



g 786-500-IS
Intrinsically safe low-frequency accelerometer

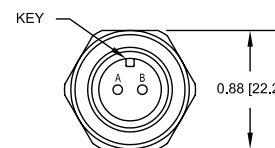
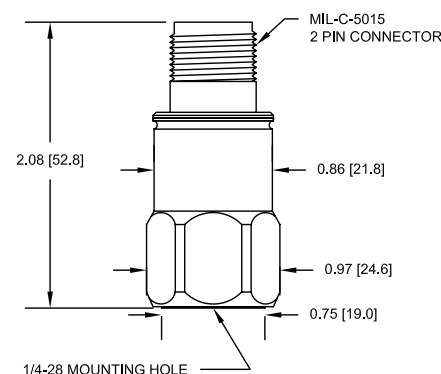
SPECIFICATIONS

Sensitivity, ± 5%, 25°C	500 mV/g
Acceleration range, VDC > 22 V	10 g peak
Amplitude nonlinearity	1%
Frequency response ¹ :	
± 5%	0.7 - 5,000 Hz
± 10%	0.5 - 9,000 Hz
± 3 dB	0.2 - 14,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-20°C	-10%
+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	250 µg
Spectral 10 Hz	2.5 µg/√Hz
100 Hz	1.5 µg/√Hz
1,000 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
Sealing	hermetic
Base strain sensitivity, max	0.0002 g/µstrain
Sensing element design	PZT, shear
Weight	90 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-5015 style
Mating connector	R6 type
Recommended cabling	J10 / J9T2A, <100 ft.



Key features

- Class I, Div 1/Zone 0/1 certified intrinsically safe
- High sensitivity
- Extended low frequency response
- Manufactured in ISO 9001 facility



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

Notes: ¹ Frequency response limits, spectral and noise values are typical.
Accessories supplied: 1/4-28 captive hex head screw; calibration data (level 2)

Certifications

	Class I, Div 1 Groups A, B, C, D		II 1 G	
	Class II, Div 1 Groups E, F, G		Ex ia IIC T4 Ga	
	Class III		Ta = -50°C to 120°C	
	Class I Zone 0 AEx/Ex ia IIC T4			
	Ta = -50°C to 120°C			

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.

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.

Althen – Your expert partner in Sensors & Controls | althensensors.com

Althen stands for pioneering measurement and custom sensor solutions. In addition we offer services such as calibration, design & engineering, training and renting of measurement equipment.

Germany/Austria/Switzerland
info@althen.de

Benelux
sales@althen.nl

France
info@althensensors.fr

Sweden
info@althensensors.se

USA/Canada
info@althensensors.com

Other countries
info@althensensors.com