

Class I Div 2 certified accelerometer

780A-D2

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25°C		100 mV/g
Acceleration range		80 g peak
Amplitude nonlinearity		1%
Frequency response:	$\pm 5\%$	1 - 7,000 Hz
	$\pm 10\%$	0.7 - 9,000 Hz
	± 3 dB	0.4 - 14,000 Hz
Resonance frequency		30 kHz
Transverse sensitivity, max		5% of axial
Temperature response:	-55°C	-20%
	+120°C	+10%
Power requirement:	Voltage source	18 - 30 VDC
	Current regulating diode	2 - 10 mA
Electrical noise, equiv. g, nominal:		
Broadband	2.5 Hz to 25 kHz	500 μ g
Spectral	10 Hz	7 μ g/ $\sqrt{\text{Hz}}$
	100 Hz	4 μ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	2 μ g/ $\sqrt{\text{Hz}}$
Output impedance, max		100 Ω
Bias output voltage		12 VDC
Grounding		case isolated, internally shielded
Temperature range		-55° 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, shear
Weight		62 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

Note: Frequency response limits and spectral noise values are typical.

Accessories supplied: SF6 mounting stud; calibration data (level 2)

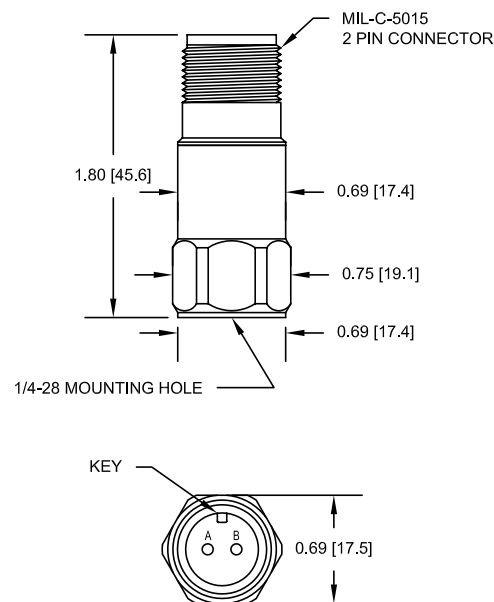
Certifications

	Class I, Div 2 Groups A, B, C, D		II 3 G	
	Class I, Zone 2		Ex nA IIC T4 Gc	
	AEx/Ex nA II T4 Tamb: -50°C to 120°C			
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

- Compact, lightweight
- Class I, Div 2/Zone 2 certified, non-incendive
- API 670 compliant
- 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.