

# Class I Div 2 certified accelerometer




## 787A-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>	1 - 5,000 Hz
<b><math>\pm 10\%</math></b>	0.5 - 10,000 Hz
<b><math>\pm 3</math> dB</b>	
<b>Resonance frequency</b>	22 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response:</b>	-20%
<b>-55°C</b>	+10%
<b>+120°C</b>	
<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>	700 $\mu$ g
<b>2.5 Hz to 25 kHz</b>	
<b>Spectral</b>	10 $\mu$ g/ $\sqrt$ Hz
<b>10 Hz</b>	
<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</b>	12 VDC
<b>Grounding</b>	case isolated, internally shielded
<b>Temperature range</b>	-55° 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>	0.002 g/ $\mu$ strain
<b>Sensing element design</b>	PZT, shear
<b>Weight</b>	145 grams
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	1/4-28 captive hex head screw, 0.046" diameter safety wire hole
<b>Output connector</b>	2 pin, MIL-C-5015 style
<b>Recommended cabling</b>	J9T2A / J9F

**Accessories supplied:** 1/4-28 captive hex head screw; calibration data (level 2)

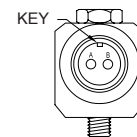
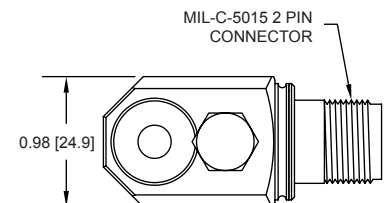
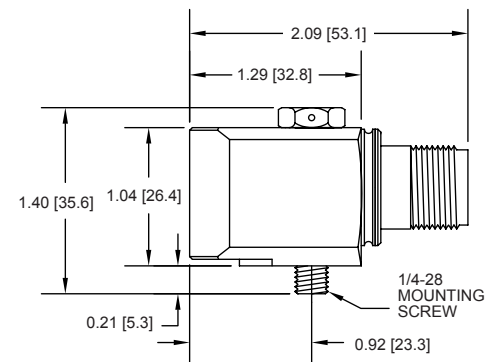
### Certifications

	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	
<p>Must be installed per 13029. • Ambient temperature range depends on the type cable used during installation. • Cable with FEP jacket, Ta=-50°C to +120°C. • Cable with Santoprene jacket, Ta=-45°C to +115°C.</p>				



### Key features

- Class I, Div 2/Zone 2 certified - non-incendive
- API 670 compliant
- Manufactured in ISO 9001 facility



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.