



Model 786A-IS Intrinsically safe certified accelerometer

Dynamic

Sensitivity, ±5%, 25°C	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity	1%
Frequency response:	
± 5%	3 - 5,000 Hz
± 10%	1 - 9,000 Hz
± 3 dB	0.5 - 14,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	
-50°C	-10%
+120°C	+10%

Features

- Hazardous area certified - intrinsically safe
- Corrosion resistant
- Hermetic seal
- Case isolated
- ESD protection
- Reverse wiring protection

Electrical

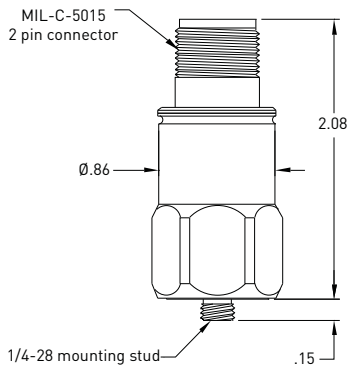
Power requirement:	voltage source	18 - 28 VDC
	current regulating diode	2 - 10 mA
Electrical noise, equiv. g:		
	Broadband 2.5 Hz to 25 kHz	700 µg
	Spectral 10 Hz	10 µg/√Hz
	100 Hz	5 µg/√Hz
	1000 Hz	5 µg/√Hz
Output impedance, max		100 Ω
Bias output voltage		12 VDC
Grounding		case isolated, internally shielded

Environmental

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

Physical

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



Connections

Connector pin	Function	Cable conductor color
Shell	ground	Shield
A	power/ signal	White
B	common	Black

Accessories supplied: SF6 mounting stud (International customers specify mounting

requirements); calibration data (level 2).

Optional required accessories available:

ISBS-STD-08: MTL 7728 + safety barrier

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

C US Class I, Zone 0, Ex ia IIC T4
Class I, Zone 0, Aex ia IIC T4

Ex Ga Ex ia IIC T4

IEC **IECEx**

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.

