

## Capacitive Accelerometer

### BST 63K1

triaxial

#### Features

- Anodized Aluminium Housing
- DC Response (0Hz)
- Voltage Output
- High Frequency Response
- High Shock Stability
- Calibration

#### Applications

- Automotive
- Truck and Busses
- Train
- Flight Test
- Wind Energy
- Comfort

#### 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 5 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.

#### Specifications

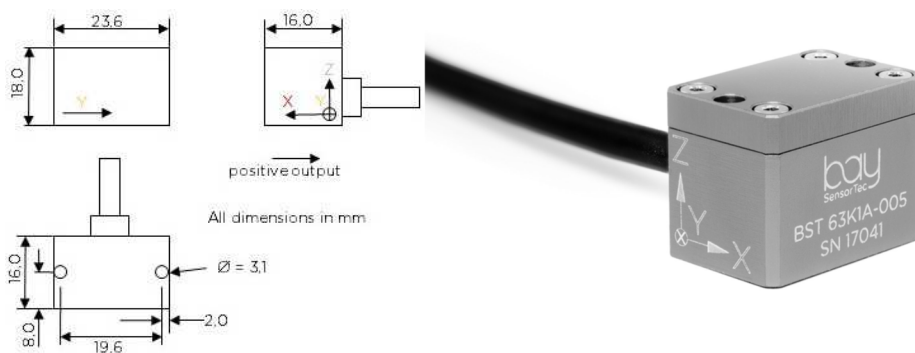
Range	from +/-2 g to +/-200 g
Supply voltage	5 to 30 VDC unregulated
Power Consumption	max. 8 mA per axe
Zero measurement output	+/- 50 mV typ in Differential Mode (> 10 g) +/- 80 mV typ in Differential Mode (2 and 5 g) 2500 mV DC +/- 50 mV in Single Ended Mode
Sensitivity	20 mV/g (200g) up to 2000 mV/g (2g)
Shock limit	4000 g (2 g and 5 g); 10000 g (>10 g)
Operation Temperature	-50° to 100° C (120°C for short time)
Weight Housing	22 grams
Dimensions	23,6 x 16,0 x 18.0 mm (l x w x h)
Case material	anodized Aluminium
Cable	6m shielded PUR cable
Weight (Cable)	30g per meter, diameter 4.4 mm, AWG 30



Individual Data	(All data at 24°C and 10V DC Supply)						
Range g	2	5	10	25	50	100	200
Frequency	0-200	0-250	0-400	0-800	0-1200	0-1500	0-2000
Sensitivity mV/g	2000	800	400	160	80	40	20
Noise µg/√Hz	7	12	18	25	50	100	200

Single Ended Mode (3.-wire) is half of the sensitivity from differential signal.

Dimensions



Cable Code

5 wire      red = Excitation + black = Excitation –  
                  white = signal x    yellow = signal y    green = signal z

8 wire      red = Excitation + black = Excitation –

<b>x-axis</b>	<b>y-axis</b>	<b>z-axis</b>
green/violet = Signal +	green/grey = Signal +	green = Signal +
white/violet = Signal –	white/grey = Signal –	white = Signal –

12 wire

<b>x-axis</b>	
red / violet = Excitation +	green / violet = Signal +
black / violet = Excitation –	white / violet = Signal –
<b>y-axis</b>	
red / grey = Excitation +	green / grey = Signal +
black / violet = Excitation –	white / grey = Signal –
<b>z-axis</b>	
red = Excitation +	green = Signal +
black = Excitation –	white = Signal –

Order Information

**BST 63K1A-050-6Z**  
 63K1 = Model Name  
 A = Aluminium  
 050 = Range 50g  
 6 = 6m shielded cable  
 Z = no connector