

# Injection molded, side exit, integral cable accelerometer

## 787F-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:</b>	<b>±10%</b>	1 - 5,000 Hz
	<b>±3 dB</b>	0.5 - 10,000 Hz
<b>Resonance frequency</b>		22 kHz
<b>Transverse sensitivity, max</b>		5% of axial
<b>Temperature response:</b>	<b>-55°C</b>	-10%
	<b>+120°C</b>	+5%
<b>Power requirement:</b>	<b>Voltage source</b>	18 - 30 VDC
	<b>Current regulating diode</b>	2 - 10 mA
<b>Electrical noise, equiv. g, nominal:</b>		
<b>Broadband</b>	<b>2.5 Hz to 25 kHz</b>	700 µg
<b>Spectral</b>	<b>10 Hz</b>	10 µg/√Hz
	<b>100 Hz</b>	5 µg/√Hz
	<b>1,000 Hz</b>	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>		-55° to +120°C
<b>Vibration limit</b>		500 g
<b>Shock limit, min</b>		5,000 g
<b>Electromagnetic sensitivity, equiv. g, max</b>		70 µg/gauss
<b>Sensor sealing</b>		hermetic
<b>Integral cable sealing</b>		IP68
<b>Base strain sensitivity, max</b>		0.002 g/µstrain
<b>Sensing element design</b>		PZT ceramic / shear
<b>Weight</b>		145 grams
<b>Case material</b>		316L stainless steel
<b>Mounting</b>		1/4-28 captive hex head screw w/ 0.046" diameter safety wire hole
<b>Integral cabling</b>		See Table 1

Accessories supplied: #80165-01 captive hex head screw; calibration data (level 2)



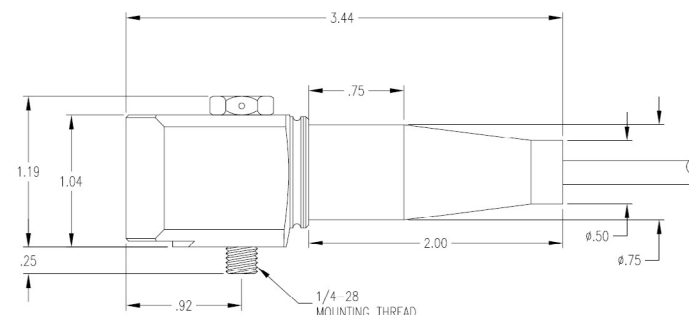
### Key features

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

**TABLE 1: 787F-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

Connections	
Function	Cable conductor color
power/signal	white
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.