

Wheelspeed Signal Splitter

Bosch Motorsport has developed a wheel speed module that converts the Bosch DF11 (differential dual hall sensors) signals to a signal that can be processed by peripheral engine controlling devices and data recording systems. The adapter can be plugged into any Bosch ABS M4 loom.

The operation principle is that it forwards the sensor information to the ABS. In addition it converts the speed info into a digital signal. The type of output is open collector. The connected device needs to contain an internal pull up resistor of 2.15 kΩ to 12 V like the MS 4-ECUs.

The interface is available in two different housings supporting one connector or two connectors (see photo). The interface with two connectors is used if the speed signal is broadcast to the peripheral device via a separate loom. The interface with one connector is used if the signal is fed back into an especially pre-defined ABS loom which connects e.g. to the original chassis loom.



Application	
Application	ABS wheelspeed sensor interface
Compatible sensor type	Bosch DF11
Operating temperature range	-20 ... 85 °C
Storage temperature range	-20 ... 85 °C

Mechanical Data	
Weight w/o wire	53 g
Size w/o wire (one connector)	101.75 x 63.5 x 30.7 mm
Size w/o wire (two connectors)	112.1 x 63.5 x 30.7 mm
Max. vibration	Vibration Profile 1 (see Appendix or www.bosch-motorsport.com)

Electrical Data	
Power supply	12 V
Max. power supply (1 min)	25 V

Connector for single connector type	
Connector (wide)	AS-012-35-PN
Mating connector	AS-612-35-SN

Connectors for double connector type	
Connector 1(wide)	AS-012-35-PN
Mating connector	AS-612-35-SN
Connector 2 (small)	AS-008-35-PN
Mating connector	AS-608-35-SN

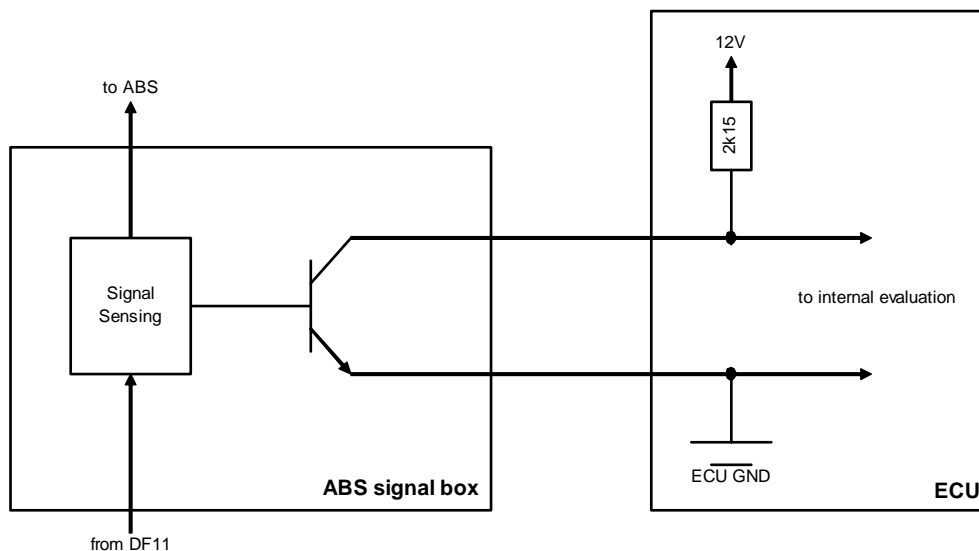
Part Number	
Wheelspeed signal splitter with one connector	F 02U V00 335-03
Wheelspeed signal splitter with two connectors	F 02U V00 203-03
Please ask for the compatibility with Bosch ECUs	

Pinout connector 1 (wide):

Pin	Description for one connector	Description for two connectors
1	Supply to DF11 (RR)	Supply to DF11 (RR)
2	Signal from DF11 (RR)	Signal from DF11 (RR)
3	Supply to DF11 (RL)	Supply to DF11 (RL)
4	Signal from DF11 (RL)	Signal from DF11 (RL)
5	Supply to DF11 (FR)	Supply to DF11 (FR)
6	Signal from DF11 (FR)	Signal from DF11 (FR)
7	Supply to DF11 (FL)	Supply to DF11 (FL)
8	Signal from DF11 (FL)	Signal from DF11 (FL)
9	Signal to ABS (FL)	Signal to ABS (FL)
10	DF11 supply from ABS (FL)	DF11 supply from ABS (FL)
11	Signal to ABS (FR)	Signal to ABS (FR)
12	DF11 supply from ABS (FR)	DF11 supply from ABS (FR)
13	Signal to ABS (RL)	Signal to ABS (RL)
14	DF11 supply from ABS (RL)	DF11 supply from ABS (RL)
15	Signal to ABS (RR)	Signal to ABS (RR)
16	DF11 supply from ABS (RR)	DF11 supply from ABS (RR)
17	Open collector Signal to ECU (FL)	not used
18	Open collector Signal to ECU (FR)	not used
19	UBat 12V	UBat 12V
20	Open collector Signal to ECU (RL)	not used
21	Open collector Signal to ECU (RR)	not used
22	ECU Ground	not used

Pinout connector 2 (small):

Pin	Description for one connector	Description for two connectors
1	n.a.	OPEN COLLECTOR Signal to ECU (FL)
2	n.a.	OPEN COLLECTOR Signal to ECU (FR)
3	n.a.	OPEN COLLECTOR Signal to ECU (RL)
4	n.a.	OPEN COLLECTOR Signal to ECU (RR)
5	n.a.	not used
6	n.a.	ECU Ground

Connection Scheme:


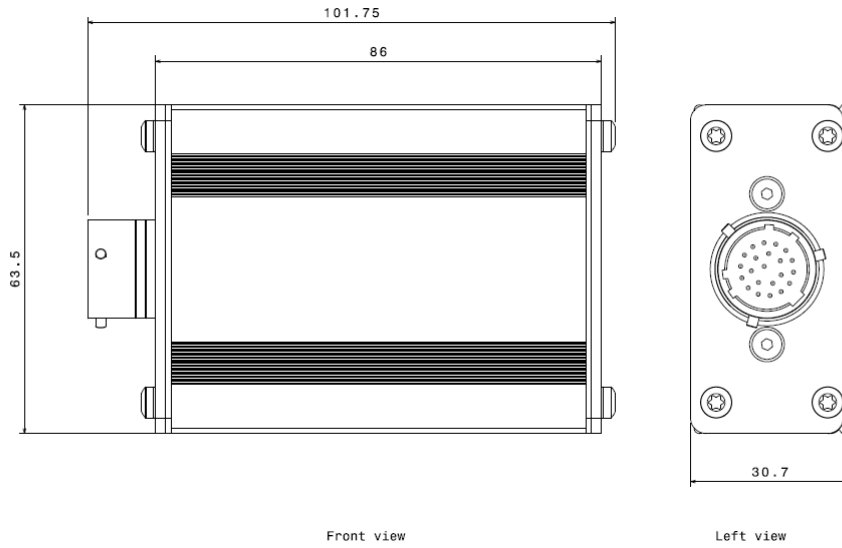


Illustration 1: Housing with one connector

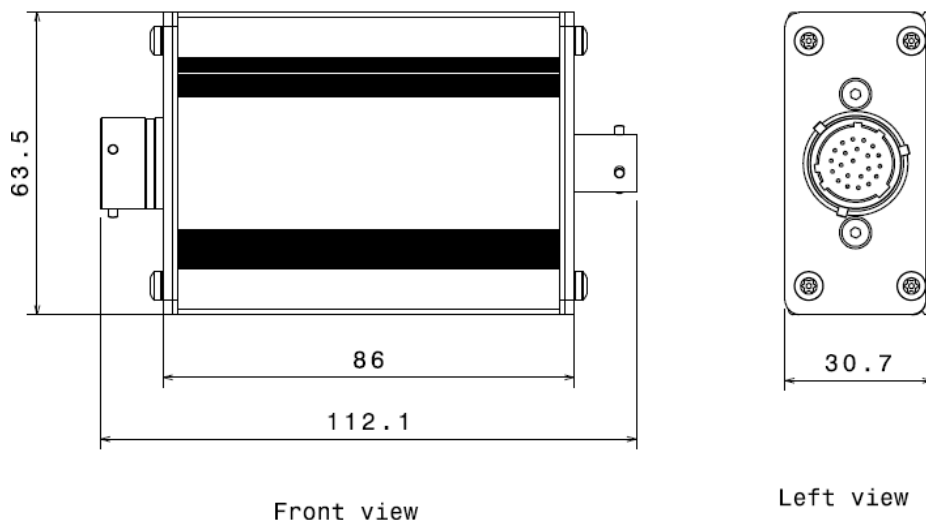


Illustration 2: Housing with two connectors