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**787F-IM**  
Accelerometer with high temperature integral cable, low profile, 100 mV/g

This general purpose accelerometer is characterised by a sensitivity of 100 mV/g and a tolerance of  $\pm 5\%$ , ensuring high measurement accuracy. It has a compact, low profile and an integrated cable with side exit that provides a cable length of 16 feet (approx. 4.88 m). The J9T2A Teflon-coated cable is suitable for temperatures up to 200°C and provides excellent heat resistance. The sensor's housing is insulated and internally shielded, providing additional protection from electromagnetic interference and enabling stable performance in demanding environments.



**FEATURES**

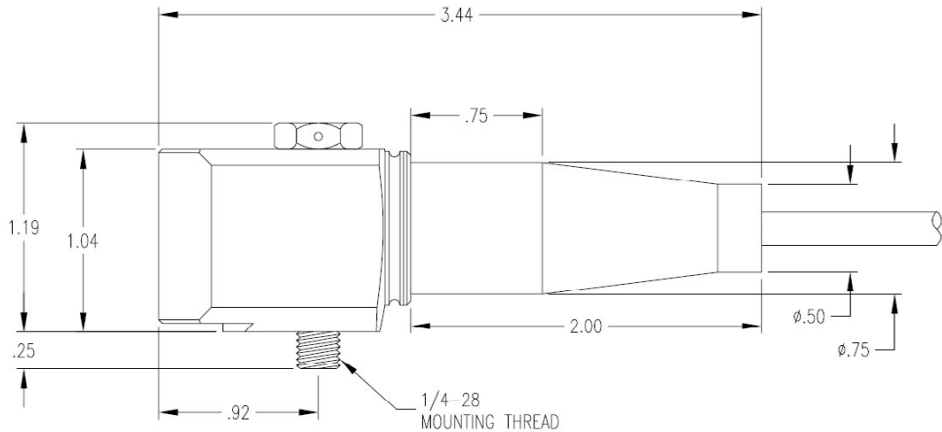
- Robust construction,
- Corrosion resistant 316L stainless steel
- Hermetically sealed sensor
- Low cost injection molded integrated cable, IP68
- Low profile design with side exit
- Shielded, twisted pair cable with Teflon jacket, 200°C
- ESD, EMI/RFI protection
- Manufactured in ISO 9001 facility

**CONNECTIONS**

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

**TABLE 1: 787F-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 Enviro prene 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

Sensitivity, $\pm 5\%$ , 25°C	100 mV/g
Acceleration range	80 g peak
Amplitude nonlinearity	1%
Frequency response:	$\pm 10\%$ $\pm 3$ dB
	1 - 5,000 Hz 0.5 - 10,000 Hz
Resonance frequency	22 kHz
Transverse sensitivity, max	5% of axial
Temperature response:	-50°C +120°C
	-5% +5%
Power requirement:	Voltage source Current regulating diode
	18 - 30 VDC 2 - 10 mA
Electrical noise, equiv. g, nominal:	
Broadband	2.5 Hz to 25 kHz
Spectral	10 Hz
	100 Hz
	1,000 Hz
	700 $\mu$ g 10 $\mu$ g/VHz 5 $\mu$ g/VHz 5 $\mu$ g/VHz
Output impedance, max	100 $\Omega$
Bias output voltage	12 VDC
Grounding	case isolated, internally shielded
Temperature range	-50° to +120°C
Vibration limit	500 g
Shock limit, min	5,000 g
Electromagnetic sensitivity, equiv. g, max	70 $\mu$ g/gauss
Sensor sealing	hermetic
Integral cable sealing	IP67
Base strain sensitivity, max	0.002 g/ $\mu$ strain
Sensing element design	PZT ceramic / shear
Weight	145 grams
Case material	316L stainless steel
Mounting	1/4-28 captive hex head screw w/ 0.046" diameter safety wire hole
Integral cabling	See Table 1
Accessories supplied:	#80165-01 captive hex head screw; calibration data (level 2)