

## A/140/SC Low Cost Industrial IEPE Accelerometer

100mV/g Output

nom. 149gm

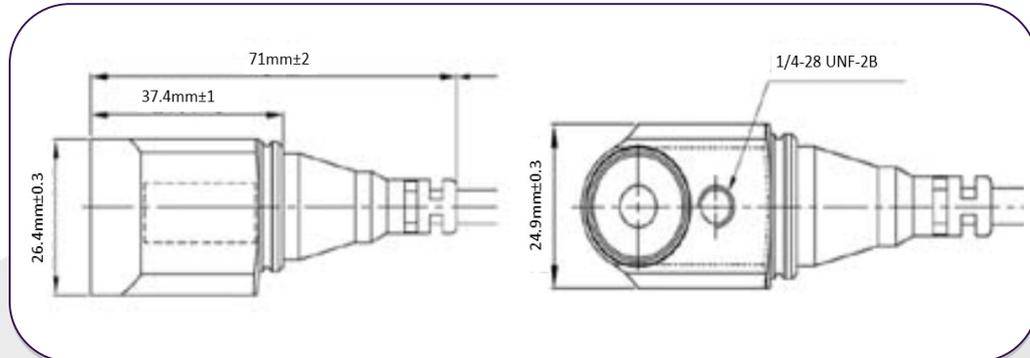
120°C Max Temp



Low cost general purpose side entry integral cable IEPE industrial accelerometer with isolated AC output. Manufactured in stainless steel, for vibration analysis in harsh environments. Sealed to IP67 and includes 3m integral cable as standard (*additional cable can be ordered*).

Using a shear plate design piezoelectric ceramic sensor at its core the A/140/SC offers superior performance at a low price.

A/140/SC



### Applications

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

### Features

- Voltage Output
- High reliability
- Maintenance free
- Corrosion resistant
- High S/N ratio
- Integral Sealing

**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

### 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 – 5KHz 0.35Hz – 9KHz	1Hz – 5KHz 0.35Hz – 9KHz
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	IP67	IP67
Weight	149g	5.2oz
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	Through hole 1/4-28UNF screw	Through hole 1/4-28UNF screw

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

**DJB Instruments (UK) Ltd**  
 Finchley Avenue,  
 Mildenhall, Suffolk IP28 7BG

Tel +44 (0)1638 712 288  
 Email sales@djbinstruments.com  
 Web www.djbinstruments.com

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

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