

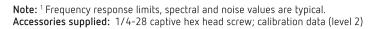


787-500-IS

Low-frequency, intrinsically safe accelerometer

SPECIFICATIONS

Sensitivity, ± 5%, 25°C	500 mV/g
Acceleration range, VDC > 22 V	10 g peak
Amplitude nonlinearity	1%
Frequency response 1: ± 10% ±3 dB	0.5 - 5,000 Hz 0.2 - 10,000 Hz
Resonance frequency	22 kHz
Transverse sensitivity, max	5% of axial
Temperature response: -20°C +120°C	–10% +10%
Power requirement: Voltage source Current regulating diode	18 - 28 VDC 2 - 10 mA
Electrical noise, equiv. g1: Broadband 2.5 Hz to 25 kHz Spectral 10 Hz 100 Hz 1,000 Hz	250 μg 2.5 μg/√Hz 1.5 μg/√Hz 1.5 μg/√Hz
Output impedance, max	100 Ω
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Temperature range	–50° to +120°C
Vibration limit	500 g peak
Shock limit	5,000 g peak
Electromagnetic sensitivity, equiv. g, max	70 µg/gauss 1.
Sealing	hermetic
Base strain sensitivity, max	0.0002 g/µstrain
Sensing element design	PZT, shear
Weight	145 grams
Case material	316L stainless steel
Mounting	1/4-28 captive hex head screw, 0.046" diameter safety wire hole
Output connector	2 pin, MIL-C-5015 style
Mating connector	R6 type



CERTIFICATIONS

Recommended cabling



Class I, Div 1 Groups A, B, C, D Class II, Div 1 Groups E, F, G Class III Class I Zone O AEx/Ex ia IIC T4 Ta = -50°C to 120°C



II1G Ex ia IIC T4 Ga Ta = -50°C to 120°C

J10 / J9T2A, <100 ft.



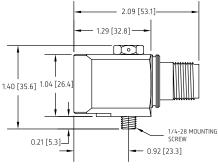


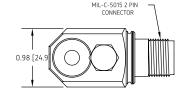
Must be installed per document 12879. For application in explosive atmospheres caused by gases, vapours or mists and where the use of apparatus of category 16 is required, electrostatic charges on the cable and non-metallic parts of the enclosure shall be avoided. The ambient temperature range for these applications is -40°C to +80°C.



Key features

- · Hazardous area certified intrinsically safe
- · High sensitivity
- · Extended low frequency response
- · Manufactured in ISO 9001 facility







Connections	
Function	Connector pin
power/signal	Α
common	В
ground	shell

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

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.

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