

## Contact

+49 89 189 41 49-11

[info@bay-sensortec.com](mailto:info@bay-sensortec.com)



## Capacitive Accelerometer

**BST 53K1** Uniaxial

### Features

- Fully Temperature Compensated
- Anodized Aluminium Housing
- Option: Stainless Steel
- DC Response
- Voltage Output
- Calibration

### Application

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

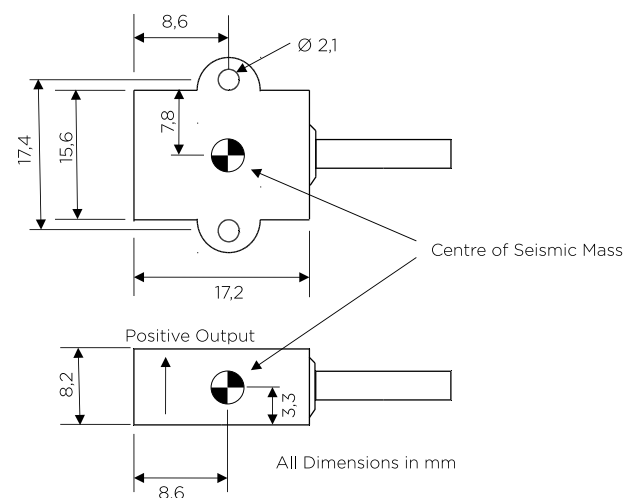
### Description

The new model BST 53K1 is a uniaxial accelerometer based on variable capacitive technology with a very good Signal-to-Noise Ratio. The accelerometer is designed for relatively low amplitudes. Do to the mounting with two screws. The sensor has 6 m very high rugged and flexible PUR-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 included.

### Dimensions



## Specifications

Range	from 2 g to 200 g
Sensitivity	20 mV/g up to 2000 mV/g
Supply voltage	8 to 30 VDC unregulated
Power Consumption	max. 8 mA
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
Frequency 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
Dimensions	24,2 x 17,2 x 8,3 mm (l x w x h)
Weight	10 grams (Al) without cable
Case material	anodized Aluminium Option: Stainless Steel

## Individual Data

Range g	2	5	10	25	50	100	200
Frequency Hz	0-90	0-90	0-250	0-400	0-650	0-700	0-850
Sensitivity mV/g	2000	800	400	160	80	40	20
Noise µg/root Hz	7	12	18	25	50	100	200

## Cable Code Differential

Red = Excitation +      Green = Signal +  
Black = Excitation -      White = Signal -

## Cable Code Single ended (Half of the Differential Signal)

Red = Excitation +      Black = Excitation -      Green = Signal

## Order information

BST 53K1(E)-050-6Z  
53K1 = Model Name  
A = Aluminium  
E = Stainless Steel  
050 = Range 50 g  
6 = 6 m shielded cable  
Z = no connector