

# Internally amplified helicopter accelerometer

## HA100

### SPECIFICATIONS

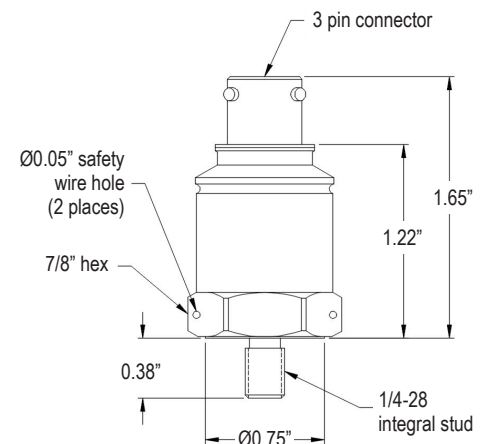
<b>Sensitivity, <math>\pm 5\%</math>, 25°C</b>		40 mV/g
<b>Acceleration range</b>		80 g peak
<b>Amplitude nonlinearity</b>		1%
<b>Frequency response:</b>	$\pm 5\%$	2 - 5,000 Hz
	$\pm 10\%$	1 - 9,000 Hz
	$\pm 3$ dB	0.5 - 14,000 Hz
<b>Resonance frequency, mounted, nominal</b>		30 kHz
<b>Transverse sensitivity,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