

Gyro Sensor

BST 83G3C Triaxial



CONTACT

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FEATURES

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

APPLICATION

- Crash-Test

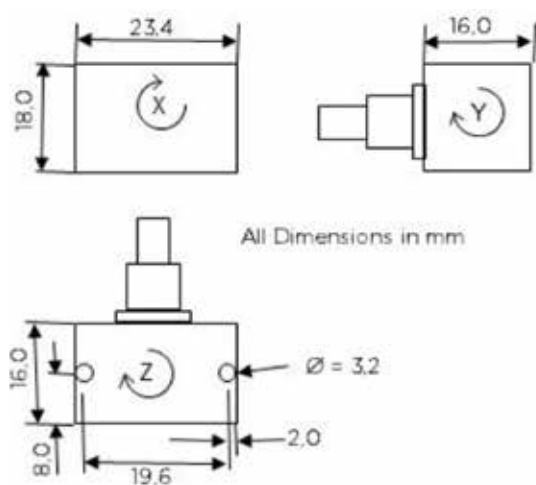


DESCRIPTION

The Model BST 83G3C is a triaxial 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. The housing material is aluminium. The BST 83G3C 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)	150	150	150	1,500	1,500	1,500

ELECTRICAL PERFORMANCES

Supply voltage	5 to 10 VDC, the signal is independent of the supply voltage
Power Consumption	8 mA max.
Zero measurement output	0 +/- 150 mV
Isolation	sensing element isolated from housing

ENVIRONMENTAL PERFORMANCES

Signal Span	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	23.4 x 16.0 x 18.0 mm (l x w x h)
Weight Housing	23 grams without cable
Cable	integrated, 3 x 4-wire, shielded, AWG 30
Cable Length	6 m
Cable Shield	not connected to housing
Cable Material	PUR, black
Cable Weight	30 grams per meter, Ø 4.4 mm

CABLE CODE

x-axis red / violet = Excitation + black / violet = Excitation -	green / violet = Signal + white / violet = Signal -
y-axis red / grey = Excitation + black / grey = Excitation -	green / grey = Signal + white / grey = Signal -
z-axis red = Excitation + black = Excitation -	green = Signal + white = Signal -

ORDER INFORMATION

BST 83G3C-2800-6Z
83G3C = Model Name
2800 = Range 2,800°/s
6 = 6 m Cable
Z = no connector

OPTIONAL

Additional Cable Length
Connector
Dallas ID
Shunt Resistor