



## H903 Accelerometer

High Frequency IEPE Shear Accelerometer

**Designed by Aircraft Engineers for Aircraft Engineers**

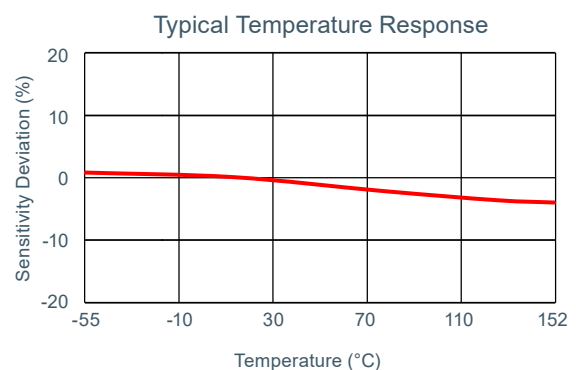
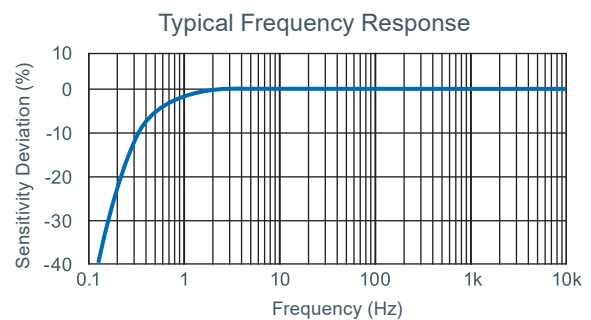
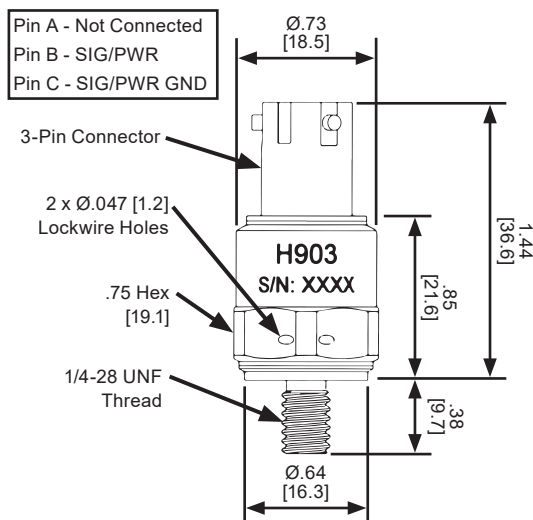
### Description

The H903 Accelerometer has been custom engineered for the collection of rotor balance & vibration data in the range of 1Hz to 10kHz. Its small size and weight make it the perfect accompaniment to Helitune's portable systems; however, it is also suitable for permanent installation.

Constructed from a corrosion-resistant stainless steel, it provides a hermetically-sealed solution that offers continuous performance at operating temperatures of up to 150°C.

- High Frequency Performance
- Excellent Linearity
- Electrically Isolated
- Safety Locking Wire Holes

Note: Accelerometers should always be correctly mounted using purpose-designed mounting solutions. Failure to do this could result in inconsistencies with measured values.



**Performance**

Sensitivity, $\pm 5\%$ , [1]	25 mV/g
Acceleration Range	$\pm 200g$ peak (F.S. for $\pm 5$ Volts Output)
Amplitude Non-Linearity	$\pm 1\%$
Frequency Response:	$\pm 5\%$ .....0.5 - 10,000 Hz $\pm 15\%$ .....0.25 - 15,000 Hz
Resonance Frequency	>30 kHz
Transverse Sensitivity MAX	$\pm 5\%$
Temperature Response	See graph
Strain Sensitivity	0.002 g/ $\mu$ strain

**Electrical**

Supply Current Range [2]	2-20mA
Compliance Voltage	+18V to +30V DC
Output Impedance, Typ	100 $\Omega$
Bias Output Voltage	+7.5V to +9.5V DC
Electrical Isolation	Ground (Pin C) to case 10 G $\Omega$ , min

**Environmental**

Temperature Range	-55°C to 150°C
Vibration MAX	$\pm 600g$ peak
Shock MAX	$\pm 3,000g$ peak
Sealing	Hermetic

**Physical**

Weight	45 grams
Case Material	Stainless steel
Mounting	1/4-28 UNF stud
Output Connector	Bayonet Style 3 pin plug, MIL-DTL-26482 Compatible
Mating Connector	Bayonet Style 3 pin socket, MIL-DTL-26482 Compatible

[1] Measure at 80Hz @ 1g pk

[2] Do not apply power to this system without current limiting, 20 mA MAX. To do so will damage the IC charge amplifier.

To ensure the correct operation of accelerometers with Helitune equipment, it is necessary for annual calibration to be carried out by Helitune Authorised Test Centres.



Helitune's Quality Management System is certified to BS EN ISO9001:2008 and AS9100

This document is not contractual. Helitune maintain a policy of continuous product development and improvement. This specification may change without notice.

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