

# High frequency integral cable accelerometer

## 712F

### SPECIFICATIONS

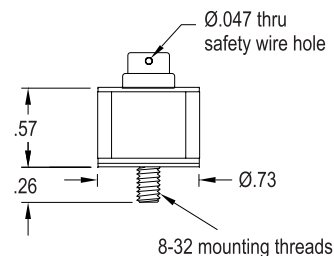
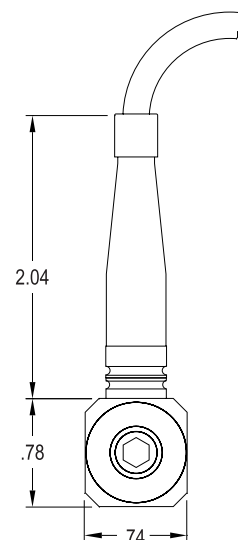
<b>Sensitivity, <math>\pm 10\%</math>, 25°C</b>		100 mV/g
<b>Acceleration range</b>		60 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	$\pm 5\%$	9.0 - 15,000 Hz
	$\pm 10\%$	6.0 - 20,000 Hz
	$\pm 3$ dB	3.0 - 25,000 Hz
<b>Resonance frequency, mounted</b>		>45 kHz
<b>Transverse sensitivity, max</b>		3% of axial
<b>Temperature response:</b>	-50°C	-10%
	+120°C	+10%
<b>Power requirement:</b>		
Voltage source		18 - 30 VDC
Current regulating diode		2 - 10 mA
<b>Electrical noise, equiv. g, nominal:</b>		
Broadband	2.5 Hz to 25 kHz	1,000 $\mu$ g
	10 Hz	25 $\mu$ g/ $\sqrt{\text{Hz}}$
	100 Hz	10 $\mu$ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	8 $\mu$ g/ $\sqrt{\text{Hz}}$
<b>Output impedance, max</b>		100 $\Omega$
<b>Bias output voltage, nominal</b>		12 VDC
<b>Grounding</b>		case isolated, internally shielded
<b>Temperature range</b>		-50° to +120°C
<b>Vibration limit</b>		$\pm 1,000$ g
<b>Shock limit, max</b>		5,000 g peak
<b>Sealing</b>		hermetic
<b>Base strain sensitivity, max</b>		0.03 g/ $\mu$ strain
<b>Sensing element design</b>		PZT ceramic / shear
<b>Weight</b>		35 grams
<b>Case material</b>		316L stainless steel
<b>Mounting</b>		8-32 captive screw with 0.047" diameter safety wire hole
<b>Integral cabling</b>		J9T2AK, 16 ft., blunt cut

Accessories supplied: 8-32 captive screw; calibration data (level 2)



### Key features

- Compact size, lightweight
- High frequency detection (25 kHz)
- Available with M4 mounting thread
- Manufactured in ISO 9001 facility



Connections	
Function	Cable conductor color
power/signal	white
common	black
case	shield



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