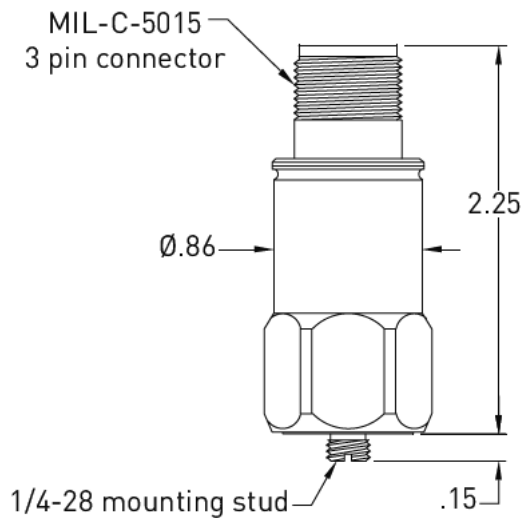


# Class I Div 2 (Zone 2) certified accelerometer with internal temperature sensor

## 786T-D2



Connections	
Function	Connector pin
ground / case	shell
accel power / signal	A
accel and temp sensor common	B
sensor signal	C

### Key features

- Measures both acceleration and temperature
- Certified for use in Class I Div 2/Zone 2 hazardous areas
- Rugged design
- Corrosion resistant
- Hermetically sealed
- Case isolated
- ESD-protected
- Reverse wiring protection

### Certifications



Class I, Div 2 Groups A, B, C, D



Class I, Zone 2  
Ex nA II T4 Ta=120°C

For hazardous area locations, sensor must be installed in accordance with installation instructions or local code requirements.



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

Wilcoxon Sensing Technologies  
20511 Seneca Meadows Parkway  
Germantown, MD 20876  
info@wilcoxon.com

Tel: (301) 330 8811  
Fax: (301) 330 8873  
www.wilcoxon.com

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An Amphenol Company

# Class I Div 2 (Zone 2) certified accelerometer with internal temperature sensor



## 786T-D2

### 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 - 7,000 Hz
$\pm 3$ dB	0.5 - 12,000 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>Temperature sensor:</b>	
<b>Output sensitivity</b>	10 mV/°C
<b>Measurement range</b>	2 to 120° C (36 to 248° F)
<b>Power requirement:</b>	
<b>Voltage source</b>	18 - 30 VDC
<b>Current regulating diode</b>	2 - 10 mA
<b>Electrical noise, equiv. g:</b>	
<b>Broadband</b> <b>2.5 Hz to 25 kHz</b>	700 $\mu$ g
<b>Spectral</b> <b>10 Hz</b>	10 $\mu$ g/ $\sqrt$ Hz
<b>100 Hz</b>	5 $\mu$ g/ $\sqrt$ Hz
<b>1,000 Hz</b>	5 $\mu$ g/ $\sqrt$ Hz
<b>Output impedance, max</b>	100 $\Omega$
<b>Bias output voltage, nominal</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>Output connector</b>	3-pin, MIL-C-5015 style
<b>Mating connector</b>	R6G
<b>Recommended cabling</b>	J9T3A

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### Contact

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Technologies

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### Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud (international customers specify mounting requirements)

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