

## Gear Shift Sensor GSS-2

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.



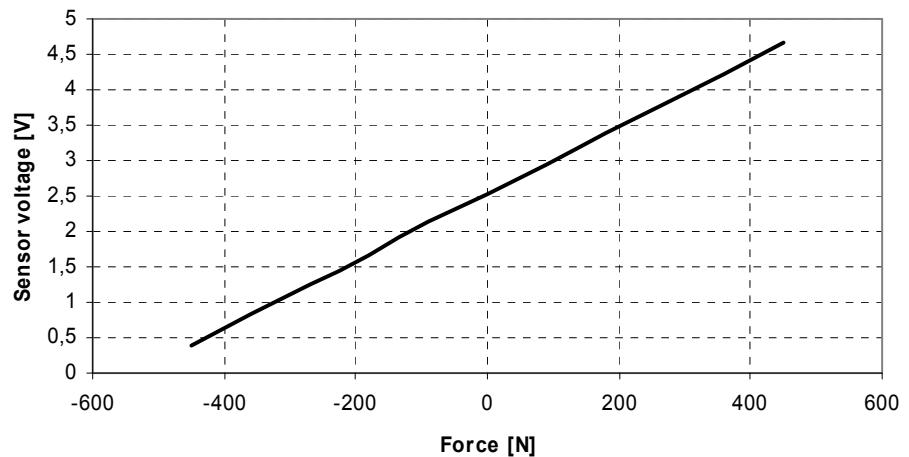
Application	
Application	-450 ... 450 N
Operating Temperature Range	0 ... 80 °C
Max. Vibration (stochastic peak level)	800 m/s <sup>2</sup> @ 5 Hz ... 2 kHz

Electrical Data	
Supply voltage	12 V

Characteristic	
Signal Output	0,5 ... 4,5 V
Zero Output	2,5 V

Mechanical Data	
Weight w/o cable	90 g
Size	65 x 16 x 16 mm
Mounting	2 x M10x1
Tightening Torque	22 Nm
Mech. Range programmable up to	450 N
F <sub>max</sub>	800 N
Mech. load limit	1800 N
Max. cycles @ 300 N	300 000 cycles

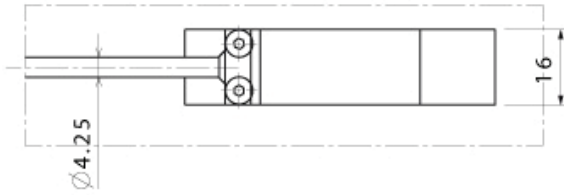
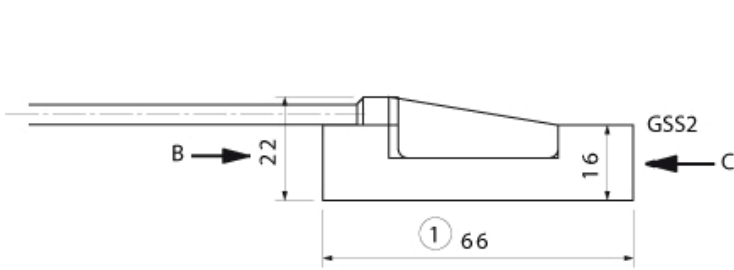
Force [N]	Voltage [V]
450	4,673
360	4,225
270	3,797
180	3,397
90	2,941
0	2,538
-90	2,141
-180	1,672
-270	1,255
-360	0,820
-450	0,402



Connectors and Cables	
Connector	ASL 6-06-05PC-HE
Mating connector	ASL 0-06-05SC-HE
Pin 1	Us
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	Scr
Various motorsport and automotive connectors on request.	
Sleeve	DR-25
Cable Size	AWG 24
Cable Length L	15 ... 100 cm
Please specify the requested cable length with your order.	

Application Hint
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 ( <a href="http://www.bosch-motorsport.com">http://www.bosch-motorsport.com</a> ).

Part Number	
Gear Shift Sensor GSS-2	<b>B 261 209 227-01</b>

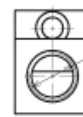


(Spannungsanstieg)  
(Increasing Voltage)

Kraftrichtung für Signaländerung  
Direction of signal altering force

(Spannungsabfall)  
(Decreasing Voltage)

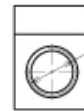
Ansicht B  
view



M10 x 1

Gewindetiefe  
thread length 11,7mm  
max. Anzugsmoment  
max. fastening torque 22 Nm

Ansicht C  
view



M10 x 1

Gewindetiefe  
thread length 11,7mm  
max. Anzugsmoment  
max. fastening torque 22 Nm