

A/140/SC Low Cost Industrial IEPE Accelerometer

100mV/g Output

nom. 149gm

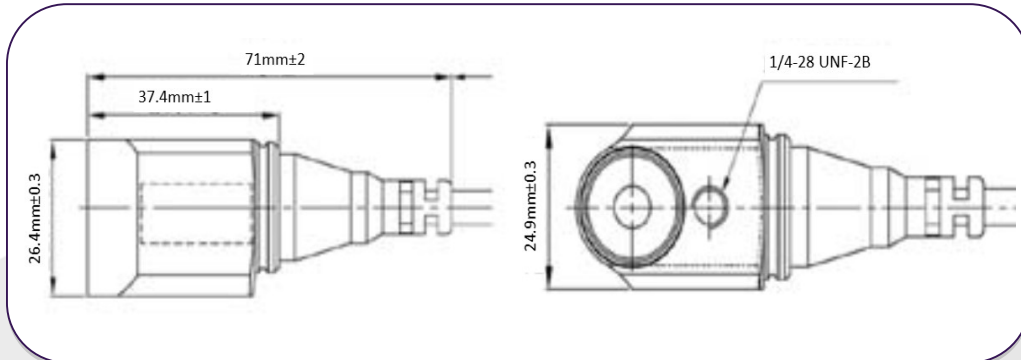
120°C Max Temp



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 ²)
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 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		149g	5.2oz
Sine vibration limit		500g Pk	4903m/s ² Pk
Shock limit		5000g Pk	49033m/s ² 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

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ISO 9001 – 00025363