

Piezoresistive Accelerometer

BST 18C

Uniaxial

Features

- DC Response
- High Shock
- Calibration
- Meets SAE J211
- Aluminium Housing
- Small Size

Applications

- Crash Test
- Fatter Test
- Slid Test

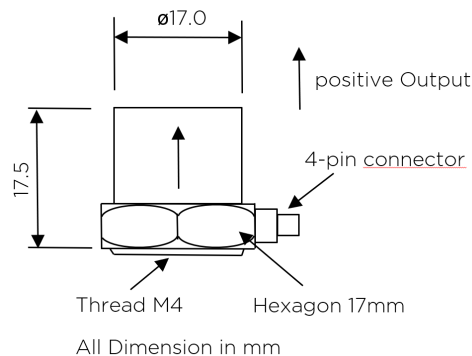
Description

The new model BST 18C is a uniaxial accelerometer based on piezo resistive technology. With the fully Wheatstone-Bridge (4 wire system) configuration helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult positions at the car for a crash test, slid test or for flatter test application.

Do to the anodized aluminium housing with a4-pin Com connector is to mount with a mounting stud M4 on difficult positions. With the 6m, very rugged, shielded and flexible 4-wire cable are all common connectors are mountable. As an option, we supply the sensor with a Dallas ID and a Shunt resistor in the connector.

A calibration for the sensor is obligatory.

Dimension



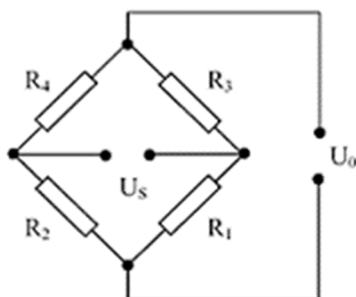
Specification

Range (g)	500	1000	2000
Sensitivity (mV/V/g)	0,04	0,018	0,016
Frequency 5% (Hz)	1800	2750	3000
Resonance Frequency (kHz)	>13	>18	> 20
Damping ratio	0.7	0.7	0.7
Shock limit (g)	6000	8000	8000

Supply voltage	3 to 10 VDC constant	
Zero measurement output	+/- 50 mV	
Thermal Shift Zero	< +/- 0.05 % FSO	(0° to 50° C)
Thermal Shift Span	- 0.2 % /°C +/- 0.05	(0° to 50° C)
Operation Temperature	-20° to 80° C	
Transverse sensitivity	3% max.	
Non-Linearity	< 1%	
Housing Material	Aluminium, anodized	
Mounting	with mounting stud M4	
Dimensions	17,5 x 17,0 mm	
Housing Weight	4 grams	
Connector	4 pin Com	
Cable	6m AWG 30, 4 wire, shielded, PUR	
Cable Weight	12 grams per meter, Ø 3,0 mm	

All data are typical at 24°C and 10 Vdc supply.

Diagram



Cable Code

Red = Excitation +
Black = Excitation -

Green = Signal +
White = Signal -

Order information

BST 18C-1000-6Z

18C = model name
1000 = Range 1000g
6 = 6 m Cable
Z = no connector