Piezo resistive Accelerometer
BST 63K1 Triaxial

Features

- Anodized Aluminium Housing
- DC Response
- Voltage Output
- 5-, 8- and 12 wire system

Application

- Comfort
- Automotive
- Truck and Busses
- Train

Description

The new model BST 63K1 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.

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

A calibration for the sensor is obligatory.

Dimensions

![Dimensions Diagram]

All dimensions in mm
**Specifications**

Range 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
- Frequency 5% typ 20 mV/g up to 2000 mV/g
- Frequency 5% typ 0 Hz to 850 Hz
- Shock limit 2000 g (2 g and 5 g); 4000 g (>10 g)
- Operation Temperature -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

**Individual Data**

<table>
<thead>
<tr>
<th>Range g</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>25</th>
<th>50</th>
<th>100</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Hz</td>
<td>0-90</td>
<td>0-90</td>
<td>0-250</td>
<td>0-400</td>
<td>0-650</td>
<td>0-700</td>
<td>0-850</td>
</tr>
<tr>
<td>Sensitivity mV/g</td>
<td>2000</td>
<td>800</td>
<td>400</td>
<td>160</td>
<td>80</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Noise µg/Hz</td>
<td>7</td>
<td>12</td>
<td>18</td>
<td>25</td>
<td>50</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

**Cable Code**

5 wire
- red = 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
- x-axis
- red / violet = Excitation +
- black / violet = Excitation –
- green / violet = Signal +
- white / violet = Signal –

- y-axis
- red / grey = Excitation +
- black / grey = Excitation –
- green / grey = Signal +
- white / grey = Signal –

- z-axis
- red = Excitation +
- black = Excitation –
- green = Signal +
- white = Signal –

**Order information**

BST 63K1A-050-6Z

63K1 = Model Name
A = Aluminium
050 = Range 50 g
6 = 6 m shielded cable
Z = no connector