

# AC934 Series

Nonincendive, CSA North America Class I, Division 2, Class II, Division 1, Class III, ATEX/IECEX Zone 2,22 Approved Accelerometer, Side Exit 2 Pin Connector, 50 mV/g,  $\pm 10\%$



## Regulatory Information

CSA 221421  
CSA 25CA80263368X  
CLI, DIV 2, GRP A, B, C and D T3/T4  
CLII, DIV 1, GRP E, F and G T135°C  
CLIII  
Ex ec IIC T\* Gc  
Ex tc IIIC T135°C Dc  
CLI, ZN 2, AEx ec IIC T\* Gc  
ZN 22, AEx tc IIIB T135°C Dc  
\*Temperature Class depends on the ambient temperature  
T4, T135°C for ambient temperature range of -40°C to +80°C  
T3 for ambient temperature range of -40°C to +121°C  
Vmax = 28VDC Imax = 10mA  
Reference Product Manual MNX10128 / Install Per INS10191

IECEX CSA 24.0015X  
Ex ec IIC T\*°C Gc  
Ex tc IIIC T135°C Dc  
T4, T135°C for ambient temperature range of -40°C to +80°C

T3 for ambient temperature range of -40°C to +121°C  
\*Temperature Class depends on the ambient temperature  
Vmax=28VDC Imax=10mA  
Install per INS10208  
Reference Product Manual MNX10132

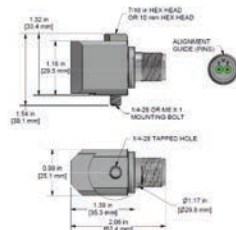
CSACa 24 ATEX1004X  
Ex ec IIC T\*°C Gc  
Ex tc IIIC T135°C Dc  
T4, T135°C for ambient temperature range of -40°C to +80°C  
T3 for ambient temperature range of -40°C to +121°C  
\*Temperature Class depends on the ambient temperature  
Vmax=28VDC Imax=10mA  
Install per INS10209  
Reference Product Manual MNX10133

Approved Cabling: CB102, CB111, CB190\*, CB206, CB296 (\*Approved for Use in T4 Applications Only)

### AC934-1A

2 Pin Connector

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

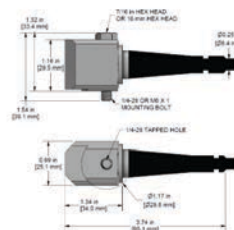


Stock Product

### AC934-2C

CB190 Integral Cable

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

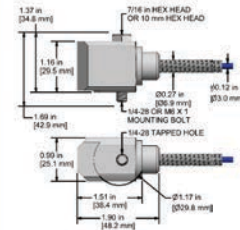


Built To Order

### AC934-3C

CB296 Armored Integral Cable

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



Built To Order

| Specifications                          | Standard                          | Metric      | Specifications              | Standard             | Metric            |
|-----------------------------------------|-----------------------------------|-------------|-----------------------------|----------------------|-------------------|
| Part Number                             | AC934                             | M/AC934     | <b>Environmental</b>        |                      |                   |
| Sensitivity ( $\pm 10\%$ )              | 50 mV/g                           |             | Operating Temperature Range | -40 to 250 °F        | -40 to 121 °C     |
| Frequency Response ( $\pm 3\text{dB}$ ) | 48-516,000 CPM                    | 0.8-8600 Hz | Maximum Shock Protection    | 5,000 g, peak        |                   |
| Frequency Response ( $\pm 10\%$ )       | 90-300,000 CPM                    | 1.5-5000 Hz | Electromagnetic Sensitivity | CE                   |                   |
| Dynamic Range                           | $\pm 100$ g, peak                 |             | Sealing                     | IP68                 |                   |
| Transverse Sensitivity                  | $\leq 5\%$                        |             | Submersible Depth           | 200 ft.              | 91 m              |
| <b>Electrical</b>                       |                                   |             | SIL Rating                  | SIL 2                |                   |
| Settling Time                           | <3 Seconds                        |             | <b>Physical</b>             |                      |                   |
| Voltage Source                          | 18-28 VDC                         |             | Sensing Element             | PZT Ceramic          |                   |
| Constant Current Excitation             | 2-10 mA                           |             | Sensing Structure           | Shear Mode           |                   |
| Spectral Noise @ 10 Hz                  | 35 $\mu\text{g}/\sqrt{\text{Hz}}$ |             | Weight                      | 5.3 oz               | 151 grams         |
| Spectral Noise @ 100 Hz                 | 25 $\mu\text{g}/\sqrt{\text{Hz}}$ |             | Case Material               | 316L Stainless Steel |                   |
| Spectral Noise @ 1000 Hz                | 25 $\mu\text{g}/\sqrt{\text{Hz}}$ |             | Mounting Thread             | 1/4-28               |                   |
| Output Impedance                        | <100 ohm                          |             | Connector (Non-Integral)    | 2 Pin MIL-C-5015     |                   |
| Bias Output Voltage                     | 10-14 VDC                         |             | Resonant Frequency          | 1,260,000 CPM        | 21000 Hz          |
| Case Isolation                          | >10 <sup>8</sup> ohm              |             | Mounting Torque             | 2 to 5 ft. lbs.      | 2.7 to 6.8 Nm     |
|                                         |                                   |             | Mounting Hardware Supplied  | 1/4-28 Captive Bolt  | M6x1 Captive Bolt |
|                                         |                                   |             | Calibration Certificate     | CA10                 |                   |

## Typical Frequency Response

