

Acceleration Sensor AM 600-2, AM 600-3

This sensor is designed to measure the physical effects of lateral acceleration in two/three axes (e.g. for analysis of acceleration and deceleration behaviour of race cars).

In order to achieve this, the sensor features two/three measuring elements for acceleration, in two/three integrated circuits. The sensing element consists of a micro machined sensor chip and an evaluation ASIC – allowing for high precision measurement applications.



Application	
Application	[1] x, y ± 4.5 g [2] x, y, z ± 4.5 g
Max. vibration	5000 m/s ² in operation
Storage temperature range	-55 ... 105 °C
Operating temperature range	-40 ... 85 °C

Electrical Data	
Power supply	5 V
Power supply max.	6 V
Full scale output	2.5 = 0 g; 440 mV/g
Supply current	7 mA
Supply current max.	12 mA

Connectors and Wires	
Connector	ASL 6-06-05PA-HE
Mating connector	ASL 0-06-05SA-HE
Pin 1	U _s
Pin 2	Gnd
Pin 3	[1] Sig _x [2] Sig _y
Pin 4	[1] Sig _y [2] Sig _x

Mechanical Data	
Weight w/o wire	[1] 30 g [2] 50 g
Size	[1] 24 x 27 x 13.5 mm [2] 24 x 27 x 29.8 mm
Mounting	2 x M3
Tightening torque	2 Nm

Characteristic	
Sensitivity	440 mV/g
Offset	2,500 mV @ 0 g
Tolerance of sensitivity	± 3 %
Non-linearity of sensitivity	± 2 %

Application Hint	
The AM 600 can be connected directly to most control units and data logging systems.	
Please avoid abrupt temperature changes.	
For mounting please use only the integrated fixed hole.	
Please ensure that the environmental conditions do not exceed the sensor specifications.	
Please find further application hints in the offer drawing (http://www.bosch-motorsport.com).	

Pin 5	[1] Scr [2] Sig _z
Various motorsport and automotive connectors are available on request.	
Sleeve	DR-25
Wire size	AWG 24
Wire length	15 ... 100 cm
Please specify the required wire length with your order.	

Part Numbers

[1] AM 600-2	B 261 209 311-04
[2] AM 600-3	B 261 209 313-02

