



# **Preliminary**

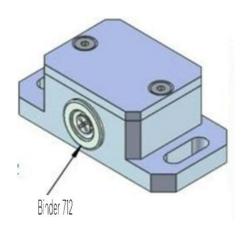
## BST RAIL BST RAIL 42

#### **Features**

Aluminium Housing, Anodized Option: Stainless Steel Housing DC Response (OHz) to 150 Hz Very Low Noise High Voltage Output Calibration

## **Application**

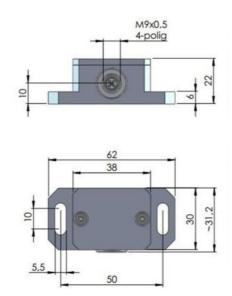
Train Comfort Break Tests



### Description

The new model **BST RAIL 42** is a uniaxial accelerometer based on variable capacitive technology with a very good Signal-to-Noise Ratio. The accelerometers are designed for very low amplitudes. Due to the mounting with two screws. The sensor has a very high rugged and flexible connector and cable this makes it easy to connect the sensor on data acquisition systems. It operates with 15 to 30 Vdc unregulated. The housing is available in Aluminium and Optional Stainless Steel.

#### **Dimensions**



DUETTO-Engineering . Frans-Hals-Str. 13 . 81479 München . Phone: +49 89 41602080 . Email: <a href="mailto:info@duetto-engineering.de">info@duetto-engineering.de</a> . www.duetto-engineering.com





## **Preliminary**

**Specifications** (All data at 24°C and 15 Vdc Supply)

Range  $+/- 0.5 g (5 m/s^2)$ 

Supply voltage 15 bis 30 VDC, unregulated

Power Consumption max. 25 mA

Zero measurement output 0 +/- 100 mV type

Frequency Response 0 Hz (DC) to 150 Hz

Sensitivity 1.000 mV/ m/s² (Differential Mode)

Non-Linearity < 0.5 %

Isolation the sensing element is isolated from housing

Shock limit 500 g

Operation Temperature -50°C to 80° C Storage Temperature -55°C to 100°C

Dimensions 62.0 (38.0) x 31.2 x 22.0 mm (l x w x h)

Weight (Housing) 80 grams, without cable biaxial

Mounting 2 holes for screws M5 Case material Aluminium, anodized

Cable 2.0 m shielded PUR-Cable, black

Weight (Cable) 12 g per meter, Ø 3,0 mm, AWG 30 uniaxial

#### **Cable Code Differential Mode**

Pin 1 = Red = Excitation + Pin 3 = Green = Signal + Pin 2 = Black = Excitation - Pin 4 = White = Signal -

Order Information BST RAIL 42-0.5-2Z

42 = Model Name

0.5 = Range 0.5 g (5 m/s<sup>2</sup>) 2 = 2 m shielded cable Z = no connector

**Options** Stainless Steel housing, welded, hermetical sealed

Current Output

Additional Cable Length Customer Connector

TEDS- Modul