

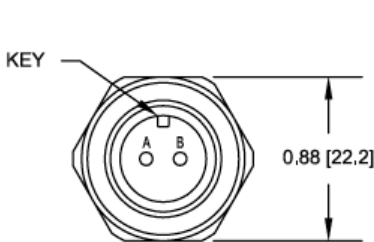
# General purpose accelerometer

## 786A

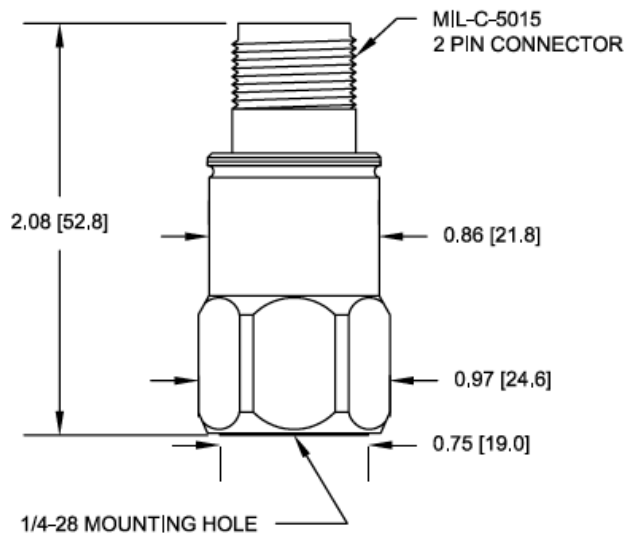


The top-exit Wilcoxon 100 mV/g broadband sensor provides long-lasting reliability with MTBF 25 years. The general purpose accelerometer is ideal for monitoring machine vibration on a wide range of rotating equipment such as motors, pumps, fans, compressors, turbines and generators. The 316L stainless 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



### Key features

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

### Certifications



Optional certified versions available for use in hazardous areas

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



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

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An Amphenol Company

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## 786A

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25° C</b>	100 mV/g
<b>Acceleration range, VDC &gt; 25 V</b>	80 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response:</b>	
$\pm 5\%$	3 - 5,000 Hz
$\pm 10\%$	1 - 9,000 Hz
$\pm 3$ dB	0.5 - 14,000 Hz
<b>Resonance frequency</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response:</b>	
-25° C	-10%
+120° C	+10%
<b>Power requirement:</b>	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
<b>Electrical noise, equiv. g:</b>	
Broadband	2.5 Hz to 25 kHz
Spectral	10 Hz
	100 Hz
	1,000 Hz
	700 $\mu$ g
	10 $\mu$ g/ $\sqrt{\text{Hz}}$
	5 $\mu$ g/ $\sqrt{\text{Hz}}$
	5 $\mu$ g/ $\sqrt{\text{Hz}}$
<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>	MIL-5015 style
<b>Recommended cabling</b>	J10 / J9T2A

### Contact

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### Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud

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