

Class I, Div 2 certified accelerometer




786A-M12-D2

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25°C	100 mV/g	
Acceleration range, VDC > 25 V	80 g peak	
Amplitude nonlinearity	1%	
Frequency response:	$\pm 5\%$	3 - 5,000 Hz
	$\pm 10\%$	1 - 9,000 Hz
	± 3 dB	0.5 - 14,000 Hz
Resonance frequency	30 kHz	
Transverse sensitivity, max	5% of axial	
Temperature response:	-55°C	-20%
	+120°C	+10%
Power requirement:		
Voltage source	18 - 30 VDC	
Current regulating diode	2 - 10 mA	
Electrical noise, equiv. g:		
Broadband	2.5 Hz to 25 kHz	700 μ g
Spectral	10 Hz	10 μ g/ $\sqrt{\text{Hz}}$
	100 Hz	5 μ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	5 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max	100 Ω	
Bias output voltage	12 VDC	
Grounding	case isolated, internally shielded	
Temperature range	-55° to +120°C	
Vibration limit	500 g peak	
Shock limit	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	90 grams	
Case material	316L stainless steel	
Mounting	M6 captive screw	
Mating connector	M12 style, 4 or 5 pin	
Recommended cabling	J10 / J9T2A	

Accessories supplied: M6 captive screw; calibration data (level 2)

Certifications

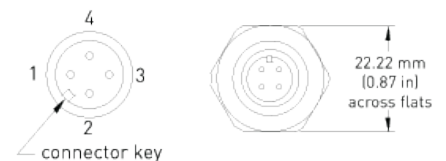
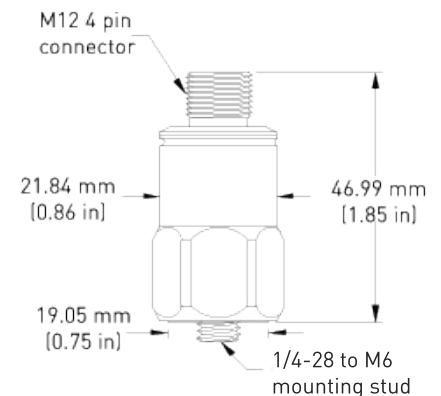
	Class I, Div 2 Groups A, B, C, D		II 3 G	
	Class I, Zone 2		Ex nA IIC T4 Gc	
	AEx/Ex nA II T4			
	Ta = -50°C to 120°C			

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
- API 670 compliant
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
power/signal	1
common	2
N/C	3
N/C	4
ground	shell

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