

# A/140/W Low Cost Industrial IEPE Accelerometer

100mV/g Output

nom. 99gm

120°C Max Temp



Low cost general purpose top entry integral cable IEPE industrial accelerometer with isolated AC output. Suitable for submersion in water or wet/moisture heavy environments. Manufactured in stainless steel and includes 3m integral cable as standard, (additional cable can be ordered).

Using DJB's Konic Shear® design piezoelectric ceramic sensor at its core the A/140/SW offers superior performance at a low price.

## Applications

- Wind turbines
- Steel mills
- Oil pipelines
- High speed trains
- Machine monitoring
- Safety monitoring
- Bearing analysis

## Features

- Konic Shear® Design
- Voltage Output
- IP68 submersible
- Maintenance free
- Corrosion resistant
- High S/N ratio

### Spectral Noise: (Typical)

Broadband Noise: 150µgrms (1Hz – 10kHz)

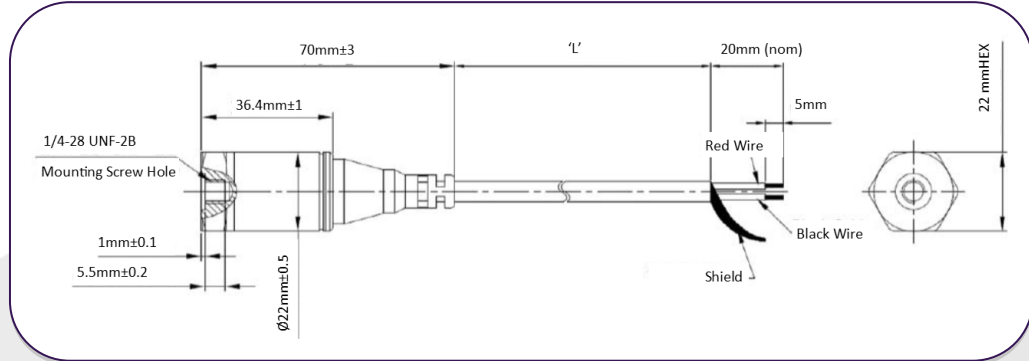
Spectrum:

1Hz	67 µg/√Hz
10Hz	25 µg/√Hz
100Hz	9.5 µg/√Hz
1kHz	5.6 µg/√Hz
10kHz	4.6 µg/√Hz

### Options:

A/140 – top entry connector  
 A/140/C – top entry int. cable  
 A/140/SC – side entry int. cable  
 A/140/W – top entry int. cable, waterproof  
 A/140/SW – side entry int. cable, waterproof

A/140/W



### System Connection:

Red Wire – Output signal & Constant Current Supply  
 Black Wire – GND

	Metric	Imperial
Nominal sensitivity ±10%	100mV/g	10.2 mV/(m/s <sup>2</sup> )
Power supply	22-30VDC, 2-10mA Constant current	22-30VDC, 2-10mA Constant current
Typical Frequency Response	±5% ±3dB 1Hz – 7KHz 0.35Hz – 13KHz	1Hz – 7KHz 0.35Hz – 13KHz
Mounted Base Resonance	20kHz (typical))	20kHz (typical)
Dynamic Range ±	80g	784m/s <sup>2</sup>
Transverse sensitivity	<5%	<5%
Amplitude Non-linearity	≤1%	≤1%
Sensor operating temperature	-50°C to +120°C	-58°F to +248°F
Cable operating temperature	-30°C to +85°C	-22°F to +185°F
Temperature Sensitivity	<5%	<5%
Output Impedance (@24°C/75.2°F)	<100Ω	<100Ω
Bias Voltage (@24°C)	10–14VDC	10-14VDC
Isolation	Case isolated, internally shielded	Case isolated, internally shielded
Case Material	Stainless Steel	Stainless Steel
Sealing	IP68	IP68
Weight	99g	3.5oz
Sine vibration limit	500g Pk	4903m/s <sup>2</sup> Pk
Shock limit	5000g Pk	49033m/s <sup>2</sup> Pk
Base strain sensitivity	≤5%	≤5%
Connector	3m integral cable	3m integral cable
Mounting	¼-28UNF Tapped Hole	¼-28UNF Tapped Hole

Please note: For information and reference only. Data should not be used as pass / fail criteria for calibration purposes

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A UK company with UK-based manufacturing, assembly and calibration in-house.

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