

Injection molded integral cable accelerometer series

786F-IM

SPECIFICATIONS

Sensitivity, $\pm 5\%$, 25°C	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity	1%
Frequency response, nominal:	1 - 8,000 Hz
± 3 dB	0.5 - 13,000 Hz
Resonance frequency	30 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	-10%
-55°C	+5%
+120°C	
Power requirement:	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
Electrical noise, equiv. g:	
Broadband	700 μ g
2.5 Hz to 25 kHz	10 μ g/ \sqrt Hz
Spectral	5 μ g/ \sqrt Hz
10 Hz	5 μ g/ \sqrt Hz
100 Hz	5 μ g/ \sqrt Hz
1,000 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, min	5,000 g peak
Electromagnetic sensitivity, equiv. g, max	70 μ g/gauss
Sensor sealing	hermetic
Integral cable sealing	IP68
Base strain sensitivity, max	0.0002 g/ μ strain
Sensing element design	PZT ceramic / shear
Weight	90 grams (excluding cable)
Case material	316L stainless steel
Mounting	1/4-28 UNF tapped hole
Integral cabling	see Table 1

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

TABLE 1: 786F-IM-X CABLE SELECTION GUIDE

-X (cable option)
-J9T2A = twisted, shielded pair, Yellow Teflon jacket, 200°C, 16ft standard, blunt cut
-J88LC = twisted, shielded pair, black polyurethane jacket, 80°C, 16ft standard, blunt cut



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



Key features

- Affordable injection molded integral cable
- Hermetically sealed sensor, IP68 molded cable
- API 670 compliant
- Manufactured in ISO 9001 facility

Connections

Function	Cable conductor
power/signal	red
common	black
N/C	shield

