

IRD531 Accelerometer

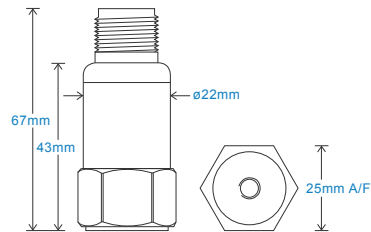
AC velocity output via 2 Pin MS Connector

Key Features

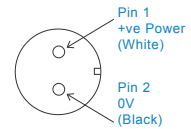
- For use with data collector
- AC velocity output
- Customisable features

Industries

Building services, Pulp and Paper, Mining, Metals, Utilities, Automotive, Water, Pharmaceutical



Connection Details



Technical Performance

Mounted Base Resonance	see 'How To Order' table (nominal)
Sensitivity	see: 'How To Order' table $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response	3Hz (180cpm) to 4.5kHz (270kcpm) $\pm 10\%$ 2Hz (120cpm) to 6kHz (360kcpm) $\pm 3dB$
Isolation	Base isolated
Range	see: 'How To Order' table
Transverse Sensitivity	Less than 5%

Mechanical

Case Material	Stainless Steel
Sensing Element/Construction	PZT/Compression
Mounting Torque	8Nm
Weight	125gms (nominal)
Screened Cable Assembly	contact sales@irdmech.com for options
Connector	HS-AA004 - non-booted HS-AA053 or HS-0054 - booted
Mounting Threads	see: 'How To Order' table

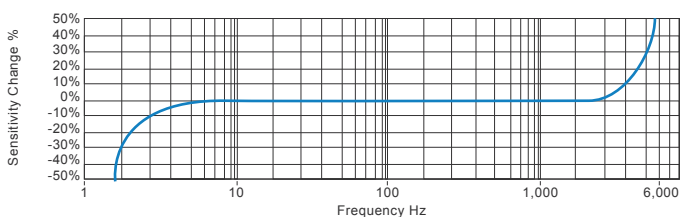
Electrical

Electrical Noise	0.1mg max
Current Range	0.5mA to 8mA
Bias Voltage	10 - 12 Volts DC
Settling Time	2 seconds
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

Environmental

Operating Temperature Range	-55 to 140°C
Sealing	IP68
Maximum Shock	5000g
EMC	EN61326-1:2013

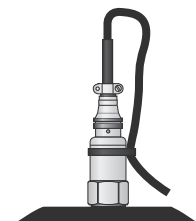
Typical Frequency Response



Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, VAC, Spindles, Machine Tooling, Process Equipment

Vibration sensor should be firmly fixed to a flat surface (spot face surface may be needed to be produced and cable anchored to sensor body.)



How To Order

Product Prefix M - Mechanalysis	Product Series 531 - Industrial Vibration Sensor	Cable Length (if integral cable) QXX - length specified in metres
M	5 3 1	X X X X X X X X X X X X X
Extra Options (if required) F - Filtered L - 316L Stainless Steel RT - Temperature Output PT100 S - 90° Side Exit T - Temperature Output Y - 5% tolerance on sensitivity	Sensitivity 004 - 4mV/mm/s 1000mm/s 025 - 25mV/mm/s 250mm/s (other sensitivities available on request)	Resonant Frequency 22kHz (1,320kcpm) 22kHz (1,320kcpm)
	Cable/Connector 01 - PUR 02 - Braided 07 - Silicon 08 - Flame Retardant 50 - 2 Pin MS 54 - M12	Mounting Threads 01 - 1/4-28" UNF Female 02 - 1/4-28" UNF Male 05 - Quick Fit Female 06 - M6 x 1mm Male 08 - M8 x 1.25mm Male 10 - M10 x 1.5mm Male

IRD Mechanalysis® Limited



www.irdmechanalysis.com
sales@irdmech.com

We reserve the right to alter the specification of this product without prior notice

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