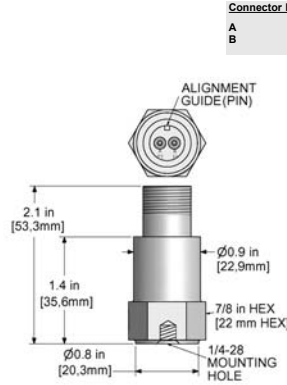


# AC901 Series

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

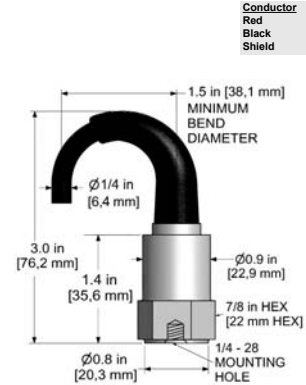


### AC901-1A 2 Pin Connector



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

### AC901-2A Integral Cable



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

### Part Numbers & Ordering Information:

When Ordering Metric, add "M" prefix.  
(Example: M/AC901-2A/010-Z)

**AC901-1A** Intrinsically safe accelerometer, 10 mV/g, 2 pin top connector

AC901-2A/010-Z	10 ft. (3 m), blunt cut end
AC901-2A/020-Z	20 ft. (6 m), blunt cut end
AC901-2A/030-Z	30 ft. (9 m), blunt cut end
AC901-2A/050-Z	50 ft. (15 m), blunt cut end
AC901-2A/100-Z	100 ft. (30 m), blunt cut end

\* Custom Lengths Available Upon Request

Performance Specifications	English	Metric	Environmental	English	Metric
Sensitivity $\pm 10\%$	10 mV/g	10 mV/g	Temperature Range	-58 to 250° F	-50 to 121° C
Frequency Response $\pm 3$ dB $\pm 10\%$	72-900,000 CPM	1,2-15000 Hz	Maximum Shock Protection	5,000 g, peak	5000 g, peak
Dynamic Range	150-360,000 CPM	2,5-6000 Hz	Electromagnetic Sensitivity	CE	CE
	$\pm 500$ g, peak	$\pm 500$ g, peak	Sealing	Welded, Hermetic	Welded, Hermetic
			Submersible Depth (AC901-2A)	200 ft.	61 m
<b>Electrical</b>			<b>Physical</b>		
Settling Time (Turn on Time) @ Room Temp (68°F/20°C)	<3 Seconds	<3 Seconds	Sensing Element	PZT Ceramic	PZT Ceramic
Power Requirement			Sensing Structure	Shear Mode	Shear Mode
Voltage Source	18-28 VDC	18-28 VDC	Weight	3.2 oz.	90 grams
Constant Current Excitation	2-4 mA	2-4 mA	Case Material	316L Stainless Steel	316L Stainless Steel
Electrical Noise (Typical)			Mounting Hole	1/4-28	1/4-28
Broadband 2.5 Hz to 25 kHz	3800 $\sigma$ g, rms	3800 $\sigma$ g, rms	Connector (AC901-1A)	2 Pin MIL-C-5015	2 Pin MIL-C-5015
Spectral 10 Hz	500 $\sigma$ g/ $\sqrt{\text{Hz}}$	500 $\sigma$ g/ $\sqrt{\text{Hz}}$	Integral Cable (AC901-2A)	CB103	CB103
100 Hz	65 $\sigma$ g/ $\sqrt{\text{Hz}}$	65 $\sigma$ g/ $\sqrt{\text{Hz}}$	<b>Mechanical</b>		
1000 Hz	11 $\sigma$ g/ $\sqrt{\text{Hz}}$	11 $\sigma$ g/ $\sqrt{\text{Hz}}$	Resonant Frequency	1,500,000 CPM	25000 Hz
Output Impedance, Max	<100 ohm	<100 ohm	Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Bias Output Voltage	10-14 VDC	10-14 VDC	<b>Supplied Accessories</b>		
Electrical Case Isolation	>10 <sup>8</sup> ohm	>10 <sup>8</sup> ohm	Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
			Calibration Certificate	CA10	CA10

### Common Applications

#### Industries Served

- Chemical
- Mining
- Manufacturing
- Painting / Plating
- Military
- Petrochemical

#### Typical Applications

- Machinery in Volatile Environments

#### Measurement Types

- Permanent Mount

### Regulatory Approvals

- **US & Canadian Standards:** Division 1, Classes I, II, III, Groups A-F
- **ATEX:** Zone 0

**\*Proper IS Barrier selection required, please refer to the Overview on Intrinsic Safety**

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



VIBRATION ANALYSIS HARDWARE