

## Piezo resistive Accelerometer

**BST 18CE** Uniaxial



### CONTACT

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### FEATURES

- DC Response
- High Shock
- Calibration
- Meets SAE J211
- Stainless-Steel Housing
- Welded
- Small Size

### APPLICATION

- Crash Test
- Fatter Test
- Slid Test

### DESCRIPTION

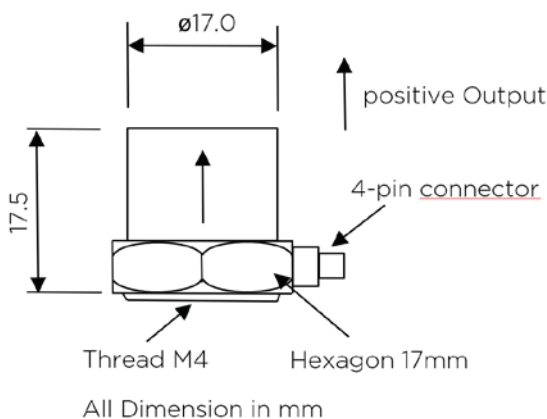
The model BST 18CE is a uniaxial accelerometer based on piezo resistive technology. With the fully Wheatstone-Bridge (4 wire system) configuration helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult positions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

Due to the Stainless-Steel housing with a 4-pin Com connector is to mount with a mounting stud M4 on difficult positions. With

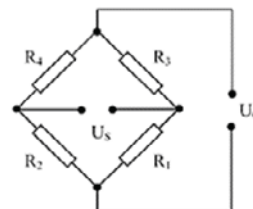
the 6m, very rugged, shielded and flexible 4-wire cable are all common connectors are mountable. As an option, we supply the sensor with a Dallas ID and a Shunt resistor in the connector.

A calibration for the sensor is obligatory.

### DIMENSIONS



### DIAGRAM



**SPECIFICATION ACCELEROMETER** All data are typical at 24°C AND 10 VDC SUPPLY.

Range (g)	500	1,000	2,000
Sensitivity typ. (mV/g)	0.04	0.018	0.016
Frequency response (Hz)	1,800	2,750	3,000
Resonance Frequency (kHz)	>13	>18	>20
Shock limit (g)	6,000	8,000	8,000

**ELECTRICAL PERFORMANCES**

Supply voltage	3 to 10 VDC constant
Zero measurement output	± 50 mV

**ENVIRONMENTAL PERFORMANCES**

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 °C to +80 °C
Protection Class	IP68
Non-Linearity	<1 %
Transverse sensitivity	3 % max.
Damping ratio	0.7 typ.
Housing Material	Stainless-Steel, welded
Mounting	with mounting stud M4
Dimensions	17.5 x 17.0 mm
Weight Housing	25 gram without cable
Connector	4 pin Com, welded
Cable	4 wire, shielded, PUR, AWG 32
Cable Length	6 m
Cable Material	PUR, black
Cable Weight	12 gram per meter, Ø 3.0 mm

**CABLE CODE**

red = Excitation +	green = Signal +
black = Excitation -	white = Signal -

**ORDER INFORMATION**

BST 18CE-1000-6Z
18CE = model name
1000 = Range 1000 g
6 = 6 m Cable
Z = no connector

**OPTIONAL**

Additional Cable Length
Connector
Calibration DAkkS DIN EN ISO/IEC 17025:2018