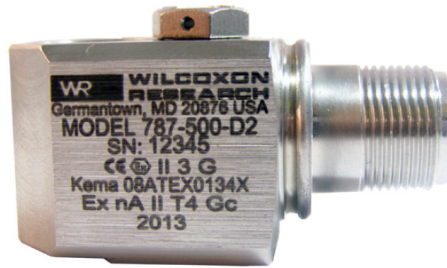
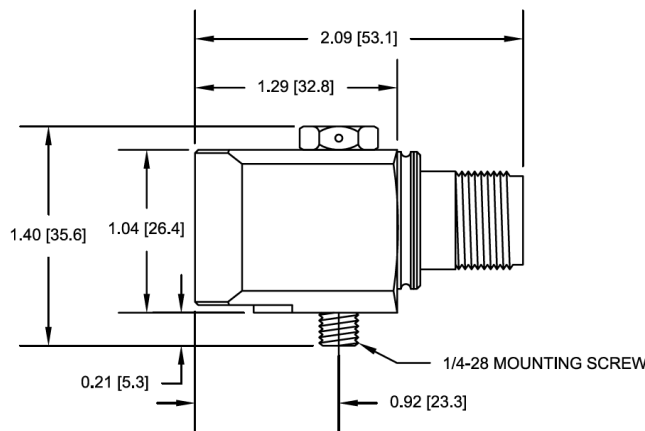
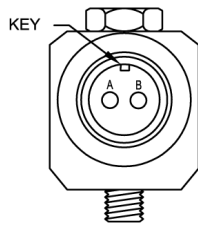


Class I, Div 2 certified low-frequency accelerometer 787-500-D2

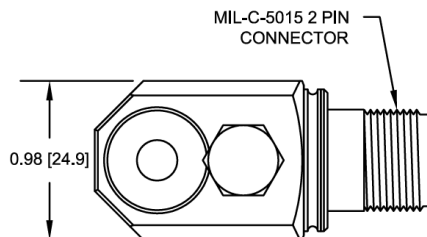


Wilcoxon's side-exit broadband sensor is certified for usage in hazardous areas. The high-sensitivity accelerometer offers an interior sensing element capable of producing 500 mV/g outputting clear signals at low vibration levels. The low-end frequency response makes it ideal for slow-speed applications such as wind turbine generators and cooling towers. A high top-end frequency response offers clear signals for early bearing fault detection, gear-box wear, and other high-speed applications. The sensor is supplied with a 2 pin MIL-5015 connector.

The 787-500-D2 is classified for usage in Class I Division 2/Zone 2 locations where ignitable gases, vapors or liquids are handled, processed or used but are not usually present during normal operation and can only escape through accidental rupture, breakdown or leaks.



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



Key features

- High sensitivity
- Clear signals at low vibration levels
- Extended low frequency response
- Class I, Div 2/Zone 2 certified, non-incendive
- Mounts in any orientation
- Hermetically sealed
- Rugged design
- ESD-protected
- Reverse wiring protection
- Manufactured in an approved ISO 9001 facility

Certifications

Class I, Div 2 Groups A, B, C, D
 Class I, Zone 2
 AEx/Ex nA II T4
 Tamb: -50°C to 120°C

II 3 G
 Ex nA IIC T4 Gc

For hazardous area locations, sensor must be installed in accordance with installation instructions or local code requirements. Special conditions for safe use: ambient temperature range is dependent on the cable type used:
 FEP (Teflon): -50°C to 120°C
 Santoprene: -45°C to 115°C



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

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Wilcoxon Sensing Technologies
 An Amphenol Company

Class I, Div 2 certified low-frequency accelerometer 787-500-D2

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25° C	500 mV/g
Acceleration range, VDC >22V	10 g peak
Amplitude nonlinearity	1%
Frequency response ¹ :	
$\pm 10\%$	0.5 - 5,000 Hz (30 - 300,000 CPM)
± 3 dB	0.2 - 10,000 Hz (12 - 600,000 CPM)
Resonance frequency	22 kHz (1.32 kCPM)
Transverse sensitivity, max	5% of axial
Temperature response	
-20° C	-10%
+120° C	+10%
Voltage source	18 - 28 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv g:	
Broadband 2.5 Hz to 25 kHz	250 μ g
Spectral 10 Hz	2.5 μ g \sqrt Hz
100 Hz	1.5 μ g \sqrt Hz
1000 Hz	1.5 μ g \sqrt Hz
Output impedance, max	100 Ω
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Temperature range	-50 to +120° C (-58 to 248° F)
Vibration limit	500 g peak
Shock limit, min	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	145 grams (5.11 oz)
Case material	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
Mating connector	R6D2
Recommended cabling	J10 / J9T2A, <100 ft

Contact

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Accessories supplied:

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

Note: ¹ Frequency response limits, spectral and noise values are typical.

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