

# Internally amplified helicopter accelerometer

## HA100

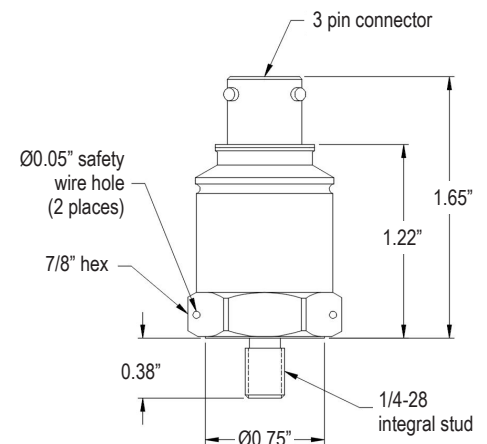
### SPECIFICATIONS

Sensitivity, $\pm 5\%$ , 25°C		40 mV/g
Acceleration range		80 g peak
Amplitude nonlinearity		1%
Frequency response:	$\pm 5\%$	2 - 5,000 Hz
	$\pm 10\%$	1 - 9,000 Hz
	$\pm 3$ dB	0.5 - 14,000 Hz
Resonance frequency, mounted, nominal		30 kHz
Transverse sensitivity, max		5% of axial
Temperature response:	-50°C	-20%
	+120°C	+10%
Power requirement:		
Voltage source		9 VDC, 700 $\mu$ A, max.
Electrical noise, equiv. g, nominal:		
Broadband	2.5 Hz to 25 kHz	70 $\mu$ g
Spectral	10 Hz	5.0 $\mu$ g/ $\sqrt{\text{Hz}}$
	100 Hz	0.8 $\mu$ g/ $\sqrt{\text{Hz}}$
	1,000 Hz	0.5 $\mu$ g/ $\sqrt{\text{Hz}}$
Output impedance		100 $\Omega$
Bias output voltage, nominal		4.2 $\pm$ 0.5 VDC
Grounding		case isolated
Temperature range		-50° to +120°C
Vibration limit		250 g peak
Shock limit		1,000 g peak
Electromagnetic sensitivity, equiv. g		70 $\mu$ g/gauss
Base strain sensitivity		0.0002 g/ $\mu$ strain
Weight		$\leq$ 82 grams
Case material		316L stainless steel
Mounting		1/4-28 x 0.38" integral stud
Output connector		3-pin, MIL-C-26482 style
Mating connector		R4
Recommended cabling		J9T2, two conductor shielded, Tefzel® jacket, 30 pF/ft

Accessories supplied: 80360-01 mounting stud; calibration data

### Key features

- Manufactured in ISO 9001 facility



Connections	
Function	Connector pin
9 VDC	A
signal out	B
common	C

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