

# Gear Shift Sensor GSS-2



- ▶ Max. vibration: 800 m/s<sup>2</sup> at 5 Hz to 2 kHz
- ▶ Weight w/o wire: 90 g
- ▶ Output signal: 0.4 to 4.5 V

This sensor is designed to measure force relative to gear shifting in order to control the engine operation allowing the driver to maintain no-lift-shift/full throttle during shifting (up and down).

A circuit of precise resistors and an integrated amplifier supply a force dependent output voltage signal. As soon as this signal exceeds a certain threshold value in the ECU, the ignition and injection can be adjusted automatically according to the individual ECU application.

The main feature and benefit of this sensor is the combination of high quality production part and robust design with metal housing and motorsport spec connection. Furthermore this sensor has a dual way functionality.

## Application

Measuring range	-450 to 450 N
Max. vibration	800 m/s <sup>2</sup> at 5 Hz to 2 kHz
Operating temperature range	0 to 80°C

## Technical Specifications

### Mechanical Data

Weight w/o wire	90 g
Size	65 x 16 x 16 mm
Mounting	2 x M10 x 1
Tightening torque	22 Nm
Mech. range programmable up to	450 N
F <sub>max</sub>	800 N
Mech. load limit	1800 N
Max. cycles at 300 N	300,000 cycles

### Electrical Data

Power supply	12 V
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### Characteristic

Signal Output	0.5 to 4.5 V
Zero Output	2.5 V

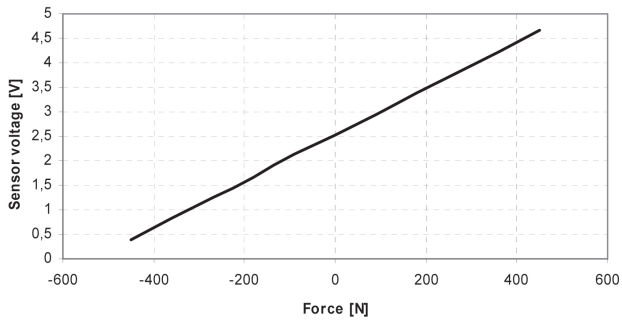
### Connectors and Wires

Connector	ASL606-05PC-HE
Mating connector	F 02U 000 228-01 ASL006-05SC-HE
Pin 1	U <sub>s</sub>
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	Scr
Various motorsport and automotive connectors are available on request.	
Sleeve	DR-25
Wire size	AWG 24
Wire length L	15 to 100 cm
Please specify the required wire length with your order.	

### Sensor voltage

Force (N)	Voltage (V)
450	4.673
360	4.225
270	3.797
180	3.397
90	2.941
0	2.538

-90	2.141
-180	1.672
-270	1.255
-360	0.820
-450	0.402



### Installation Notes

The GSS-2 can be connected directly to most control units and data logging systems.

Please avoid abrupt temperature changes.

For mounting please use only the integrated thread.

Please ensure that the environmental conditions do not exceed the sensor specifications.

Please find further application hints in the offer drawing at our homepage.

### Safety Note

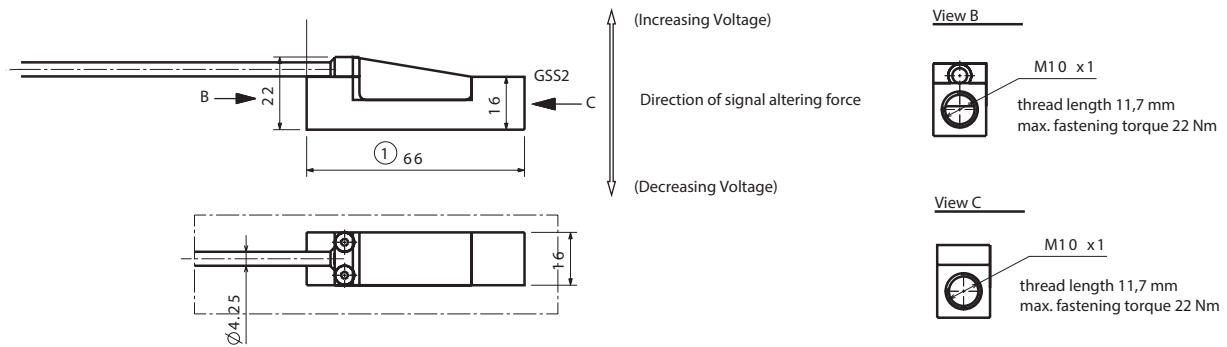
The sensor is not intended to be used for safety related applications without appropriate measures for signal validation in the application system.

### Ordering Information

#### Gear Shift Sensor GSS-2

Order number **B 261 209 227-01**

### Dimensions



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