

# Class I Div 2 certified integral cable accelerometer




## 786F-D2

### SPECIFICATIONS

<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>	100 mV/g
<b>Acceleration range</b>	80 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response, nominal:</b>	$\pm 10\%$ 1 - 8,000 Hz $\pm 3$ dB 0.5 - 13,000 Hz
<b>Resonance frequency</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response:</b>	-50°C -5% +120°C +5%
<b>Power requirement:</b>	
Voltage source	18 - 28 VDC
Current regulating diode	2 - 10 mA
<b>Electrical noise, equiv. g:</b>	
Broadband 2.5 Hz to 25 kHz	700 $\mu$ g
Spectral 10 Hz	10 $\mu$ g/ $\sqrt{\text{Hz}}$
100 Hz	5 $\mu$ g/ $\sqrt{\text{Hz}}$
1,000 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, min</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>Hydrostatic pressure</b>	100 psi
<b>Sensing element design</b>	PZT, shear
<b>Weight</b>	90 grams (excluding cable)
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	1/4-28 UNF tapped hole
<b>Integral cabling</b>	Class I Div 2 suitable cable, shielded, twisted pair

**Accessories supplied:** SF6 mounting stud; calibration data (level 2)

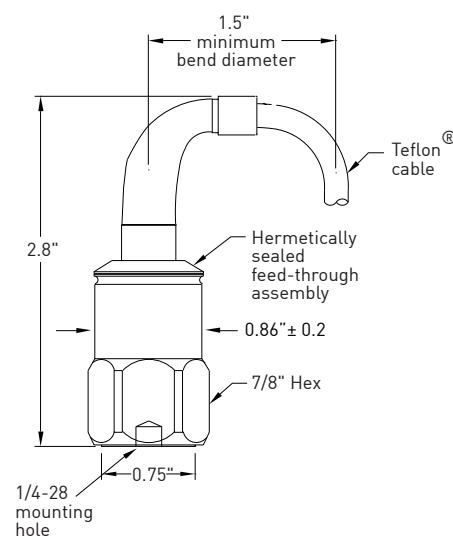
### Certifications

	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	
<small>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.</small>				



### Key features

- Class I, Div 2/Zone 2 certified - non-incendive
- Usable in submerged applications up to 30 ft.
- Manufactured in ISO 9001 facility



Connections	
Function	Cable conductor
power/signal	white
common	black
case	shield

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