

# AC294 Series

Premium Compact Accelerometer, Side Exit 2 Pin Connector, 100 mV/g, ±5%



VIBRATION ANALYSIS HARDWARE



## Product Features

Superior RF Immunity in a Compact 100 mV/g Sensor

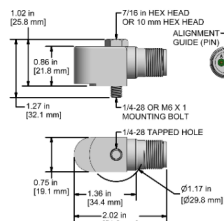
- ▶ ± 80 g, Dynamic Range
- ▶ 0.3 - 10,000 Hz (18 - 600,000 CPM) Frequency Response
- ▶ Standard 2 Pin MIL Connection or Integral Cable

Note: Integral Cable Options are only for Permanent Monitoring Applications

### AC294-1D

2 Pin Connector

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

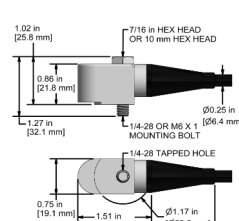


Stock Product

### AC294-2D

CB103 Integral Cable

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

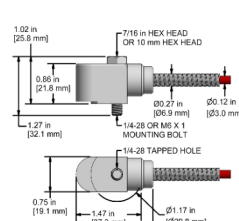


Built To Order

### AC294-3D

CB206 Armored Integral Cable

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

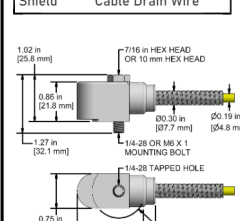


Built To Order

### AC294-6D

CB611 Heavy Duty Armored Integral Cable

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

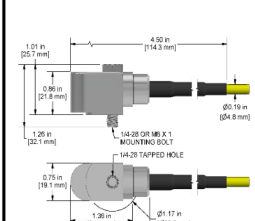


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### AC294-6N

CB111 Integral Cable

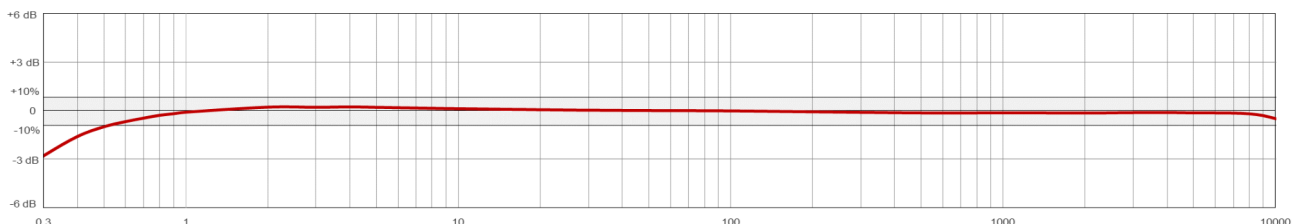
| Conductor | Polarity         |
|-----------|------------------|
| Red       | (+) Signal/Power |
| Black     | (-) Common       |
| Shield    | Cable Drain Wire |



Built To Order

| Specifications              | Standard                | Metric       | Specifications              | Standard             | Metric            |
|-----------------------------|-------------------------|--------------|-----------------------------|----------------------|-------------------|
| Part Number                 | AC294                   | M/AC294      | <b>Environmental</b>        |                      |                   |
| Sensitivity (±5%)           | 100 mV/g                |              | Operating Temperature Range | -58 to 250°F         | -50 to 121°C      |
| Frequency Response (±3dB)   | 18-600,000 CPM          | 0.3-10000 Hz | Maximum Shock Protection    | 5,000 g, peak        |                   |
| Frequency Response (±10%)   | 60-150,000 CPM          | 1.0-2500 Hz  | Electromagnetic Sensitivity | CE                   |                   |
| Frequency Response (±5%)    | 600-120,000 CPM         | 10-2000 Hz   | Sealing                     | Welded, Hermetic     |                   |
| Dynamic Range               | ± 80 g, peak            |              | Submersible Depth           | 200 ft.              | 60 m              |
|                             | *Vsource ≥ 22V, 12Vbias |              | <b>Physical</b>             |                      |                   |
| <b>Electrical</b>           |                         |              | Sensing Element             | PZT Ceramic          |                   |
| Settling Time               | <2 Seconds              |              | Sensing Structure           | Shear Mode           |                   |
| Voltage Source (IEPE)       | 18-30 VDC               |              | Weight                      | 3.3 oz               | 93 grams          |
| Constant Current Excitation | 2-10 mA                 |              | Case Material               | 316L Stainless Steel |                   |
| Spectral Noise @ 10 Hz      | 8 µg/vHz                |              | Connector (Non-Integral)    | 2 Pin MIL-C-5015     |                   |
| Spectral Noise @ 100 Hz     | 4 µg/vHz                |              | Resonant Frequency          | 1,200,000 CPM        | 20000 Hz          |
| Spectral Noise @ 1000 Hz    | 2 µg/vHz                |              | Mounting Torque             | 2 to 5 ft. lbs.      | 2.7 to 6.8 Nm     |
| Output Impedance            | <100 ohm                |              | Mounting Hardware Supplied  | 1/4-28 Captive Bolt  | M6x1 Captive Bolt |
| Bias Output Voltage         | 10-14 VDC               |              | Calibration Certificate     | CA10                 |                   |
| Case Isolation              | >10 <sup>8</sup> ohm    |              |                             |                      |                   |

## Typical Frequency Response



Backed by our Unconditional Lifetime Warranty & Free Annual Recalibration Service

www.ctconline.com | sales@ctconline.com | 585-924-5900