

AC914 Series

Low Capacitance, Intrinsically Safe Accelerometer, Side Exit Connector/Cable, 50 mV/g

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers



Actual Product Size Shown



Requires Intrinsically Safe Barrier

Product Features

CSA/ATEX Approved

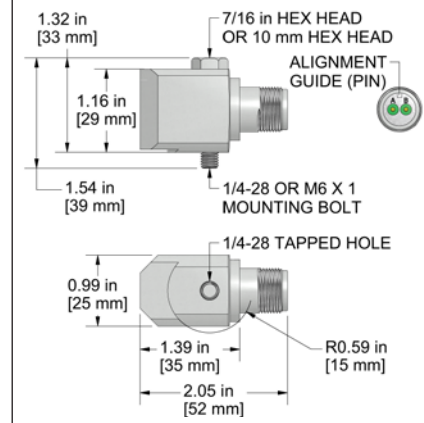
Excellent for Higher g Applications

- ± 100 g, Peak Dynamic Range
- 50 mV/g Sensitivity $\pm 10\%$
- Requires Intrinsic Safety Barrier (see page 278)

AC914-1A

2 Pin Connector

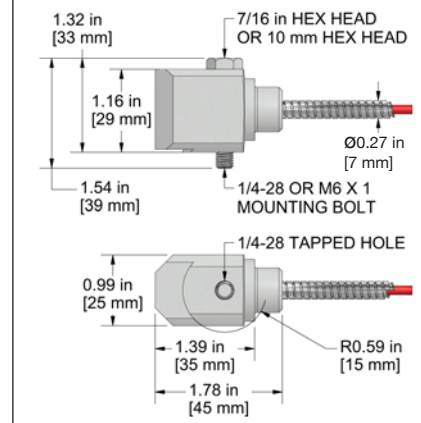
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common



AC914-3C

Armored Integral Cable

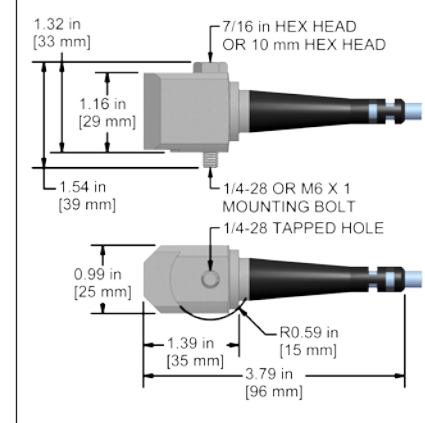
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



AC914-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC914	M/AC914
Sensitivity ($\pm 10\%$)	50 mV/g	
Frequency Response (± 3 dB)	48-516,000 CPM	0,8-8600 Hz
Frequency Response ($\pm 10\%$)	90-300,000 CPM	1,5-5000 Hz
Dynamic Range	± 100 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 mA	
Spectral Noise @ 10 Hz	30 μ g/ \sqrt Hz	
Spectral Noise @ 100 Hz	25 μ g/ \sqrt Hz	
Spectral Noise @ 1000 Hz	25 μ g/ \sqrt Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 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	5.3 oz	151 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC914-1A)	2 Pin MIL-C-5015	
Armored Cable (AC914-3C)	Armor Jacketed Cable	
Integral Cable (AC914-9C)	RAL 5015 Blue Polyurethane Cable	
Resonant Frequency	1,260,000 CPM	21000 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	AC914-1A (1/4-28 Captive Bolt)	AC914-3C - / <input type="text"/> / <input type="text"/> - <input type="text"/> (1/4-28 Captive Bolt) (maximum armor length 100 ft.) (cable length in feet) (termination)	AC914-9C - / <input type="text"/> - <input type="text"/> (1/4-28 Captive Bolt) (length in feet) (termination)
Metric	M/AC914-1A (M6x1 Captive Bolt)	M/AC914-3C - / <input type="text"/> / <input type="text"/> - <input type="text"/> (maximum armor length 30 m) (cable length in meters) (termination)	M/AC914-9C - / <input type="text"/> - <input type="text"/> (M6x1 Captive Bolt) (length in meters) (termination)

Read Before Purchasing
Important information on
Regulatory Approvals and Requirements
on Pages 80 & 81

Cable Termination Options: L Z

Backed by our Unconditional Lifetime Warranty

www.ctconline.com



AC915 Series

Low Capacitance, Intrinsically Safe Accelerometer,
Top Exit Connector/Cable, 100 mV/g

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers



Actual Product Size Shown



Requires **Intrinsically Safe Barrier**

Product Features

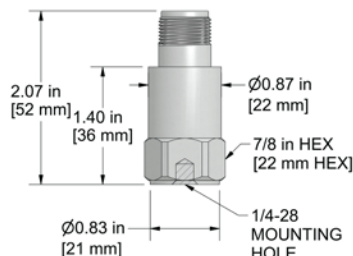
CSA/ATEX Approved
High Performance at a Reasonable Price

- 0,5 - 15000 Hz (30 - 900,000 CPM) Frequency Response
- 100 mV/g Sensitivity ±10%
- Requires Intrinsic Safety Barrier (see page 278)

AC915-1A 2 Pin Connector

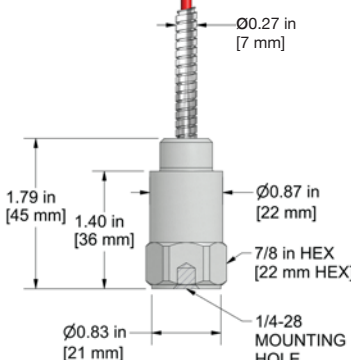
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common

ALIGNMENT GUIDE (PIN)



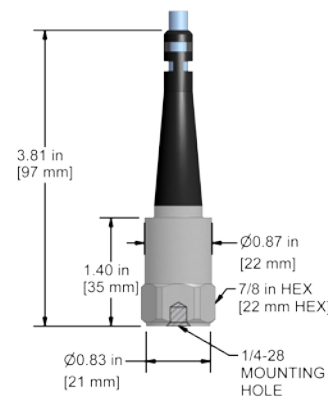
AC915-3C Armored Integral Cable

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



AC915-9C Integral Cable

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



Specifications	Standard	Metric
Part Number	AC915	M/AC915
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-900,000 CPM	0,5-15000 Hz
Frequency Response (±10%)	60-600,000 CPM	1,0-10000 Hz
Dynamic Range	± 50 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 mA	
Spectral Noise @ 10 Hz	30 µg/√Hz	
Spectral Noise @ 100 Hz	19 µg/√Hz	
Spectral Noise @ 1000 Hz	15 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 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	3.2 oz	91 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC915-1A)	2 Pin MIL-C-5015	
Armored Cable (AC915-2C)	Armor Jacketed Cable	
Integral Cable (AC915-9C)	RAL 5015 Blue Polyurethane Cable	
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	AC915-1A (1/4-28 Stud)	AC915-3C - / [] / [] - [] (1/4-28 Stud) (maximum armor length 100 ft.) (cable length in feet) (termination)	AC915-9C - / [] - [] (1/4-28 Stud) (length in feet) (termination)
Metric	M/AC915-1A (M6x1 Adapter Stud)	M/AC915-3C - / [] / [] - [] (M6x1 Adapter Stud) (maximum armor length 100 ft.) (cable length in feet) (termination)	M/AC915-9C - / [] - [] (M6x1 Adapter Stud) (length in feet) (termination)
		[] M / [] M - [] (maximum armor length 30 m) (cable length in meters) (termination)	[] M - [] (length in meters) (termination)

Read Before Purchasing
Important information on
Regulatory Approvals and Requirements
on Pages 80 & 81

Cable Termination Options: L Z



Backed by our **Unconditional Lifetime Warranty**

AC916 Series

Low Capacitance, Intrinsically Safe Accelerometer, Side Exit Connector/Cable, 100 mV/g

SECTION I - VIBRATION SENSORS
Low Capacitance Accelerometers



Actual Product Size Shown



Requires Intrinsically Safe Barrier

Product Features

CSA/ATEX Approved

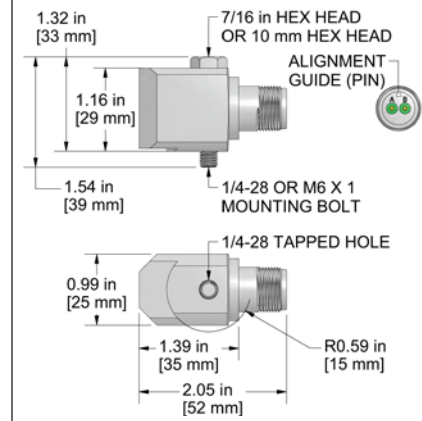
Hazardous Location Sensor for ATEX and C1D1 Areas

- 0,5 - 8600 Hz (30 - 516,000 CPM) Frequency Response
- 100 mV/g Sensitivity $\pm 10\%$
- Requires Intrinsic Safety Barrier (see page 278)

AC916-1A

2 Pin Connector

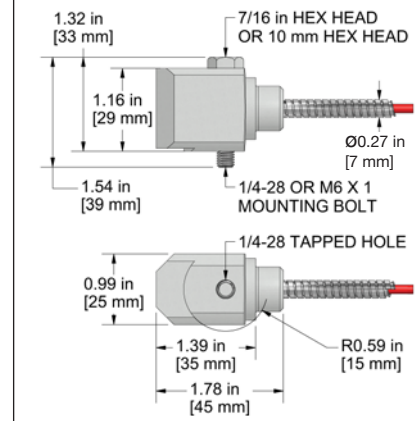
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common



AC916-3C

Armored Integral Cable

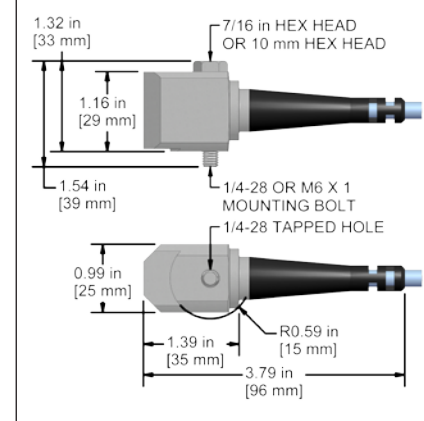
Conductor	Polarity
Red	(+) Signal / Power
Black	(-) Common
Shield	Cable Drain Wire



AC916-9C

Integral Cable

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



Specifications	Standard	Metric
Part Number	AC916	M/AC916
Sensitivity ($\pm 10\%$)	100 mV/g	
Frequency Response ($\pm 3\text{dB}$)	30-516,000 CPM	0,5-8600 Hz
Frequency Response ($\pm 10\%$)	60-360,000 CPM	1,0-6000 Hz
Dynamic Range	± 50 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 mA	
Spectral Noise @ 10 Hz	30 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 100 Hz	19 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 1000 Hz	15 $\mu\text{g}/\sqrt{\text{Hz}}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 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	5.3 oz	151 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC916-1A)	2 Pin MIL-C-5015	
Armored Cable (AC916-3C)	Armor Jacketed Cable	
Integral Cable (AC916-9C)	RAL 5015 Blue Polyurethane Cable	
Resonant Frequency	1,260,000 CPM	21000 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	AC916-1A (1/4-28 Captive Bolt)	AC916-3C - / <input type="text"/> / <input type="text"/> - <input type="text"/> (1/4-28 Captive Bolt) (maximum armor length 100 ft.) (cable length in feet) (termination)	AC916-9C - / <input type="text"/> - <input type="text"/> (1/4-28 Captive Bolt) (length in feet) (termination)
Metric	M/AC916-1A (M6x1 Captive Bolt)	M/AC916-3C - / <input type="text"/> / <input type="text"/> - <input type="text"/> (M6x1 Captive Bolt) (maximum armor length 30 m) (cable length in meters) (termination)	M/AC916-9C - / <input type="text"/> - <input type="text"/> (M6x1 Captive Bolt) (length in meters) (termination)

Read Before Purchasing
Important information on
Regulatory Approvals and Requirements
on Pages 80 & 81

Cable Termination Options: L Z

Backed by our Unconditional Lifetime Warranty

www.ctconline.com



AC911 Series

Low Capacitance, Intrinsically Safe Accelerometer,
Top Exit Connector/Cable, 10 mV/g

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers



Actual Product Size Shown



Requires Intrinsically Safe Barrier

Product Features

CSA/ATEX Approved

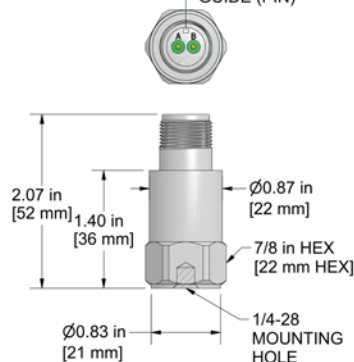
Helps to Detect Bearing Defects and Other High Frequency Faults

- ±500 g, Peak Dynamic Range
- 1,0 - 15000 Hz (60 - 900,000 CPM) Frequency Response
- Requires Intrinsic Safety Barrier (see page 278)

AC911-1A 2 Pin Connector

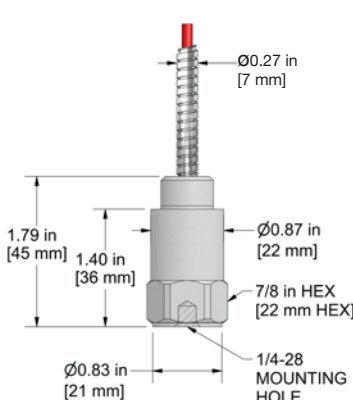
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common

ALIGNMENT GUIDE (PIN)



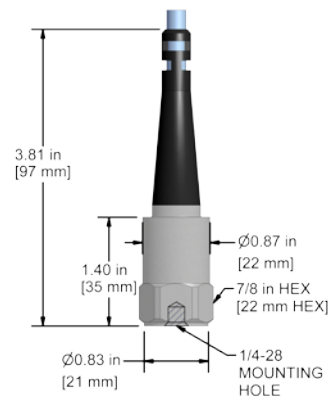
AC911-3C Armored Integral Cable

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



AC911-9C Integral Cable

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



Specifications	Standard	Metric
Part Number	AC911	M/AC911
Sensitivity (±10%)	10 mV/g	
Frequency Response (±3dB)	60-900,000 CPM	1,0-15000 Hz
Frequency Response (±10%)	120-360,000 CPM	2,0-6000 Hz
Dynamic Range	± 500 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 mA	
Spectral Noise @ 10 Hz	100 µg/√Hz	
Spectral Noise @ 100 Hz	90 µg/√Hz	
Spectral Noise @ 1000 Hz	85 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 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	3.2 oz	91 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC911-1A)	2 Pin MIL-C-5015	
Armored Cable (AC911-3C)	Armor Jacketed Cable	
Integral Cable (AC911-9C)	RAL 5015 Blue Polyurethane Cable	
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	AC911-1A (1/4-28 Stud)	AC911-3C - / [] - [] - [] (1/4-28 Stud) (maximum armor length 100 ft.) (cable length in feet) (termination)	AC911-9C - / [] - [] (1/4-28 Stud) (length in feet) (termination)
Metric	M/AC911-1A (M6x1 Adapter Stud)	M/AC911-3C - / [] - [] - [] (M6x1 Adapter Stud) (maximum armor length 30 m.) (cable length in meters) (termination)	M/AC911-9C - / [] - [] (M6x1 Adapter Stud) (length in meters) (termination)



Read Before Purchasing
Important information on
Regulatory Approvals and Requirements
on Pages 80 & 81

Cable Termination Options: **L** **Z**

Backed by our Unconditional Lifetime Warranty

www.ctconline.com



AC913 Series

Low Capacitance, Intrinsically Safe Accelerometer,
Top Exit Connector/Cable, 50 mV/g

SECTION 1 - VIBRATION SENSORS
Low Capacitance Accelerometers



Actual Product Size Shown



Requires **Intrinsically Safe Barrier**

Product Features

CSA/ATEX Approved

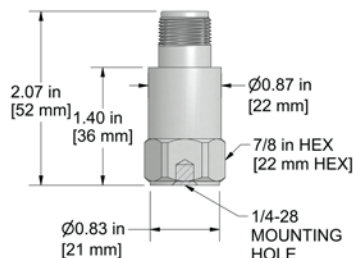
Excellent for Higher g Applications

- 0,8 - 15000 Hz (48 - 900,000 CPM) Frequency Response
- ±100 g, Peak Dynamic Range
- Requires Intrinsic Safety Barrier (see page 278)

AC913-1A 2 Pin Connector

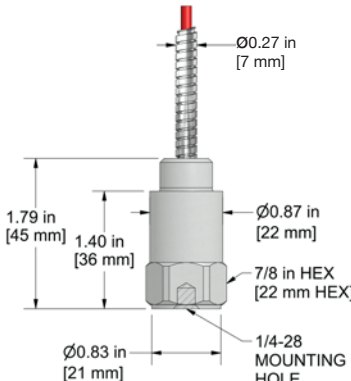
Connector Pin	Polarity
A	(+) Signal / Power
B	(-) Common

ALIGNMENT GUIDE (PIN)



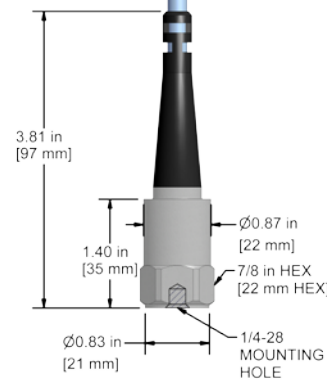
AC913-3C Armored Integral Cable

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



AC913-9C Integral Cable

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



Specifications	Standard	Metric
Part Number	AC913	M/AC913
Sensitivity (±10%)	50 mV/g	
Frequency Response (±3dB)	48-900,000 CPM	0,8-15000 Hz
Frequency Response (±10%)	90-390,000 CPM	1,5-6500 Hz
Dynamic Range	± 100 g, peak	
Electrical		
Settling Time	<3 Seconds	
Voltage Source	18-28 VDC	
Constant Current Excitation	2-4 mA	
Spectral Noise @ 10 Hz	30 µg/√Hz	
Spectral Noise @ 100 Hz	25 µg/√Hz	
Spectral Noise @ 1000 Hz	25 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 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	3.2 oz	91 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (AC913-1A)	2 Pin MIL-C-5015	
Armored Cable (AC913-3C)	Armor Jacketed Cable	
Integral Cable (AC913-9C)	RAL 5015 Blue Polyurethane Cable	
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	AC913-1A (1/4-28 Stud)	AC913-3C - / [] / [] - [] (1/4-28 Stud) (maximum armor length 100 ft.) (cable length in feet) (termination)	AC913-9C - / [] - [] (1/4-28 Stud) (length in feet) (termination)
Metric	M/AC913-1A (M6x1 Adapter Stud)	M/AC913-3C - / [] / [] - [] (M6x1 Adapter Stud) (maximum armor length 30 m) (cable length in meters) (termination)	M/AC913-9C - / [] - [] (M6x1 Adapter Stud) (length in meters) (termination)

Read Before Purchasing
Important information on
Regulatory Approvals and Requirements
on Pages 80 & 81

Cable Termination Options: L Z



Backed by our Unconditional Lifetime Warranty