

# AC925 SERIES

CLASS I, DIVISION 2 / ZONE 2 ACCELEROMETER,  
FOR USE IN "NON-ARCING, NON-SPARKING" ENVIRONMENTS,  
TOP EXIT CONNECTOR, 100 mV/g

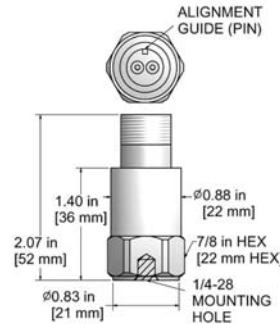


## AC925-1A

### 2 Pin Connector

**SENSOR REQUIRES  
CLASS I, DIVISION 2  
"CB190" CABLE &  
"D2Q" CONNECTOR**

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



### Part Numbers & Ordering Information:

When Ordering Metric, add "M" prefix.  
(Example: M/AC925-1A)

**AC925-1A**

100 mV/g accelerometer, 2 pin top connector, for Class I, Division 2 / Zone 2 hazardous area, "non-arcing, non-sparking" environment.

#### Performance Specifications

	English	Metric
Sensitivity $\pm 10\%$	100 mV/g	100 mV/g
Frequency Response		
$\pm 3$ dB	30-900,000 CPM	0.5-15000 Hz
$\pm 10\%$	60-600,000 CPM	1.0-10000 Hz
Dynamic Range	$\pm 50$ g, peak	$\pm 50$ g, peak

#### Electrical

Settling Time (Turn on Time) @ Room Temp (68°F/20°C)	<3 Seconds	<3 Seconds
Power Requirement		
Voltage Source	18-28 VDC	18-28 VDC
Constant Current Excitation	2-4 mA	2-4 mA
Electrical Noise (Typical)		
Broadband 2.5 Hz to 25 kHz	200 $\mu$ g, rms	200 $\mu$ g, rms
Spectral 10 Hz	6.5 $\mu$ g/ $\sqrt$ Hz	6.5 $\mu$ g/ $\sqrt$ Hz
100 Hz	2 $\mu$ g/ $\sqrt$ Hz	2 $\mu$ g/ $\sqrt$ Hz
1000 Hz	1.8 $\mu$ g/ $\sqrt$ Hz	1.8 $\mu$ g/ $\sqrt$ Hz
Output Impedance, Max	<100 ohm	<100 ohm
Bias Output Voltage	10-14 VDC	10-14 VDC
Electrical Case Isolation	>10 <sup>8</sup> ohm	>10 <sup>8</sup> ohm

#### Environmental

	English	Metric
Temperature Range	-65 to 257° F	-54 to 125° C
Maximum Shock Protection	5,000 g, peak	5000 g, peak
Electromagnetic Sensitivity	CE	CE
Sealing	Welded, Hermetic	Welded, Hermetic

#### Physical

Sensing Element	PZT Ceramic	PZT Ceramic
Sensing Structure	Shear Mode	Shear Mode
Weight	3.2 oz.	90 grams
Case Material	316L Stainless Steel	316L Stainless Steel
Mounting Hole	1/4-28	1/4-28
Connector (AC925-1A)	2 Pin MIL-C-5015	2 Pin MIL-C-5015

#### Mechanical

Resonant Frequency	1,500,000 CPM	25000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm

#### Supplied Accessories

Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	CA10

### Regulatory Approvals

US & Canada: Class I, Division 2, Groups A,B,C,D; Class II, Division 2, Groups F, G, Class III; T3; Ex nA IIC, Zone 2; AEx nA IIC, Zone 2; T3

ATEX: II 3 G, Zone 2, Ex nA II T3

### Requirements

- Energy limiting barrier not required with Class I, Division 2 / Zone 2 sensors.
- Must be used in combination with Class I, Division 2 / Zone 2 approved cable (such as CB190) and connector (such as D2Q). Please refer to "Class I, Division 2 / Zone 2 Series Control Drawing & Accessories" data sheet, in accordance with CEC or the NEC.
- Case of sensor must be grounded. Please refer to "Class I, Division 2 / Zone 2 Series Control Drawing & Accessories" data sheet.
- Suitability of final installation is to be determined by the authority having local jurisdiction.



# UNCONDITIONAL, LIFETIME WARRANTY