

## Piezoresistive Accelerometer

### BST 12C

#### Uniaxial

##### Features

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

##### Applications

- Crash Test
- Flutter Test

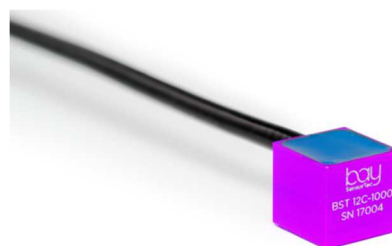
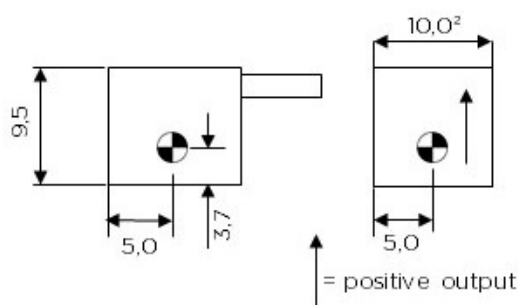
#### Description

The new model BST 12C 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 or for flutter test application.

Do to the anodized aluminium housing in Cube form to mount it with glue 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.

#### Dimensions

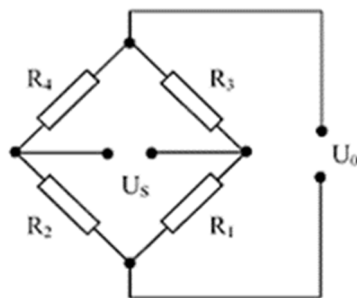


## Specifications

Range (g)	500	1000	2000
Sensitivity typ. (mV/V/g)	0,04	0,018	0,016
Frequency 5% (Hz)	2000	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 typ.		
Thermal Shift Zero	< +/- 0.05 % FSO		(0° to 50° C)
Thermal Shift Span	- 0.2 % /°C +/- 0.05		(0° to 50° C)
Non-Linearity	<1%		
Operation Temperature	-20° to 80° C		
Housing Material	Aluminium, anodized		
Dimensions	10.0 x 10.0 x 9.5 mm		
Housing Weight	3 grams		
Cable	6m AWG 30, 4 wire, shielded, PUR		
Cable Weight	12 grams per meter, Ø 3,0 mm		
Bridge Resistance	1500 to 2000 Ohm		

All data are typical at 23°C and 10 V DC supply.

## Diagram



## Cable Code

Red = Excitation +  
Black = Excitation -

Green = Signal +  
White = Signal -

## Order information

### **BS1 12C-1000-6Z**

12C = model name  
1000 = Range 1000g  
6 = 6 m Cable  
Z = no connector