

Industrial accelerometers

766 series

SPECIFICATIONS





Sensitivity, $\pm 5\%$, 25°C		100 mV/g
Acceleration range		80 g peak
Amplitude nonlinearity		1%
Frequency response¹:	$\pm 5\%$	2.0 - 10,000 Hz
	$\pm 10\%$	1.0 - 12,000 Hz
	± 3 dB	0.6 - 15,000 Hz
Resonance frequency, mounted, nominal		33 kHz
Transverse sensitivity, max		5% of axial
Temperature response:	-50°C	-10%
	+120°C	+8%
Power requirement:	Voltage source	18 - 30 VDC
	Current regulating diode²	2 - 10 mA
Electrical noise, equiv. g, nominal:		
	Broadband 2.5 Hz to 25 kHz	550 μ g
	Spectral 10 Hz	10 μ g/ \sqrt Hz
	100 Hz	5.0 μ g/ \sqrt Hz
	1,000 Hz	5.0 μ g/ \sqrt Hz
Output impedance, max		100 Ω
Bias output voltage, nominal		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		10 μ g/gauss
Base strain sensitivity		0.0005 g/ μ strain
Sensing element design		PZT, shear
Weight		78 grams
Case material		316L stainless steel
Mounting		1/4-28 tapped hole
Output connector		3 pin, MIL-C-26482 style
Mating connector		R4
Recommended cabling		J9T2, two conductor shielded, Tefzel [®] jacket, 30 pF/ft

Notes: ¹ The high end frequency response disregards minor localized aberrations.

² A maximum current of 6 mA is recommended for operating temperatures in excess of 100°C.

Accessories supplied: SF6 mounting stud; calibration data

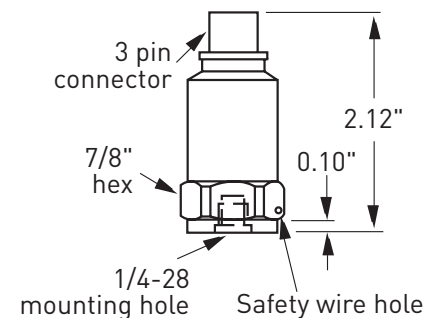
Certifications

All 766 models	766E	766-33	766-35	
	 Class I, II, III, T4 Div 1 Groups A, B, C, D, E, F, G Div 2 Groups A, B, C, D, F, G	 Class I, Div 1 Groups A, B, C, D	 Ex ia IIC T4 Ga Tamb: -50°C to 120°C	For group IIC applications the transducer must not be subjected to an acceleration greater than 4300g and must be mechanically protected so that it is not subjected to impacts greater than 4J energy. For group IIB and group IIA applications the transducer must not be subjected to acceleration greater than 7500g.



Key features

- Hazardous area certified versions available (models 766E, 766-33, 766-35)
- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
case	A
common	B
power/signal	C

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

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