

# Class I Div 2 certified integral cable accelerometer

## 786F-D2

### SPECIFICATIONS

Sensitivity, $\pm 5\%$ , 25°C	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity	1%
Frequency response, nominal:	$\pm 10\%$ 1 - 8,000 Hz $\pm 3$ dB 0.5 - 13,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	-50°C -5% +120°C +5%
Power requirement:	
Voltage source	18 - 28 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
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/ $\sqrt{\text{Hz}}$
Output impedance, max	100 $\Omega$
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Temperature range	-50° to +120°C
Vibration limit	500 g peak
Shock limit, min	5,000 g peak
Electromagnetic sensitivity, equiv. g, max	70 $\mu$ g/gauss
Sealing	hermetic
Base strain sensitivity, max	0.0002 g/ $\mu$ strain
Hydrostatic pressure	100 psi
Sensing element design	PZT, shear
Weight	90 grams (excluding cable)
Case material	316L stainless steel
Mounting	1/4-28 UNF tapped hole
Integral cabling	Class I Div 2 suitable cable, shielded, twisted pair

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

### Certifications

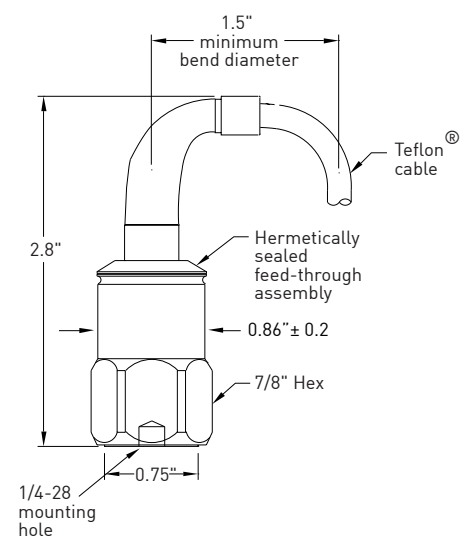
	Class I, Div 2 Groups A, B, C, D		II 3 G	
	Class I, Zone 2		Ex nA IIC T4 Gc	
	AEx/Ex nA II T4			
	Tamb: -50°C to 120°C			

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.



### 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.