 μ g/ $\sqrt{\text{Hz}}$
100 Hz	3.0 μ g/ $\sqrt{\text{Hz}}$	3.0 μ g/ $\sqrt{\text{Hz}}$	2.0 μ g/ $\sqrt{\text{Hz}}$
1,000 Hz	3.0 μ g/ $\sqrt{\text{Hz}}$	3.0 μ g/ $\sqrt{\text{Hz}}$	2.0 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max	100 Ω	200 Ω	300 Ω
Bias output voltage	13 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		
Output connector	4 pin, M12 style		
Mating connector	R6 type		
Recommended cabling	J10 / J9T2A, <100 ft.		

Accessories supplied: SF6M-1 mounting stud; calibration data (level 2)



Key features

- Extended low frequency response
- Available with 100, 250, or 500 mV/g sensitivity
- M12 connector
- 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.