

Low profile, general purpose accelerometer

787A

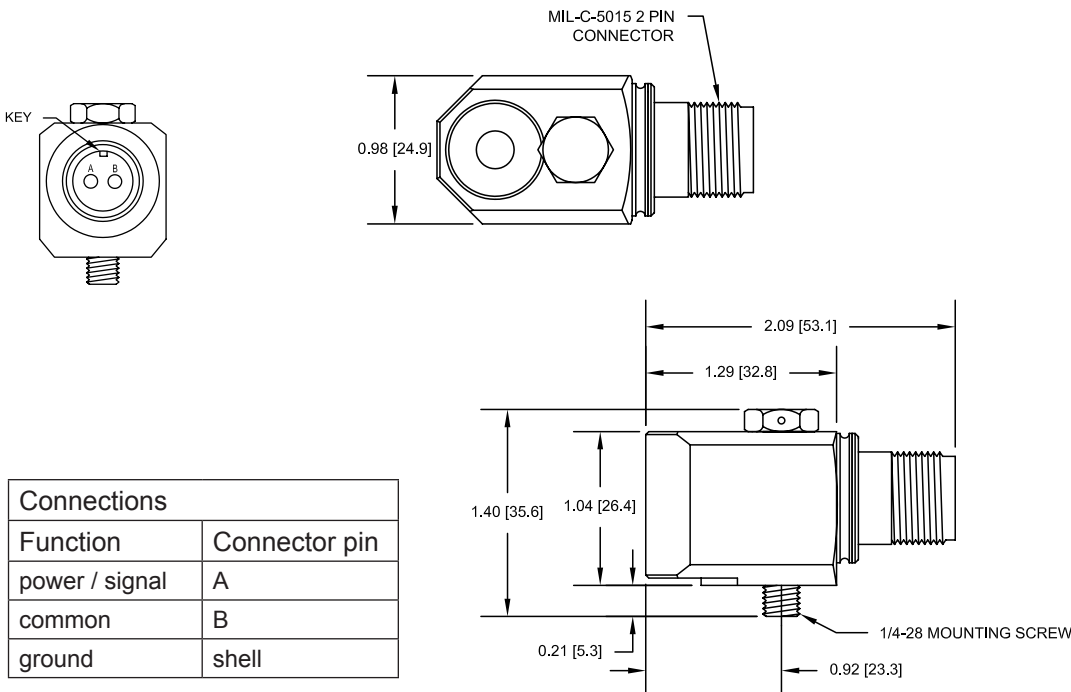


Wilcoxon's side-exit 100 mV/g broadband sensor is ideal for monitoring machine vibration on a wide range of rotating equipment including motors, pumps, fans, compressors, turbines and generators. A 316L stainless steel casing provides rugged durability for the most extreme environments. The sensing element is housed in a case-isolated Faraday shield, providing maximum protection from ground loops and RF interference.

Key features

- Mounts in any orientation
- Hermetically sealed
- ESD-protected
- Reverse wiring protection
- Manufactured in an approved ISO 9001 facility

Certifications



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.

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 An Amphenol Company

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SPECIFICATIONS

	English	Metric
Sensitivity, $\pm 5\%$, 25° C	100 mV/g	9.8 mV/m/sec ²
Acceleration range, VDC >25 V	80 g peak	784 m/sec ²
Amplitude nonlinearity	1%	1%
Frequency response:		
$\pm 10\%$	60 - 300,000 CPM	1 - 5,000 Hz
± 3 dB	30 - 600,000 CPM	0.5 - 10,000 Hz
Resonance frequency	1.32 kCPM	22 kHz
Transverse sensitivity, max	5% of axial	5% of axial
Temperature response:		
-25° C	-10%	-10%
+120° C	+10%	+10%
Voltage source	18 - 30 VDC	18 - 30 VDC
Current regulating diode	2 - 10 mA	2 - 10 mA
Electrical noise, equiv g:		
Broadband 2.5 Hz to 25 kHz	700 μ g	6.9×10^{-3} m/sec ²
Spectral 10 Hz	10 μ g/ $\sqrt{\text{Hz}}$	9.8×10^{-5} m/sec ² / $\sqrt{\text{Hz}}$
100 Hz	5 μ g/ $\sqrt{\text{Hz}}$	4.9×10^{-5} m/sec ² / $\sqrt{\text{Hz}}$
1000 Hz	5 μ g/ $\sqrt{\text{Hz}}$	4.9×10^{-5} m/sec ² / $\sqrt{\text{Hz}}$
Output impedance, max	100 Ω	100 Ω
Bias output voltage	12 VDC	12 VDC
Grounding	case isolated, internally shielded	
Temperature range	-58 to +248° F	-50 to +120° C
Vibration limit	500 g peak	4,900 m/sec ² peak
Shock limit	5,000 g peak	49,000 m/sec ² peak
Electromagnetic sensitivity, equiv g, max	70 μ g/gauss	6.9×10^{-4} m/sec ² /gauss
Sealing	hermetic	hermetic
Base strain sensitivity, max	0.002 g/ μ strain	
Sensing element design	PZT, shear	PZT, shear
Weight	5.11 oz	145 g
Case material	316L stainless steel	316L stainless steel
Mounting	1/4-28 captive hex head screw, 0.046" diameter safety wire hole	
Output connector	2 pin, MIL-C-5015 style	
Recommended cabling	J9T2A / J9F	

Contact

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Accessories supplied:

- 1/4-28 captive hex head screw
- Calibration data (level 2)

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