Piezo resistive Accelerometer
BST 64K1 Triaxial

Features
- Anodized Aluminium Housing
- Option: Stainless Steel
- IP 67
- DC Response
- Voltage Output
- 5-, 8- and 12 wire system

Application
- Motion
- Automotive
- Truck and Busses
- Train
- Comfort

Description
The new model BST 64K1 is a triaxial accelerometer based on variable capacitive technology with a very good Signal-to-Noise Ratio. The accelerometers are designed for relatively low amplitudes. Do to the mounting with two screws. The sensor has 6m very high rugged and flexible cable this makes it easy to connect the sensor on data acquisition systems. It operates between 8 and 30 VDC unregulated. The housing is available in Aluminium and Stainless Steel.

As an option, we supply the sensor with connector, Dallas ID or TEDS module.

A calibration for the sensor is obligatory.

Dimensions

[Dimensions diagram]
### Specifications

- **Range g**: from 2 g to 200 g
- **Supply voltage**: 8 to 30 VDC unregulated
- **Power Consumption**: max. 8 mA per axe
- **Zero measurement output**: +/- 80 mV typ in Differential Mode (> 10 g)  
  +/- 150 mV typ in Differential Mode (2 and 5 g)  
  2500 mV DC +/- 150 mV in Single Ended Mode
- **Sensitivity mV/g**: 20 mV/g up to 2000 mV/g
- **Frequency 5% typ Hz**: 0 Hz to 850 Hz
- **Shock limit**: 2000 g (2 g and 5 g); 4000 g (>10 g)
- **Operation Temperature °C**: -25° to 100° C
- **Weight**: 20 grams
- **Dimensions**: 23.6 x 16.0 x 18.0 mm (l x w x h)
- **Case material**: anodized Aluminium Option: Stainless Steel

### Individual Data

<table>
<thead>
<tr>
<th>Range g</th>
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<tbody>
<tr>
<td>2-200</td>
<td>8 to 30 VDC unregulated</td>
<td>max. 8 mA per axe</td>
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### Cable Code

- **5 wire**
  - red = Excitation +  
  - black = Excitation -  
  - white = signal x  
  - yellow = signal y  
  - green = signal z
- **8 wire**
  - red = Excitation +  
  - black = Excitation -  
  - x-axis  
  - green / violet = Signal +  
  - white / violet = Signal -  
  - y-axis  
  - green / grey = Signal +  
  - white / grey = Signal -  
  - z-axis  
  - green = Signal +  
  - white = Signal -
- **12 wire**
  - red / violet = Excitation +  
  - black / violet = Excitation -  
  - x-axis  
  - green / violet = Signal +  
  - white / violet = Signal -  
  - y-axis  
  - red / grey = Excitation +  
  - black / grey = Excitation -  
  - z-axis  
  - green = Signal +  
  - white = Signal -

### Order information

- BST 64K1A-050-6Z  
  64K1 = Model Name  
  A = Aluminium  
  E = Stainless Steel  
  050 = Range 50 g  
  6 = 6 m shielded cable  
  Z = no connector