

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 diode ²	2 - 10 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz	550 μ g
Spectral 10 Hz	10 μ g/ $\sqrt{\text{Hz}}$
100 Hz	5.0 μ g/ $\sqrt{\text{Hz}}$
1,000 Hz	5.0 μ g/ $\sqrt{\text{Hz}}$
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.

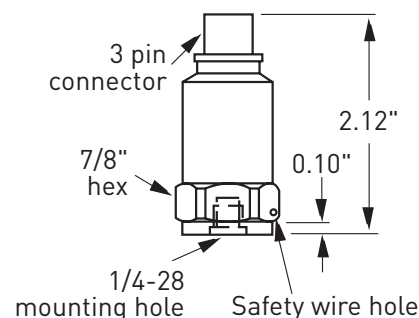
² A maximum current of 6 mA is recommended for operating temperatures in excess of 100°C.

Accessories supplied: SF6 mounting stud; calibration data



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

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	 II 1 G 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.

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