

Piezo resistive Accelerometer

Model **BST 18C** Uniaxial



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FEATURES

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

APPLICATION

- Crash test
- Fatter Test
- Slid test



DESCRIPTION

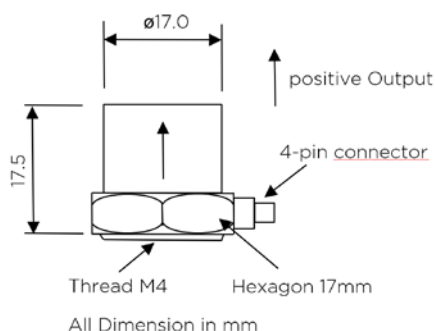
The new model BST 18C is a uniaxial accelerometer based on piezo resistive technology. With the fully Wheatstone-Bridge (4 wire system) configuration helps to connect the sensor on all data acquisition systems. The light weight and small size of the sensor makes it easy to mount it on difficult positions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

Do to the anodized aluminium housing with 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

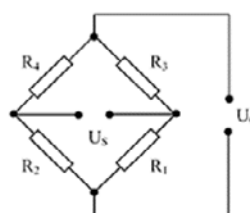
all common connectors are mountable. As an option, we supply the sensor with a Dallas ID and a Shunt resistor in the connector.

A calibration for the sensor is obligatory.

DIMENSIONS



DIAGRAM



SPECIFICATION ACCELEROMETER

All data are typical at 23°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) 5% max	1,800	2,750	3,000
Resonance Frequency (kHz)	>13	>28	>20
Shock limit (g)	6,000	8,000	8,000

ELECTRICAL PERFORMANCES

Supply voltage	3 to 10 VDC constant
Zero measurement output	+/- 25 mV, max. +/- 50 mV
Input Bridge Resistance	1,800 to 2,100 Ω
Output Bridge Resistance	1,800 to 2,100 Ω

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° to 80° C
Non-Linearity	< 1%
Transverse sensitivity	3% max.
Damping ratio	0.7 typ.
Housing Material	Aluminium, anodized
Mounting	with mounting stud M4
Dimensions	17,5 x 17,0 mm
Weight Housing	4 grams
Cable	integrated, 4 wire, shielded PUR, AWG 30
Cable Length	6m AWG 30, 4 wire, shielded
Cable Material	PUR, black
Cable Weight	12 grams per meter, Ø 3,0 mm

CABLE CODE

red = Excitation +
black = Excitation -

green = Signal +
white = Signal -

ORDER INFORMATION

BST 18C-1000-6Z
18C = Model name
1000 = Range 1000 g
6 = 6 m Cable
Z = no connector

OPTIONAL

Dallas ID
Shunt
Connector
Cable Length