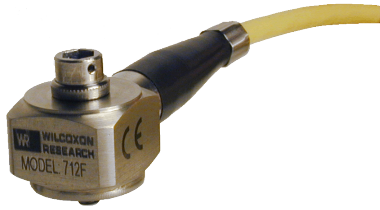


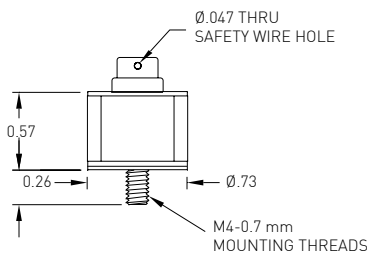
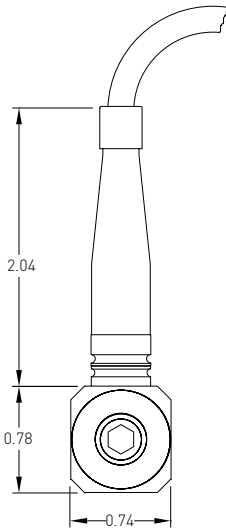


## Wilcoxon Research model 712F-M4 High frequency, integral cable accelerometer



### Features

- Corrosion resistant
- Hermetically sealed
- Ground isolated
- ESD protection
- Reverse wiring protection
- EMI/RFI protection



### Dynamic

Sensitivity, $\pm 10\%$ , 25° C.....	100 mV/g
Acceleration range .....	60 g peak
Amplitude nonlinearity.....	1%
Frequency response:	
$\pm 5\%$ .....	9.0 - 15,000 Hz
$\pm 10\%$ .....	6.0 - 20,000 Hz
$\pm 3$ dB .....	3.0 - 25,000 Hz
Resonance frequency, mounted .....	>45 kHz
Transverse sensitivity, max.....	3% of axial
Temperature response:	
-50° C.....	-10%
+120° C.....	+10%

### Electrical

Power requirement:	
Voltage source .....	18 - 30 VDC
Current regulating diode .....	2 - 10 mA
Electrical noise, equiv. g, nominal:	
Broadband 2.5 Hz to 25 kHz .....	1,000 $\mu$ g
Spectral                   10 Hz.....	25 $\mu$ g/ $\sqrt$ Hz
100 Hz.....	10 $\mu$ g/ $\sqrt$ Hz
1000 Hz.....	8 $\mu$ g/ $\sqrt$ Hz
Output impedance, max. ....	100 $\Omega$
Bias output voltage, nominal .....	12 VDC
Grounding.....	case isolated, internally shielded

### Environmental

Temperature range .....	-50 to 120° C
Vibration limit.....	$\pm 1,000$ g
Shock limit, max.....	5,000 g peak
Sealing .....	hermetic
Base strain sensitivity, max .....	0.03 g/ $\mu$ strain

### Physical

Sensing element design.....	PZT, shear
Weight.....	35 g
Case material.....	316L stainless steel
Mounting .....	M4 captive screw with 0.047" diameter safety wire hole
Mating connector .....	N/A
Integral cabling .....	J9T2A, 16 ft blunt cut

### Connections

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

Accessories supplied: M4 captive screw; calibration data (level 2)

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99106 Rev.A.1 11/11