



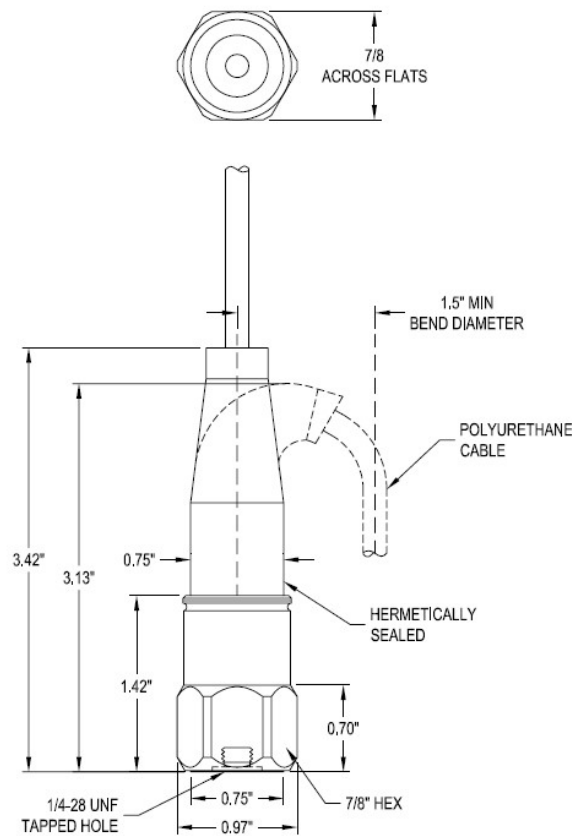
g

## 786F-IM

Injection molded integral cable accelerometer series

### FEATURES

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



### CONNECTIONS

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

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



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



**SPECIFICATIONS**

<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>	100 mV/g
<b>Acceleration range</b>	80 g peak
<b>Amplitude nonlinearity</b>	1%
<b>Frequency response, nominal:</b>	$\pm 10\%$ $\pm 3$ dB
	1 - 8,000 Hz 0.5 - 13,000 Hz
<b>Resonance frequency</b>	30 kHz
<b>Transverse sensitivity, max</b>	5% of axial
<b>Temperature response:</b>	$-50^{\circ}\text{C}$ $+120^{\circ}\text{C}$
	-5% +5%
<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
Spectral	10 Hz
	100 Hz
	1,000 Hz
	700 $\mu\text{g}$ 10 $\mu\text{g}/\sqrt{\text{Hz}}$ 5 $\mu\text{g}/\sqrt{\text{Hz}}$ 5 $\mu\text{g}/\sqrt{\text{Hz}}$
<b>Output impedance, max</b>	100 $\Omega$
<b>Bias output voltage</b>	12 VDC
<b>Grounding</b>	case isolated, internally shielded
<b>Temperature range</b>	$-50^{\circ}$ to $+120^{\circ}\text{C}$
<b>Vibration limit</b>	500 g peak
<b>Shock limit, min</b>	5,000 g peak
<b>Electromagnetic sensitivity, equiv. g, max</b>	70 $\mu\text{g}/\text{gauss}$
<b>Sensor sealing</b>	hermetic
<b>Integral cable sealing</b>	IP67
<b>Base strain sensitivity, max</b>	0.0002 g/ $\mu\text{strain}$
<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
<b>Accessories supplied:</b> SF6 mounting stud; calibration data (level 2)	