

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

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

Generally blocked are direct and indirect business involving high risk destinations, including Russia, Belarus, Cuba, Iran, North Korea, Syria, Libya, Afghanistan, and certain non-governmental controlled Ukrainian regions. This list may change as geopolitics evolve.

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**

