

# Injection molded integral cable accelerometer series

## 786F-IM

### SPECIFICATIONS

<b>Sensitivity, ±5%, 25°C</b>	100 mV/g
<b>Acceleration range</b>	80 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response, nominal:</b>	1 - 8,000 Hz
±10%	0.5 - 13,000 Hz
±3 dB	
<b>Resonance frequency</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response:</b>	-5%
-50°C	+5%
+120°C	
<b>Power requirement:</b>	
Voltage source	18 - 30 VDC
Current regulating diode	2 - 10 mA
<b>Electrical noise, equiv. g:</b>	
Broadband	2.5 Hz to 25 kHz
700 µg	
Spectral	10 Hz
10 µg/√Hz	
	100 Hz
5 µg/√Hz	
	1,000 Hz
5 µg/√Hz	
<b>Output impedance, max</b>	100 Ω
<b>Bias output voltage</b>	12 VDC
<b>Grounding</b>	case isolated, internally shielded
<b>Temperature range</b>	-50° to +120°C
<b>Vibration limit</b>	500 g peak
<b>Shock limit, min</b>	5,000 g peak
<b>Electromagnetic sensitivity, equiv. g, max</b>	70 µg/gauss
<b>Sensor sealing</b>	hermetic
<b>Integral cable sealing</b>	IP67
<b>Base strain sensitivity, max</b>	0.0002 g/µstrain
<b>Sensing element design</b>	PZT ceramic / shear
<b>Weight</b>	90 grams (excluding cable)
<b>Case material</b>	316L stainless steel
<b>Mounting</b>	1/4-28 UNF tapped hole
<b>Integral cabling</b>	see Table 1

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

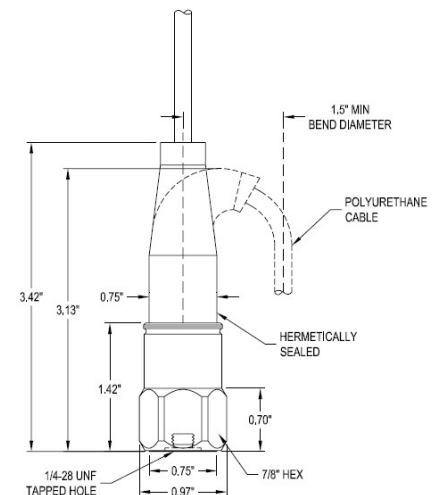
TABLE 1: 786F-IM-X CABLE SELECTION GUIDE

-X (cable option)
-J9T2A = twisted, shielded pair, Yellow Teflon jacket, 200°C, 16ft standard, blunt cut
-J10 = twisted, shielded pair, grey Enviroprene jacket, 125°C, 16ft standard, blunt cut



### Key features

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



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

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