

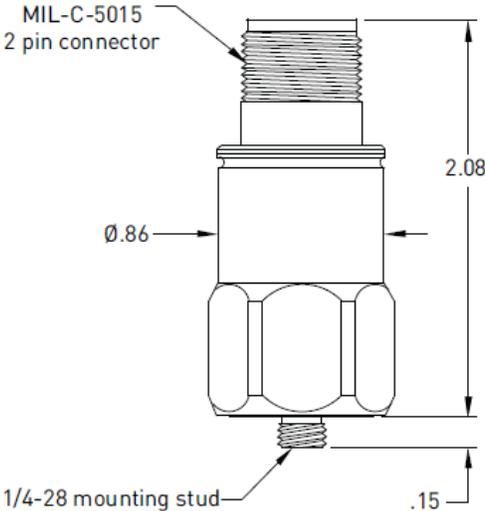
Intrinsically safe certified accelerometer

786A-IS



Key features

- Hazardous area certified - intrinsically safe
- Corrosion resistant
- Hermetically sealed
- Case isolated
- ESD-protected
- Reverse wiring protection
- Manufactured in an approved ISO 9001 facility



Certifications



Class I, Div 1 Groups A, B, C, D
 Class I, Div 1 Groups E, F, G
 Class III, Div 1
 Class I, Zone 0 Ex ia IIC T4
 Class I, Zone 0 AEx ia IIC T4



Ga Ex ia IIC T4



For hazardous area locations, sensor must be installed in accordance with installation instructions or local code requirements. Electrical safety barrier required for hazardous area installations.



Connections		
Function	Connector pin	Cable conductor color
power/signal	A	white
common	B	black
ground	shell	shield

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

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SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25° C	100 mV/g
Acceleration range	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:	
-25° C	-10%
+120° C	+10%
Power requirement:	
Voltage source	18 - 28 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	-50 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 ceramic / shear
Weight	90 grams
Case material	316L stainless steel
Mounting	1/4 - 28 UNF tapped hole
Output connector	2-pin, MIL-C-5015 style
Mating connector	R6 type
Recommended cabling	J10 / J9T2A

Contact

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Accessories supplied:

- Calibration data (level 2)
- SF6 mounting stud (international customers specify mounting requirements)

Optional accessories available:

ISBS-STD-08: MTL 7728 +
safety barrier

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