

# SI-170S Series Vibration Sensor

Premium 2 Pin MS Connector, Low Profile, 100 mV/g Industrial Accelerometer



## Typical Applications

- With improved frequency response and settling times for offline applications using commercially available data collectors and online monitoring systems in the fields of Building Services, Civil Engineering, Paper and Pulp, Mining, Metals Manufacture, Utilities, Automotive, Water and Waste Treatment, Pharmaceutical, Aerospace, etc.

## Protecting...

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyers, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

## Technical Performance

Mounted Base Resonance	22 kHz (nominal)
Sensitivity	100 mV/g $\pm 10\%$ (Optnl $\pm 5\%$ ) Nominal 80 Hz at 22 °C
Frequency Response	1.5 Hz to 10 kHz $\pm 5\%$ 0.5 Hz to 12 kHz $\pm 10\%$ 0.2 Hz to 15 kHz $\pm 3$ dB
Isolation	Base isolated
Measurement Range	$\pm 80$ g
Transverse Sensitivity	Less than 5%

## Electrical

Electrical Noise	0.1 mg max
Current Range	0.5 mA to 8 mA
Bias Voltage	10 - 12 Volts DC
Settling Time	1 seconds
Output Impedance	200 Ohms max.
Case Isolation	$>10^8$ Ohms at 500 Volts

## Environmental

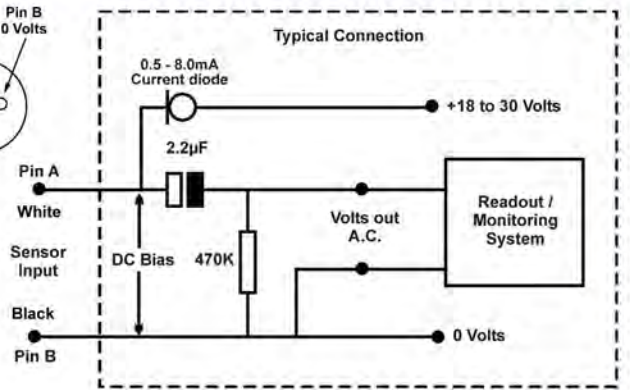
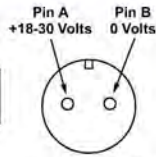
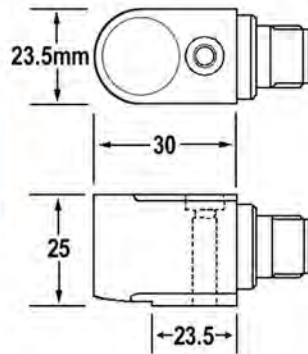
Operating Temperature Range	-55 to 130 °C
Sealing	IP68
Maximum Shock	5000 g
Emissions	EN61000-6-4:2007
Immunity	EN61000-6-2:2005

## Mechanical

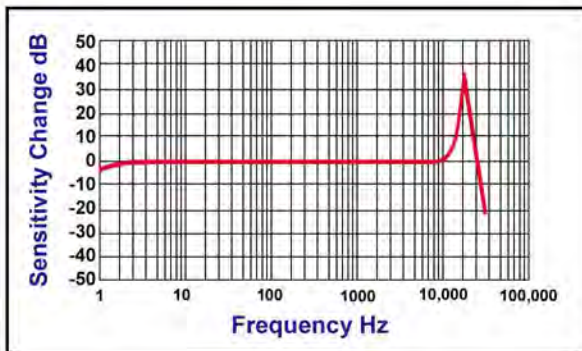
Case Material	Stainless Steel
Sensing Element/Construction	PZT/Annular Shear
Mounting Torque	8 Nm
Mounting Bolt provided	M6 x 35 mm long, 1/4- 28 UNF x 35 mm long
Weight	135 gms (nom)
Maximum Cable length	1000 metres
Mating Connector	SI-AA004
Mounting Threads	See 'How to order' table
Options	Mounting cable assemblies and other sensitivities

# SI-170S Series Vibration Sensor

## Dimensions



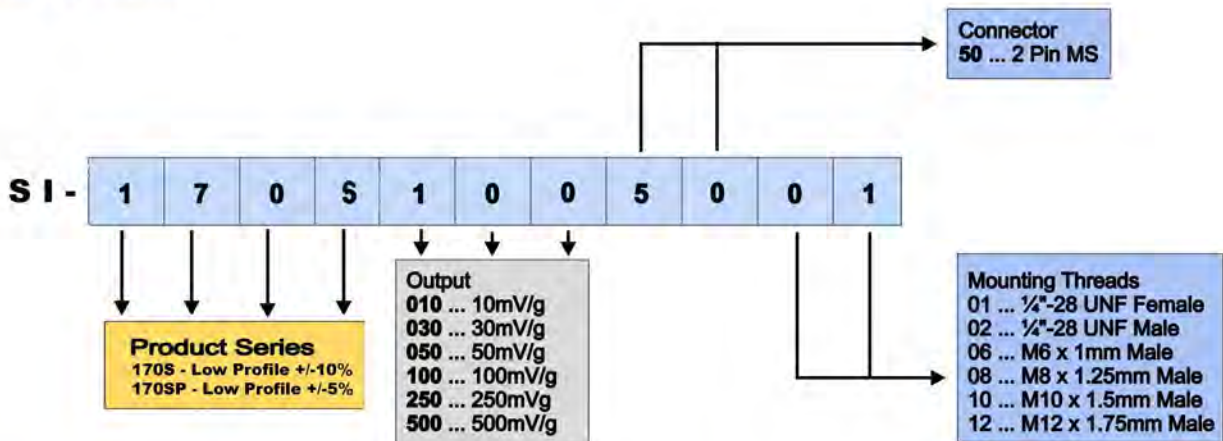
## Frequency Response



**Mounting of sensor to achieve good repeatable readings.** 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



Please contact our Sales Office for information on sensor accessories (mounting studs, etc) and multichannel switch boxes.