

Capacitive Accelerometer

BST 64K1 triaxial

Features

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

Applications

- 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.

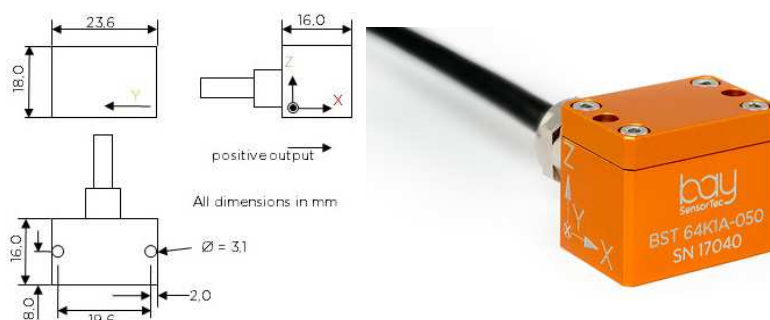
Specifications

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	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 Option: Stainless Steel

Individual Data

Range g	2	5	10	25	50	100	200
Frequency	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 $\mu\text{g}/\sqrt{\text{Hz}}$	7	12	18	25	50	100	200

Dimensions



Cable Code

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

Order Information

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