

AC150 Series

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

SECTION 1 - VIBRATION SENSORS
Accelerometers



Actual Product Size Shown



Product Features

Low-Cost Accelerometer - Perfect for Permanent Mounting

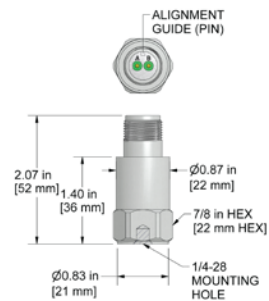
Excellent Choice for budget Conscious Data Collection

- ± 50 g, Peak Dynamic Range
- Standard 2 Pin MIL Connection
- 1-10000 Hz (60-600,000 CPM) Frequency Response

AC150-1A

2 Pin Connector

Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



AC150-2C

Integral Cable

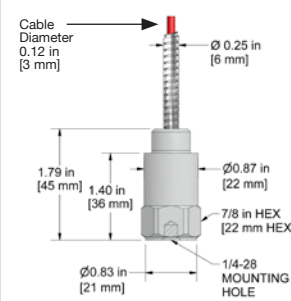
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC150-3C

Armored Integral Cable

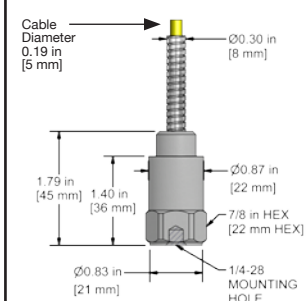
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC150-6C

Heavy Duty Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Specifications	Standard	Metric
Part Number	AC150	M/AC150
Sensitivity ($\pm 15\%$)		100 mV/g
Frequency Response (± 3 dB)	60-600,000 CPM	1,0-10000 Hz
Dynamic Range		± 50 g, peak
Electrical		
Settling Time		<2.5 seconds
Voltage Source (IEPE)		18-30 VDC
Constant Current Excitation		2-10 mA
Spectral Noise @ 10 Hz		14 μ g./Hz
Spectral Noise @ 100 Hz		2.3 μ g./Hz
Spectral Noise @ 1000 Hz		2 μ g./Hz
Output Impedance		<100 ohm
Bias Output Voltage		10-14 VDC
Case Isolation		>10 ⁸ ohm

Specifications	Standard	Metric
Environmental		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection		5,000 g, peak
Electromagnetic Sensitivity		CE
Sealing		IP68
Submersible Depth (AC150-2C/3C)	200 ft.	60 m
Physical		
Sensing Element		PZT Ceramic
Sensing Structure		Shear Mode
Weight	3.2 oz	90 grams
Case Material		316L Stainless Steel
Mounting		1/4-28
Connector (non-integral)		2 Pin MIL-C-5015
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate		CA10

Ordering Information

Standard	AC150-1A (1/4-28 Stud)	AC150-2C - / (1/4-28 Stud)	AC150-3C - / (1/4-28 Stud)	AC150-6C - / (1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)	(maximum armor length 20 ft.) (cable length in feet) (termination)
Metric	M/AC150-1A (M6x1 Adapter Stud)	M/AC150-2C - / (M6x1 Adapter Stud)	M/AC150-3C - / (M6x1 Adapter Stud)	M/AC150-6C - / (M6x1 Adapter Stud)
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)	(maximum armor length 6 m) (cable length in meters) (termination)

Cable Termination Options: E F L Z



VIBRATION ANALYSIS HARDWARE

Backed by our Unconditional Lifetime Warranty

LIMITED AVAILABILITY!



Actual Product Size Shown



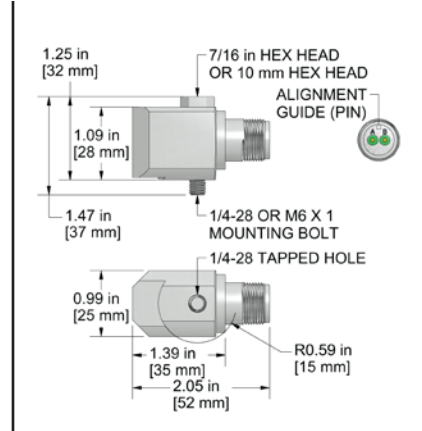
Product Features

Low Cost Side Exit Sensor!
Economical way to Trend Machinery

- Standard 2 Pin MIL Connection
- $\pm 50g$, Peak Dynamic Range
- 5 - 7000 Hz (30 - 420,000 CPM) Frequency Response

AC154-1A 2 Pin Connector

Connector	Pin Polarity
A	(+) Signal/Power
B	(-) Common



Specifications	Standard	Metric
Part Number	AC154-1A	M/AC154-1A
Sensitivity ($\pm 15\%$)	100 mV/g	
Frequency Response ($\pm 3dB$)	30-420,000 CPM	0,5-7000 Hz
Dynamic Range	$\pm 50 g$, peak	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	14 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 100 Hz	2.3 $\mu g/\sqrt{Hz}$	
Spectral Noise @ 1000 Hz	2 $\mu g/\sqrt{Hz}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.1 oz	145 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,320,000 CPM	22000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

Ordering Information

Standard	AC154-1A (1/4-28 Captive Bolt)
Metric	M/AC154-1A (M6x1 Captive Bolt)

→ **Contact Factory BEFORE Ordering or Quoting!**



AC184 Series

Multi-Purpose Accelerometer, M8 Captive Bolt, Side Exit Connector/Cable, 100 mV/g

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Accelerometers



Actual Product Size Shown



M8 Captive Bolt Product Features

CTC's Most Popular Side Exit Sensor, Now With M8 Mounting!

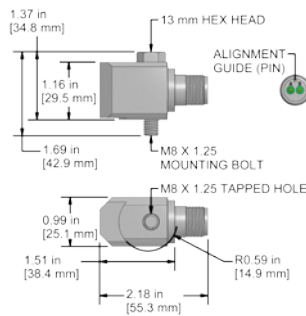
High Performance in a Low Cost Sensor

- Standard 2 Pin MIL Connection
- Perfect for M8 Applications
- Affordably Priced

AC184-1A

2 Pin Connector

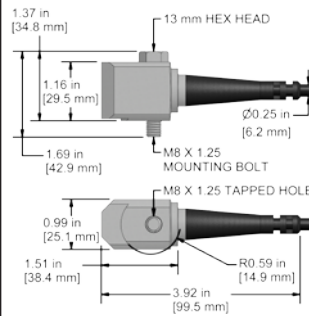
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



AC184-2C

Integral Cable

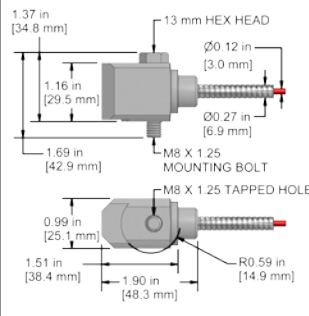
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC184-3C

Armored Integral Cable

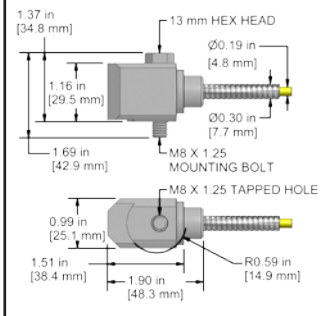
Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



AC184-6C

Heavy Duty Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Drain Wire



Specifications	Standard	Metric
Part Number	AC184	
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-600,000 CPM	0.5-10000 Hz
Frequency Response (±10%)	120-300,000 CPM	2.0-5000 Hz
Dynamic Range	± 50 g, peak	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	14 µg/√Hz	
Spectral Noise @ 100 Hz	2.3 µg/√Hz	
Spectral Noise @ 1000 Hz	2 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-58 to 250°F	-50 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (AC184-2C/3C)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	6 oz	170 grams
Case Material	316L Stainless Steel	
Mounting	M8	
Connector (non-integral)	2 Pin MIL-C-5015	
Resonant Frequency	1,200,000 CPM	20000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	M8 Captive Bolt	
Calibration Certificate	CA10	

Ordering Information

Metric	AC184-1A (M8x1 Captive Bolt)	AC184-2C - / (M8x1 Captive Bolt)	AC184-3C - / (M8x1 Captive Bolt)	AC184-6C - / (M8x1 Captive Bolt)

Cable Termination Options: E F L Z



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