

Class I Div 2 certified low-frequency accelerometer

787-500-D2

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25°C	500 mV/g
Acceleration range, VDC > 22 V	10 g peak
Amplitude nonlinearity	1%
Frequency response ¹ :	
$\pm 10\%$	0.5 - 5,000 Hz
± 3 dB	0.2 - 10,000 Hz
Resonance frequency	22 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-20°C	-10%
+120°C	+10%
Power requirement:	
Voltage source	18 - 28 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g ¹ :	
Broadband 2.5 Hz to 25 kHz	250 μ g
Spectral 10 Hz	2.5 μ g/ $\sqrt{\text{Hz}}$
100 Hz	1.5 μ g/ $\sqrt{\text{Hz}}$
1,000 Hz	1.5 μ g/ $\sqrt{\text{Hz}}$
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, min	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	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	R6D2
Recommended cabling	J10 / J9T2A, <100 ft.

Notes: ¹ Frequency response limits and spectral noise values are typical.

Accessories supplied: 1/4-28 captive hex head screw; calibration data (level 2)

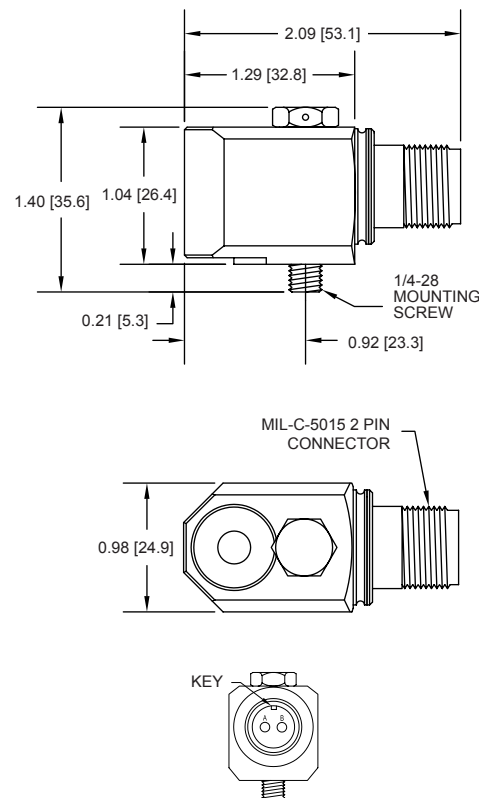
Certifications

	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	
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
- High sensitivity
- Extended low frequency response
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
power/signal	A
common	B
ground	shell

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