

# Gyro Sensor

**BST 83G1C** Uniaxial



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## FEATURES

- Very small housing
- Low power consumption
- Low noise
- Aluminium Housing
- 0 Hz (DC)
- Calibration

## APPLICATION

- Crash Test

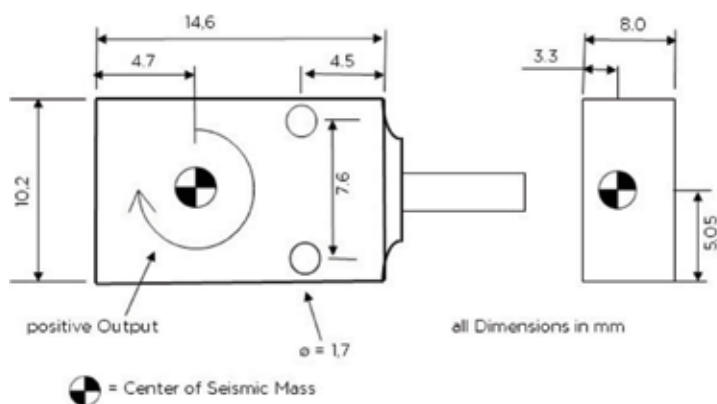


## DESCRIPTION

The Model BST 83G1C is a uniaxial Angular-Rate-Sensor, based on MEMS Technology, its design is especially for Car-Safety-Tests with Differential Signal Output.

The very small size makes it easy to mount it on difficult places. Available is also a small triaxial mounting block or a mounting block which is prepared for 3 accelerometers and 3 gyros. The BST 83G1C is very shock resistant. The sensor has 6 m high rugged shielded PUR-cable which is useable for connector from Lemo or ODU with Dallas ID and Shunt.

## DIMENSIONS



## SPECIFICATION ACCELEROMETER

All data are typical at 23 °C AND 10 VDC SUPPLY.

Ranges (°/s)	900	1,500	2,800	5,000	10,000	20,000
Sensitivity typ. (mV/°/s)	2.2	1.35	0.73	0.4	0.2	0.1
Frequency (Hz)	160	160	160	2,000	2,000	2,000

## ELECTRICAL PERFORMANCES

Supply voltage	5 to 10 VDC constant, the signal is independent of the supply voltage
Power Consumption	8 mA max.
Zero measurement output	0 +/- 100 mV
Isolation	sensing element isolated from housing

## ENVIRONMENTAL PERFORMANCES

Signal Spann	2,000 mVDC
Linearity	< 0,5 % FS typ.
Cross Axis Sensitivity	1 % typ. max. 3 %
Shock limit	2,000 g
TC Zero	0,03 %/°/s FSO
TC Signal	+/- 1 % typ. (+/- 3 % max.)
Operation Temperature	- 20 °C to + 70 °C
Storage Temperature	- 25 °C to + 100 °C
Protection Class	IP64
Housing Material	Aluminium, anodized
Dimensions	14.6 x 10.2 x 8.0 mm (l x w x h)
Weight Housing	3 grams without cable
Cable	integrated, 4-wire, shielded AWG 32
Cable Length	6 m
Cable Material	PUR, black
Cable Weight	6 grams per meter, Ø 2.2 mm

## CABLE CODE

red = Excitation +  
black = Excitation -

green = Signal +  
white = Signal -

## ORDER INFORMATION

BST 83G1C-2800-6Z
83G1C = Model Name
2800 = Range 2,800°/s
6 = 6 m Cable
Z = no connector

## OPTIONAL

Additional Cable Length
Connector
Dallas ID
Triaxial Mounting Block
Shunt Resistor