



motionSENSOR BG2168 Acceleration Sensor ±2g

- Current / Voltage Output
- 1 or 2 Axes
- various upper Frequency Limits



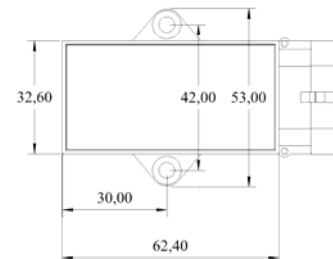
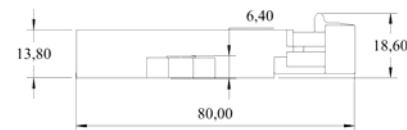
Physical Parameters	min	max
Axes	1	2
Range	±2g	
Sensitivity	1000mV/g	
Resolution	2mg	
Transverse Sensitivity	5%	
Hysteresis	0g	
Non-Linearity	±3%	
Zero Offset	5%	
Frequency Limit (-3dB)	100Hz, 10Hz [T1], 1000Hz [T2]	

Electrical Parameters		
Excitation Voltage	10,8VDC	30VDC
Quiescent Current	1mA	2.5mA
Output [Voltage]	0.5V	4.5V
Output [Current]	4mA	20mA
Zero Signal [Voltage]	2.5V	
Zero Signal [Current]	12mA	

Enviromental		
Operating Temperature Range	-40°C (-40°F)	+85°C (+185°F)
Shock	1000g	
Case Material	Grivory GV-5H black	
Seal	IP67	
Plug	AMP Superseal 1.5	

All Specifications at +25°C (+77°F), unless other defined.

We reserve to make technical alterations without prior notice.



Designation and Ordering Information

BG2168.2- [] [] []
 Frequency: 100Hz [] / 10Hz [T1] / 1000Hz [T2]
 — Output: [I] Current 4...20mA / [U] Voltage 0.5...4.5 V
 — Axis [1] / [2]

Voltage Output:

$$\alpha = (U_{OUT} - 2.5V) / 1V$$

Current Output:

$$\alpha = (I_{OUT} - 12mA) / 4mA$$

Options

Cable Set [] [] []
 unshielded [] / [shielded]
 — [1m] / [4m] / [10m] / [20m]
 — [3-pin] / [4-pin]

Assembling Set

Case is resistant against

- Fuels
- Oils
- Seawater
- a lot of Chemicals
(see AppNote 62/02)

Pin	Connection		Cable Set Color / Number	
1	one axis	two axes	one axis	two axes
2	n.c.	Y	n.c.	yellow / 1
3	X	X	green / 2	green / 2
4	GND	GND	brown / 3	brown / 3
4	Power	Power	white / 4	white / 4

