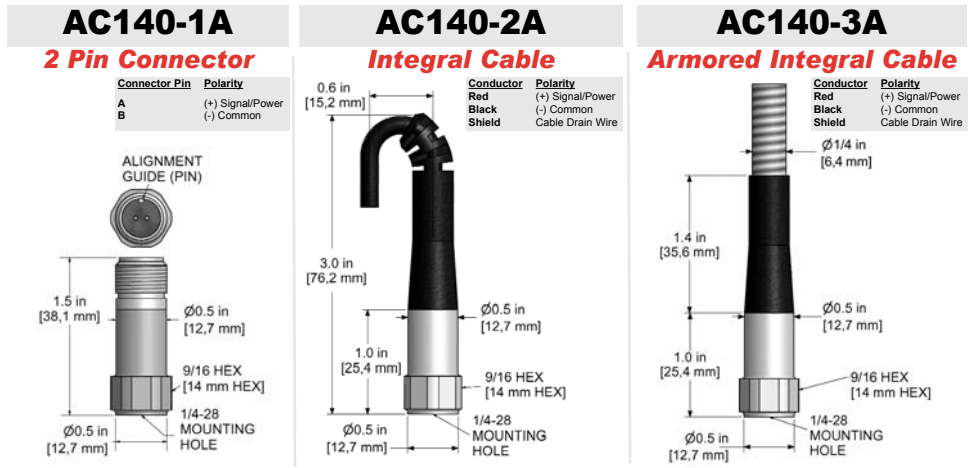


AC140 Series

Low Cost Small Accelerometer, Top Exit Cable, 100 mV/g

Use CTC mini MIL J2 Series Connectors with this sensor



<p>Part Numbers & Ordering Information:</p> <p>When Ordering Metric, add "M" prefix. (Example: M/AC140-2A/010-Z)</p>	<p>AC140-1A Low cost small accelerometer, 100 mV/g, 2 pin top connector</p> <p>Requires J2A or J2C Connector/Cable</p>	<table border="1"> <tr> <td>AC140-2A/010-Z</td> <td>10 ft. (3 m), blunt cut end</td> <td>AC140-3A/010-Z</td> <td>10 ft. (3 m), blunt cut end</td> </tr> <tr> <td>AC140-2A/020-Z</td> <td>20 ft. (6 m), blunt cut end</td> <td>AC140-3A/020-Z</td> <td>20 ft. (6 m), blunt cut end</td> </tr> <tr> <td>AC140-2A/030-Z</td> <td>30 ft. (9 m), blunt cut end</td> <td>AC140-3A/030-Z</td> <td>30 ft. (9 m), blunt cut end</td> </tr> <tr> <td>AC140-2A/050-Z</td> <td>50 ft. (15 m), blunt cut end</td> <td>AC140-3A/050-Z</td> <td>50 ft. (15 m), blunt cut end</td> </tr> <tr> <td>AC140-2A/100-Z</td> <td>100 ft. (30 m), blunt cut end</td> <td>AC140-3A/100-Z</td> <td>100 ft. (30 m), blunt cut end</td> </tr> <tr> <td>AC140-2A/010-F</td> <td>10 ft. (3 m), BNC plug connector</td> <td>AC140-3A/010-F</td> <td>10 ft. (3 m), BNC plug connector</td> </tr> <tr> <td>AC140-2A/020-F</td> <td>20 ft. (6 m), BNC plug connector</td> <td>AC140-3A/020-F</td> <td>20 ft. (6 m), BNC plug connector</td> </tr> <tr> <td>AC140-2A/030-F</td> <td>30 ft. (9 m), BNC plug connector</td> <td>AC140-3A/030-F</td> <td>30 ft. (9 m), BNC plug connector</td> </tr> <tr> <td>AC140-2A/050-F</td> <td>50 ft. (15 m), BNC plug connector</td> <td>AC140-3A/050-F</td> <td>50 ft. (15 m), BNC plug connector</td> </tr> <tr> <td>AC140-2A/100-F</td> <td>100 ft. (30 m), BNC plug connector</td> <td>AC140-3A/100-F</td> <td>100 ft. (30 m), BNC plug connector</td> </tr> </table>	AC140-2A/010-Z	10 ft. (3 m), blunt cut end	AC140-3A/010-Z	10 ft. (3 m), blunt cut end	AC140-2A/020-Z	20 ft. (6 m), blunt cut end	AC140-3A/020-Z	20 ft. (6 m), blunt cut end	AC140-2A/030-Z	30 ft. (9 m), blunt cut end	AC140-3A/030-Z	30 ft. (9 m), blunt cut end	AC140-2A/050-Z	50 ft. (15 m), blunt cut end	AC140-3A/050-Z	50 ft. (15 m), blunt cut end	AC140-2A/100-Z	100 ft. (30 m), blunt cut end	AC140-3A/100-Z	100 ft. (30 m), blunt cut end	AC140-2A/010-F	10 ft. (3 m), BNC plug connector	AC140-3A/010-F	10 ft. (3 m), BNC plug connector	AC140-2A/020-F	20 ft. (6 m), BNC plug connector	AC140-3A/020-F	20 ft. (6 m), BNC plug connector	AC140-2A/030-F	30 ft. (9 m), BNC plug connector	AC140-3A/030-F	30 ft. (9 m), BNC plug connector	AC140-2A/050-F	50 ft. (15 m), BNC plug connector	AC140-3A/050-F	50 ft. (15 m), BNC plug connector	AC140-2A/100-F	100 ft. (30 m), BNC plug connector	AC140-3A/100-F	100 ft. (30 m), BNC plug connector
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* Custom Lengths Available Upon Request																																										

Performance Specifications	English	Metric	Environmental	English	Metric
Sensitivity ±15%	100 mV/g	100 mV/g	Temperature Range	-58 to 250° F	-50 to 121° C
Frequency Response			Maximum Shock Protection	5,000 g, peak	5000 g, peak
±3 dB	30-900,000 CPM	0.5-15000 Hz	Electromagnetic Sensitivity	CE	CE
±10%	42-420,000 CPM	0.7-7000 Hz	Sealing	Welded, Hermetic	Welded, Hermetic
Dynamic Range	±50 g, peak	±50 g, peak	Submersible Depth	500 ft	152 m
Electrical			Physical		
Settling Time (Turn on Time)			Sensing Element	PZT Ceramic	PZT Ceramic
@ Room Temp (68°F/20°C)	<2.5 Seconds	<2.5 Seconds	Sensing Structure	Shear Mode	Shear Mode
Power Requirement			Weight	0.7 oz.	20 grams
Voltage Source	18-30 VDC	18-30 VDC	Case Material	316L Stainless Steel	316L Stainless Steel
Constant Current Excitation	2-10 mA	2-10 mA	Mounting Hole	1/4-28	1/4-28
Electrical Noise (Typical)			Connector (AC140-1A)	2 Pin Mini-MIL	2 Pin Mini-MIL
Broadband 2.5 Hz to 25 kHz	325 σg, rms	325 σg, rms	Integral Cable (AC140-2A)	CB110	CB110
Spectral 10 Hz	30 σg/√Hz	30 σg/√Hz	Armored Cable (AC140-3A)	CB206, Armor Jacket	CB206, Armor Jacket
100 Hz	4 σg/√Hz	4 σg/√Hz	Mechanical		
1000 Hz	2 σg/√Hz	2 σg/√Hz	Resonant Frequency	2,040,000 CPM	34000 Hz
Output Impedance, Max	<100 ohm	<100 ohm	Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Bias Output Voltage	7-14 VDC	7-14 VDC	Supplied Accessories		
Electrical Case Isolation	>10 ⁸ ohm	>10 ⁸ ohm	Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate	CA10	CA10

Common Applications

Industries Served

- Automotive
- Pharmaceutical
- Wastewater Treatment
- Manufacturing
- Power
- Military
- Pulp and Paper
- Petrochemical
- Steel

Typical Applications

- Air Compressors
- Dryer Sections <250° F (121° C)
- Motors
- Pumps, Underwater
- Air Handlers
- Fans
- Press Sections
- Roll and Process Equipment
- Conveyors
- Fourdriniers
- Presses and Stamping
- Spindles
- Cooling Towers
- Gear Boxes
- Pumps

Measurement Types

- Permanent
- Portable

For optional accessories, please see the *Sensor Accessory Selection Chart*.



VIBRATION ANALYSIS HARDWARE