

# ABS M5 Kit



- Suitable for front-wheel, rear-wheel and four-wheel drive vehicles

We developed ABS M5 for the operation in front-, rear- or 4-wheel drive vehicles. A vehicle specific wiring harness is included in the Kit.

The ABS M5 is specifically adapted for motorsport use. Individual car parameters like e.g. vehicle weight, vehicle track, wheel weights, wheel circumferences, wheel base or number of increments can be calibrated with software free of charge. Please contact your Bosch Motorsport dealer for further information.

## Technical Specifications

### Variations

Option	Kit 1	Kit 2	Club-Sport
F02U.V05.2	89-01	90-01	91-01 92-01 93-01 94-01 95-01 96-01
Customized wiring loom	+	+	-
ABS-Off position optional on position 1	+	+	-
Selection of ABS maps via Bosch 12-position switch or via specified CAN signal	+	+	+
Motorsport connectors for wheel speed sensors	-	+	-
Flexible CAN terminals	+	+	+
Downforce depending slip regulation	+	+	-

Option	Kit 1	Kit 2	Club-Sport
Lateral acceleration slip regulation	+	+	-
Corner inside wheel slip reduction regulation	+	+	-

+: fixed Kit Content

+: Adjustable via Coding Plug

+: Enabled with customer specific calibration

### Mechanical Data

Hydraulic unit	
Serial housing, dust- and damp-proof	
Vibration damped circuit board	
38 pin connector	
2 hydraulic valves per wheel	
2 brake circuits (front and rear)	
2 hydraulic high pressures pumps	
2 hydraulic accumulators	5 cm <sup>3</sup> /each
Standard fittings	2 x master cylinders M12 x 1 4 x brake cylinders M10 x 1
Size	122 x 110 x 122 mm
Operating temperature	-30 to 130°C
Max. shock	50 g less than 6 ms
Max. working speed	360 km/h = 100 m/s = 224 mph

### Pressure Medium

DOT 4 brake fluid
DOT 5.1 brake fluid

## Electrical Data

Supply voltage	10 to 16 V, max. 24 V for 5 min
Max. peak voltage	35 V for 200 ms
Power consumption Pump	230 W
Power consumption Relay	170 W
Power consumption Electronics	8 W

## Inputs

4 active wheel speed DF11i, DF11S or DF11V
Brake pressure (front brake circuit / rear brake circuit)
Longitudinal acceleration, lateral acceleration, yaw rate (MM5.10 sensor)
11 adjustment settings (applicable for OEMs)
ABS function can be deactivated (Pos. 1 or Pos. 12)

## Outputs

ABS warning light (MIL)
EBD warning light (MIL) if needed
TTL wheel speed signal FL / FR / RL / RR

## Content of Kit and Weights

Hydraulic unit	1,910 g
2 pressure sensors	40 g/each
Yaw/acceleration sensor	60 g
12 position function switch	50 g
4 wheel speed sensors DF11 standard	50 g/each
ABS warning light (MIL)	50 g
Vehicle specific wiring harness with motorsport connectors	Depends on version
Clubsport wiring harness	1,540 g
Mounting and vibration-damping boards	80 g
Mounting board for hydraulic unit	212 g

## Communication

ABS and Yaw rate sensor	CAN1
-------------------------	------

Diagnostics

MSA Box II

## Installation Notes

Maintenance Interval (brake fluid change, bleeding): 220 h or a maximum of two years.

The load on the hydraulic unit in racing is much higher than in pure road operation, therefore we recommend a replacement of the unit after two years.

## Legal Restrictions

The sale of this product in Mexico is prohibited. Due to embargo restrictions, sale of this product in Russia, Belarus, Iran, Syria, and North Korea is prohibited.

## Ordering Information

### ABS M5 Kit 1

Order number **F02U.V05.289-01**

### ABS M5 Kit 2

Order number **F02U.V05.290-01**

### ABS M5 Kit Clubsport

DF11i, 500 kbaud

Order number **F02U.V05.291-01**

### ABS M5 Kit Clubsport

DF11i, 1 Mbaud

Order number **F02U.V05.292-01**

### ABS M5 Kit Clubsport

DF11S, 500 kbaud

Order number **F02U.V05.293-01**

### ABS M5 Kit Clubsport

DF11S, 1 Mbaud

Order number **F02U.V05.294-01**

### ABS M5 Kit Clubsport

DF11V, 500 kbaud

Order number **F02U.V05.295-01**

### ABS M5 Kit Clubsport

DF11V, 1 Mbaud

Order number **F02U.V05.296-01**

### Com Interface MSA-Box II

Not mandatory if available

Order number **F02U.V00.327-03**

## Dimensions

### ABS M5 Kit Variations

	ABS M5 Kit 1	ABS M5 Kit 2	ABS M5 Kit Clubsport	ABS M5 Kit Clubsport	ABS M5 Kit Clubsport
Type	Kit 1	Kit 2	1 Mbaud, DF11i	500 kbaud, DF11i	1 Mbaud, DF11S
Wiring harness	Specific	Specific	Generic	Generic	Generic
4 wheelspeed sensors DF11S	Included, with standard connectors	Included, with motorsport connectors	Not included	Not included	Included, with standard connectors
Wheel speed signal splitter	included*	Included*	included*	included*	included*
Fuses	Not included	Not included	Not included	Not included	Not included
Brake pipe fittings	Not included	Not included	Not included	Not included	Not included

	ABS M5 Kit Clubsport	ABS M5 Kit Clubsport	ABS M5 Kit Clubsport	ABS M5 Kit Porsche 991 Cup Gen 1	ABS M5 Kit Porsche 991 Cup Gen 2
Type	500 kbaud, DF11S	500 kbaud, DF11V	1 Mbaud, DF11V	Model year 2015	Model year 2017
Wiring harness	Generic	Generic	Generic	Specific	Specific
4 wheelspeed sensors DF11S	Included, with standard connectors	Not included	Not included	Included, Porsche specific DF11S	Included, Porsche specific DF11S
Wheel speed signal splitter TTL	included*	included*	included*	Included, DF11	Included, DF11
Fuses	Not included	Not included	Not included	Included	Included
Brake pipe fittings	Not included	Not included	Not included	Included	Included

\*TTL splitter incl. in ABS Hardware, DF11 splitter optional

#### Represented by:

**Europe:**  
Bosch Engineering GmbH  
Motorsport  
Robert-Bosch-Allee 1  
74232 Abstatt  
Germany  
Tel.: +49 7062 911 9101  
Fax: +49 7062 911 79104  
motorsport@bosch.com  
www.bosch-motorsport.de

**North America:**  
Bosch Engineering North America  
Motorsport  
38000 Hills Tech Drive  
Farmington Hills, MI 48331-3417  
United States of America  
Tel.: +1 248 876 2977  
Fax: +1 248 876 7373  
motorsport@bosch.com  
www.bosch-motorsport.com

**Asia-Pacific:**  
Bosch Engineering Japan K.K.  
Motorsport  
18F Queen's Tower C, 2-3-5 Minato  
Mirai Nishi-ku, Yokohama-shi  
Kanagawa 220-6218  
Japan  
Tel.: +81 45 650 5610  
Fax: +81 45 650 5611  
www.bosch-motorsport.jp

**Australia, New Zealand and South Africa:**  
Robert Bosch Pty. Ltd  
Motorsport  
1555 Centre Road  
Clayton, Victoria, 3168  
Australia  
Tel.: +61 (3) 9541 3901  
motor.sport@au.bosch.com