

Gear Shift Sensor GSS-M

This sensor is specifically designed for the use with motorcycle applications. The sensor measures the relative force during gear shifting directly relaying data to the ECU in order to gain max power from rapid up or down shifting.

An electronic circuit composed of a precise strain gauge and an integrated amplifier supplies a force-dependent output signal. As soon as this signal exceeds a certain threshold, the ignition and injection can be adjusted automatically according to the individual ECU application. The carbon fibre housing achieves excellent protection for the electronics and reduces the overall weight of the sensor.

The main features and benefits of this sensor are its small dimensions, its minimal weight, its precise temperature compensation and its combination of high quality production and robust design with a motorsport spec connector.



Application	
Application	-1,000 ... +1,000 N
Operating temperature range	0 ... 80 °C
Max. vibration (stochastic peak level)	800 m/s ² @ 5 Hz ... 2 kHz

Electrical Data	
Power supply	12 V

Characteristic	
Signal output	0.2 ... 4.8 V
Zero output	(20 ... 70 °C) 2.5 V ±100 mV

Mechanical Data	
Weight	30 g
Size	51 x 36 x 16 mm
Mounting	2 x M6
Tightening torque	22 Nm
F _{max}	± 1,000 N
Mech. load limit	± 3,000 N

Connectors	
Connector	ASU 0-03-05PC-HE
Mating connector	ASU 6-03-05SC-HE
Pin 1	Us
Pin 2	Gnd
Pin 3	Sig
Pin 4	-
Pin 5	Scr

Application Hint

The GSS-M 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 (<http://www.bosch-motorsport.com>).

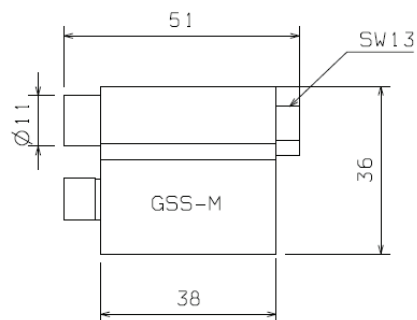
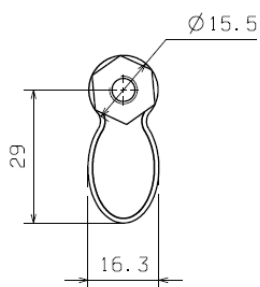
Part Number

Gear Shift Sensor GSS-M

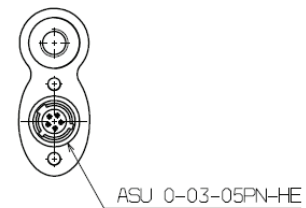
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Kraftrichtung für Signaländerung
Direction of signal altering force

$F_1 \longleftrightarrow F_2$
(Spannungsabfall)
(decreasing voltage)



$F_1 \longrightarrow \longleftarrow F_2$
(Spannungsanstieg)
(increasing voltage)



M6 - right handed / Rechtsgewinde
Gewindetiefe
thread length: 15 mm
max. Anzugsmoment
max. fastening torque: 22 Nm

M6 - right handed / Rechtsgewinde
Gewindetiefe
thread length: 10 mm
max. Anzugsmoment
max. fastening torque: 22 Nm