

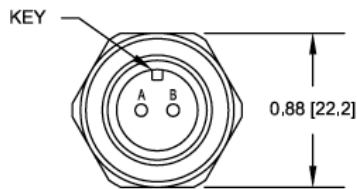
General purpose accelerometer

786A

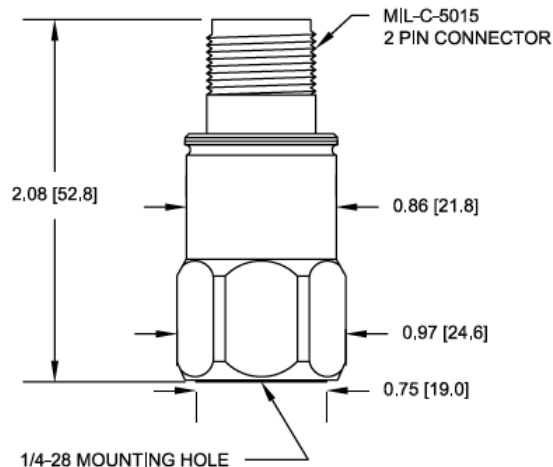


The top-exit Wilcoxon 100 mV/g broadband sensor provides long-lasting reliability with MTBF 25 years. The general purpose accelerometer is ideal for monitoring machine vibration on a wide range of rotating equipment such as motors, pumps, fans, compressors, turbines and generators. The 316L stainless steel casing provides rugged durability for most extreme environments. The sensing element is housed in a case-isolated Faraday shield, providing maximum protection from ground loops and RF interference. Certified versions are available for use in hazardous areas.

786A series models	
Model	Description
786A-IS	Certified for Class I Div 1 areas
786A-D2	Certified for Class I Div 2 areas



Connections	
Function	Connector pin
power/signal	A
common	B
ground	shell



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

Key features

- Case isolated
- Hermetically sealed
- ESD-protected
- EMI/RFI shielded
- Reverse wiring protection
- Manufactured in an approved ISO 9001 facility
- API 670 compliant

Certifications



Optional certified versions available for use in hazardous areas

- Class I Div 1 (Zone 0/1)
- Class I Div 2 (Zone 2)



General purpose accelerometer

786A

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25°C	100 mV/g
Acceleration range, VDC > 25 V	80 g peak
Amplitude nonlinearity	1%
Frequency response:	
$\pm 5\%$	3 - 5,000 Hz
$\pm 10\%$	1 - 9,000 Hz
± 3 dB	0.5 - 14,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-55°C	-20%
+120°C	+10%
Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Broadband	2.5 Hz to 25 kHz
Spectral	10 Hz
	100 Hz
	1,000 Hz
	700 μ g
	10 μ g/ $\sqrt{\text{Hz}}$
	5 μ g/ $\sqrt{\text{Hz}}$
	5 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max	100 Ω
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Temperature range	-55° 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	MIL-5015 style
Recommended cabling	J10 / J9T2A

Contact

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Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud

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