

# Model BI-5114A



Proven Condition Monitoring Solutions

## 100mV/g High Performance Compact Accelerometer

- Compact size, side exit
- +/- 80g dynamic range
- Connector or integral cable options
- Shear mode design reduces sensitivity to base strain and thermal transients
- Ground isolated

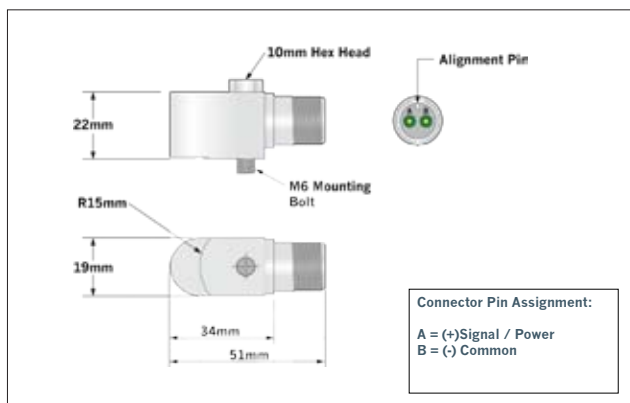


### Performance

|                             |               |
|-----------------------------|---------------|
| Sensitivity (+/-5%)         | 100mV/g       |
| Acceleration range          | ±80g peak     |
| Frequency response (+/-5%)  | 10 - 2000Hz   |
| Frequency response (+/-10%) | 1 - 2500Hz    |
| Frequency response (+/-3dB) | 0.3 - 10000Hz |

### Electrical

|                         |                                      |
|-------------------------|--------------------------------------|
| Voltage source          | 18 - 30VDC                           |
| Constant current source | 2 - 10mA                             |
| Spectral noise @ 10Hz   | 8µg/√Hz                              |
| Spectral noise @ 100Hz  | 4µg/√Hz                              |
| Spectral noise @ 1000Hz | 2µg/√Hz                              |
| Output impedance        | <100 ohm                             |
| Bias output voltage     | 10 - 14VDC                           |
| Grounding               | Case isolated<br>Internally screened |
| Settling time           | <2 seconds                           |

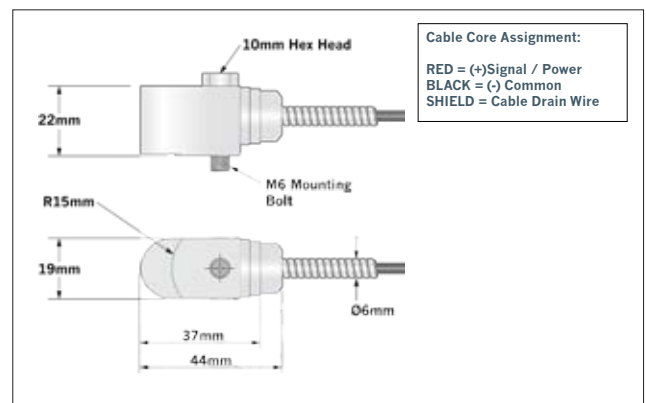


### Environmental

|                   |                   |
|-------------------|-------------------|
| Temperature range | -50 to +120 Deg C |
| Shock limit       | 5000g peak        |
| Sealing           | Welded, Hermetic  |

### Physical

|                              |                         |
|------------------------------|-------------------------|
| Sensing element              | PZT ceramic             |
| Sensing structure            | Shear mode              |
| Weight                       | 93 grams                |
| Case Material                | 316L stainless steel    |
| Mounting torque              | 3 to 6.5 Nm             |
| Mounting hardware (metric)   | M6 x 1 captive bolt     |
| Mounting hardware (imperial) | 1/4-28 captive bolt     |
| Output connector             | 2 pin, MIL-C-5015 style |
| International compliance     | CE                      |



### Ordering Information

**Interface option**  
 0 = Connector  
 1 = Integral cable  
 2 = Armoured cable

**Mounting bolt**  
 0 = Metric (M6)  
 1 = Imperial (1/4-28)

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**Cable length**  
 Metric (meters) = xxxM  
 Imperial (feet) = xxxF

**Cable termination**  
 00 = No termination  
 01 = BNC Plug  
 02 = BNC Jack (Skt)  
 03 = MIL-C-5015 termination