

AC194 Series

Compact, Multi-Purpose Accelerometer, Side Exit
Connector/Cable, 100 mV/g



REGULATORY
APPROVALS



PRODUCT FEATURES

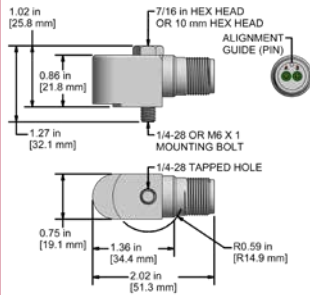
High Performance in an Affordable,
Side Exit Compact Sensor

Very Low Noise & Superior RF Immunity

AC194-1D

2 Pin Connector

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

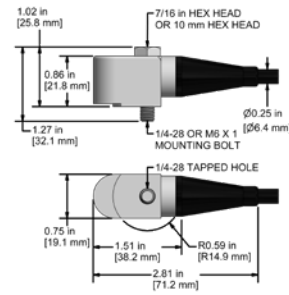


STOCK PRODUCT

AC194-2D

Integral Cable

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

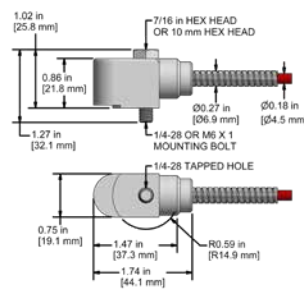


BUILD TO ORDER

AC194-3D

Armored Integral Cable

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

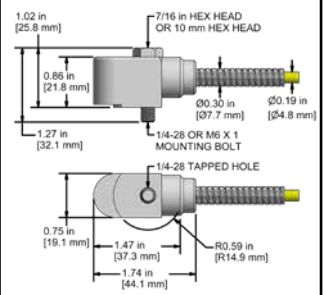


BUILD TO ORDER

AC194-6D

Heavy Duty Armored Integral Cable

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



BUILD TO ORDER

| Specifications | Standard | Metric |
|----------------------------------|--------------------|-------------------------------|
| Part Number | AC194 | M/AC194 |
| Vibration | | |
| Sensitivity ($\pm 10\%$) | | 100 mV/g |
| Frequency Response (± 3 dB) | 30 CPM to 600 kCPM | 0.5 Hz to 10 kHz |
| Dynamic Range | | ± 80 g, peak |
| Electrical | | |
| Settling Time | | < 2 seconds |
| Voltage Source (IEPE) | | 18 Vdc to 30 Vdc |
| Constant Current Excitation | | 2 mA to 10 mA |
| Spectral Noise @ 10 Hz | | 8 μ g/ $\sqrt{\text{Hz}}$ |
| Spectral Noise @ 100 Hz | | 4 μ g/ $\sqrt{\text{Hz}}$ |
| Spectral Noise @ 1 kHz | | 2 μ g/ $\sqrt{\text{Hz}}$ |
| Output Impedance | | < 100 ohm |
| Bias Output Voltage | | 10 Vdc to 14 Vdc |
| Case Isolation | | > 10^8 ohm |

| Specifications | Standard | Metric |
|------------------------------------|---------------------|-------------------------|
| Environmental | | |
| Temperature Range | -58°F to 250°F | -50°C to 121°C |
| Maximum Shock Protection | | 5 kg, peak |
| Electromagnetic Sensitivity | | CE |
| Sealing | | Welded, Hermetic (IP68) |
| Submersible Depth (AC194-2D/3D/6D) | 200 ft | 60 m |
| Physical | | |
| Sensing Element | | PZT Ceramic |
| Sensing Structure | | Shear Mode |
| Weight | 3.3 ounces | 93 grams |
| Case Material | | 316L Stainless Steel |
| Mounting | | Captive Bolt |
| Connector (non-integral) | | 2 Pin MIL-C-5015 |
| Resonant Frequency | 1380 kCPM | 23 kHz |
| Mounting Torque | 2 ft-lb to 5 ft-lb | 2.7 N-m to 6.8 N-m |
| Mounting Hardware | 1/4-28 Captive Bolt | M6x1 Captive Bolt |
| Calibration Certificate | | CA10 |

TYPICAL FREQUENCY RESPONSE

