



787A-M12-IS

Intrinsically safe accelerometer

SPECIFICATIONS

Sensitivity, ±5%, 25°C	100 mV/g
Acceleration range, VDC > 22 V	80 g peak
Amplitude nonlinearity	1%
Frequency response: ±10% ±3 dB	1.0 - 5,000 Hz 0.5 - 10,000 Hz
Resonance frequency	22 kHz
Transverse sensitivity, max	5% of axial
Temperature response: -55°C +120°C	–20% +10%
Power requirement: Voltage source Current regulating diode	18 - 30 VDC 2 - 10 mA
Electrical noise, equiv. g: Broadband 2.5 Hz to 25 kHz Spectral 10 Hz 100 Hz 1,000 Hz	700 μg 10 μg/√Hz 5 μg/√Hz 5 μg/√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 μg/gauss
Sealing	hermetic
Base strain sensitivity, max	0.0002 g/µstrain
Sensing element design	PZT, shear
Weight	145 grams
Case material	316L stainless steel
Mounting	M6 captive screw
Mating connector	4 pin, M12 style
Recommended cabling	J10 / J9T2A

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

Certifications



Class I, Div 1 Groups A, B, C, D Class II, Div 1 Groups E, F, G Class III

Class III
Class I Zone 0 AEx/Ex ia IIC T4
Ta = -50°C to 120°C



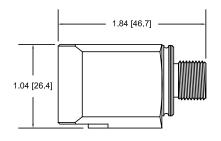
II 1 G

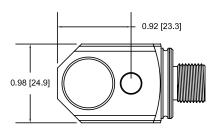
Ex ia IIC T4 Ga

Must be installed per document 12879. For application in explosive atmospheres caused by gases, vapours or mists and where the use of apparatus of category 1G is required, electrostatic charges on the cable and non-metallic parts of the enclosure shall be avoided. The ambient temperature range for these applications is -40°C to +80°C.

Key features

- Class I, Div 1/Zone 0/1 certified intrinsically safe
- 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.

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The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.