

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 ³
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

Optional Accessories / Spare Parts

Mounting board for hydraulic unit (recommended)	0265.Y5H. 505-01
Pressure sensor PSS-260 (2 required)	0261.545.040
Rubber unit Ø 18	2260.306.017
Rubber unit Ø 23	2260.306.016
Communication interface MSA Box II	F02U.V00.327-03

Component Weights

Hydraulic unit	3,630 g
----------------	---------

2 pressure sensors	40 g/each
Mounting board for hydraulic unit	300 g
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	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.

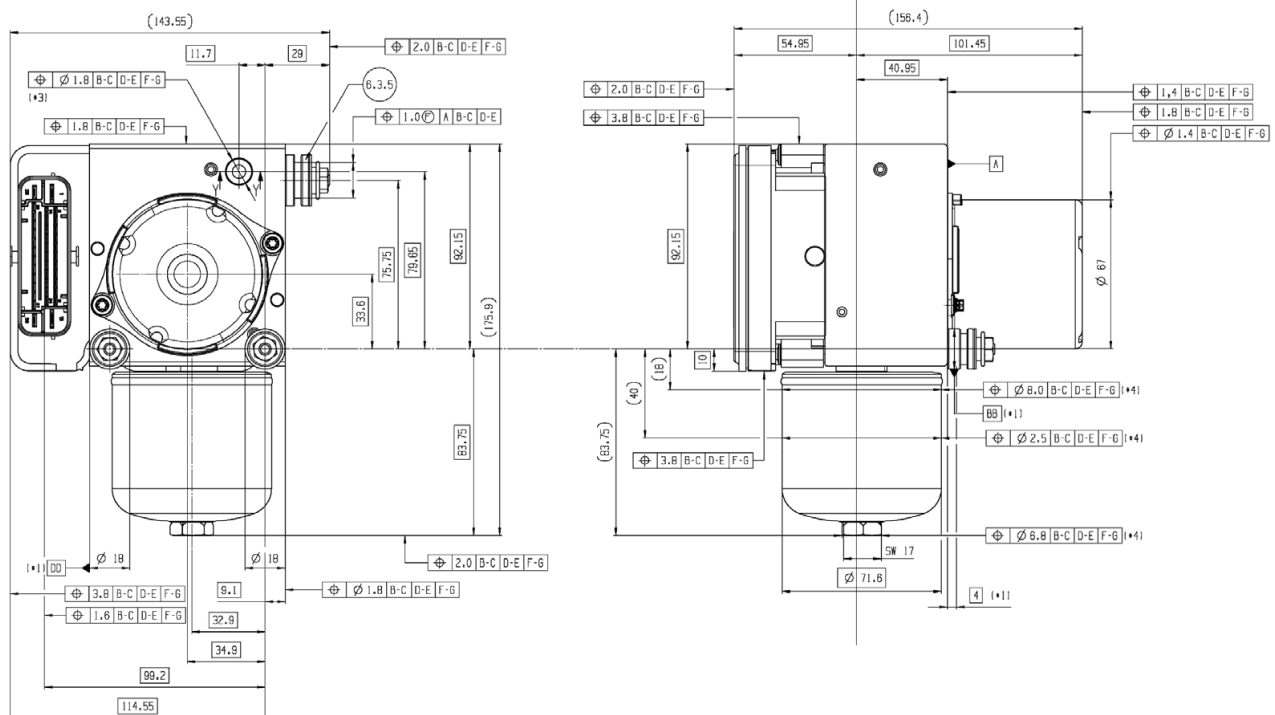
Due to embargo restrictions, sale of this product in Russia, Belarus, Iran, Syria, and North Korea is prohibited.

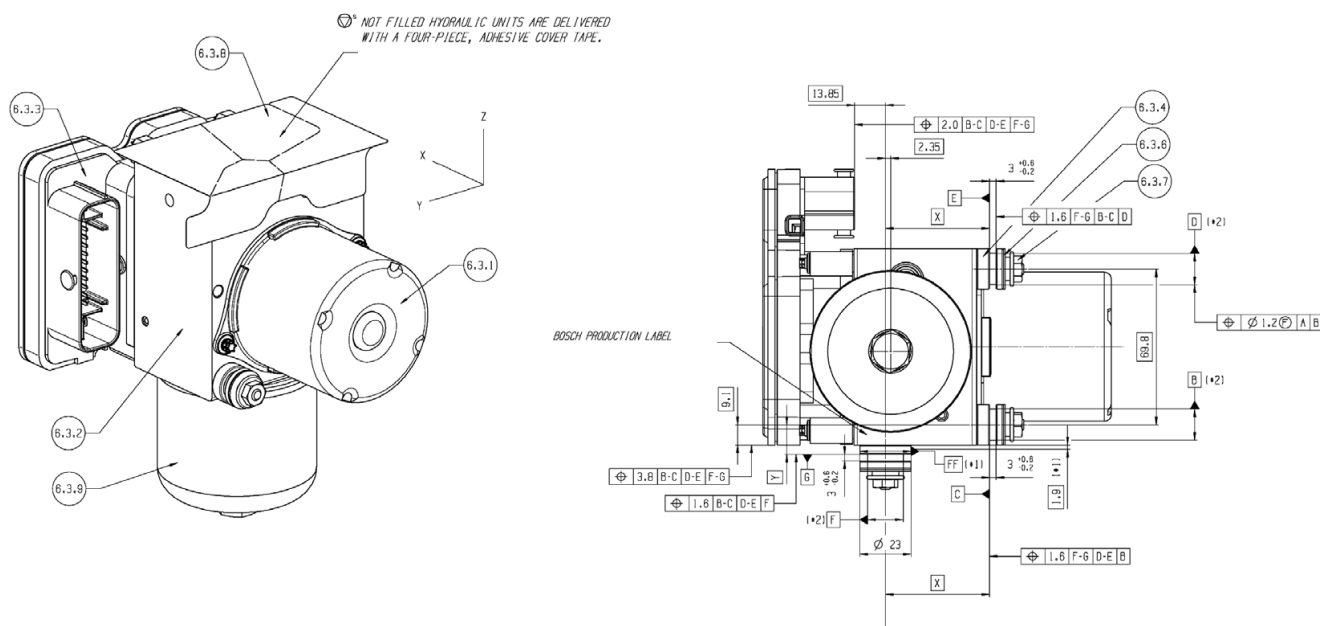
Ordering Information

Electronic Brake System EBS

Order number **F02U.V02.900-01**

Dimensions





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