

A/140/C Low Cost Industrial IEPE Accelerometer

100mV/g Output

nom. 99gm

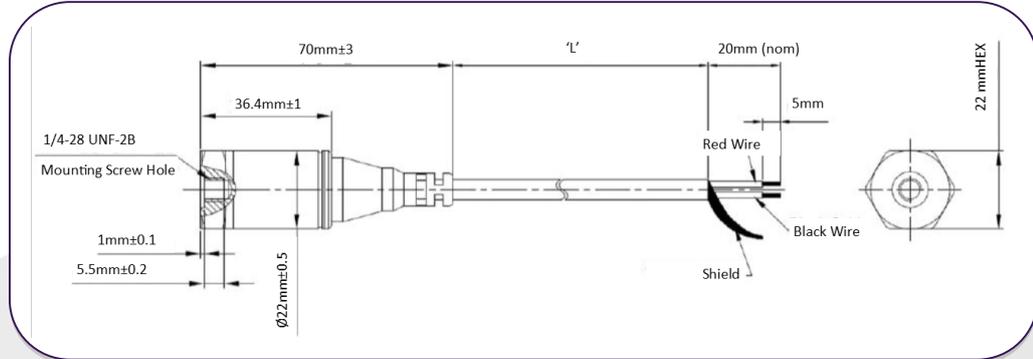
120°C Max Temp



Low cost general purpose integral cable IEPE industrial accelerometer with isolated AC output. Manufactured in stainless steel for long term 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/C offers superior performance at a low price.

A/140/C



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

System Connection:

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

	Metric	Imperial
Nominal sensitivity ±10%	100mV/g	10.2 mV/(m/s ²)
Power supply	22-30VDC, 2-10mA Constant current	22-30VDC, 2-10mA Constant current
Typical Frequency Response	±5% ±3dB 1Hz – 10KHz 0.35Hz – 13KHz	1Hz – 10KHz 0.35Hz – 13KHz
Mounted Base Resonance	≥30kHz (typical))	≥30kHz (typical)
Dynamic Range ±	80g	784m/s ²
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	99g	3.5oz
Sine vibration limit	500g Pk	4903m/s ² Pk
Shock limit	10000g Pk	98066m/s ² Pk
Base strain sensitivity	≤5%	≤5%
Connector	3m integral cable (RG58)	3m integral cable (RG58)
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

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.

DJB Iss.2.2020



ISO 9001 – 00025363