

# Electronic Brake System EBS



► Suitable for one axle use

We developed EBS for the operation in electric or hybrid vehicles on one axle. A vehicle specific wiring harness can be purchased (vehicle specific definition is needed).

The EBS is specifically adapted for motorsport use. Individual car parameters like e.g. brake pads friction can be calibrated with software free of charge. Please contact your Bosch Motorsport dealer for further information.

## Technical Specifications

### Mechanical Data

Hydraulic unit	
Serial housing, dust- and damp-proof	
Vibration damped circuit board	
38 pin connector	
6 hydraulic valves for inlet/outlet	
1 separation backup valve	
1 electric pump motor	
1 hydraulic accumulator	160 bar/90 cm <sup>3</sup>
Standard fittings	M12 x 1
Size	176 x 144 x 157 mm
Operating temperature	-30 to 130°C
Max. shock	50 g less than 6 ms
Max. working pressure	130 bar; max. recommended locking pressure 120 bar
Max. pressure gradient	up to 2,000 bar/s

### 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
Max. peak at start	<165 A
Current consumption Pump	<40 A
Current consumption Relay	<16.5 A
Power consumption Electronics	<1.5 A

### Inputs

1 x PWM Target (Pressure or Torque)
1 x PWM input calliper pressure
1 x CAN1; 500 k or 1 Mb selectable
1 x CAN1 DC (Daisy Chain)
EBS function switch 6 positions via CAN1

### Outputs

EBS warning light (MIL) via CAN1
EBS diagnostic via CAN1

### Required Additional

Mounting Board for Hydraulic Unit	
Pressure Sensors Fluid PSS-260	2 required
Com Interface MSA Box II	Required for communication and programming, not mandatory if available

**Spare Parts**

Mounting Rubber Elements Kit	5 sets (10 units Ø 18 mm; 5 units Ø 23 mm)
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**Component Weights**

Hydraulic Unit	3,630 g
Mounting Board for Hydraulic Unit	300 g
2 Pressure Sensors Fluid PSS-260	40 g/each
Vehicle specific wiring harness with motorsport connectors	Depends on version

**Pin Configuration**

1	UB_MR
...	
13	GND_MR
14	CAN1M
15	CAN1M-DC
...	
25	UB_VR
26	CAN1P
27	CAN1P-DC
28	WAU_IN
...	
31	PWM Gnd
...	
33	PWM 5 V
...	
36	P_Target_PWM
37	P Caliper PWM in
38	GND_ECU

**Communication**

EBS	CAN1
Diagnostics	Com Interface 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 one year.

**Legal Restrictions**

The sale of this product in Mexico is prohibited. The use of the system is not permitted in South Korea.  
Due to embargo restrictions, sale of this product in Russia, Belarus, Iran, Syria, and North Korea is prohibited.

**Ordering Information**

**Electronic Brake System EBS**  
Order number **F02U.V02.900-01**

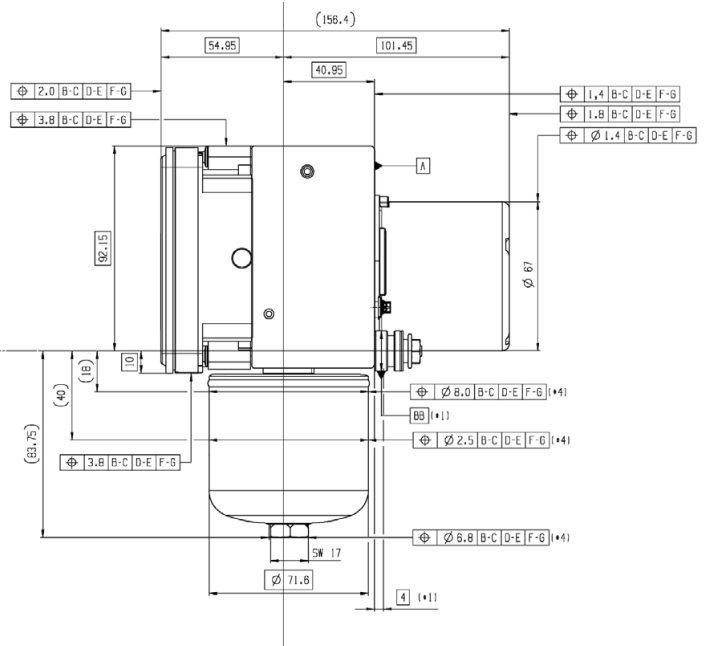
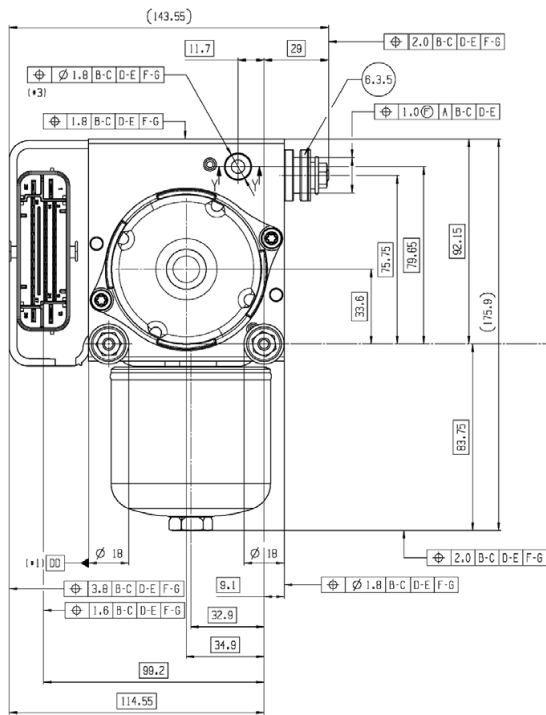
**Com Interface MSA-Box II**  
Not mandatory if available  
Order number **F02U.V00.327-03**

**Mounting Board for Hydraulic Unit**  
Order number **0265.Y5H.505-01**

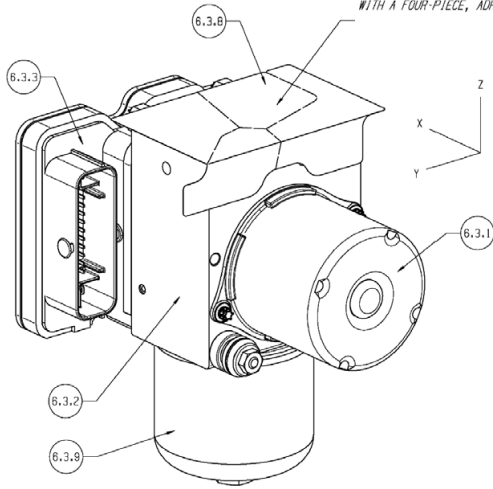
**Pressure Sensor Fluid PSS-260**  
Order number **0261.545.040**

**Mounting Rubber Elements Kit**  
Spare Part  
Order number **F02U.V03.318-01**

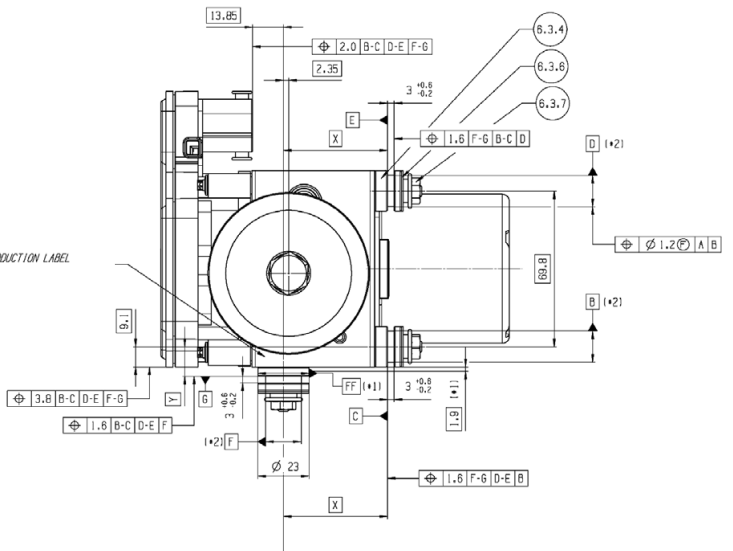
Dimensions



NOT FILLED HYDRAULIC UNITS ARE DELIVERED WITH A FOUR-PIECE, ADHESIVE COVER TAPE.



BOSCH PRODUCTION LABEL



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.  
Motorsports Department  
1-9-32 Nakagawa Chuo, Tsuzuki-ku  
Yokohama City  
Kanagawa Prefecture 224-8601  
Japan  
Tel.: +81 45 605 3032  
Fax: +81 45 605 3059  
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