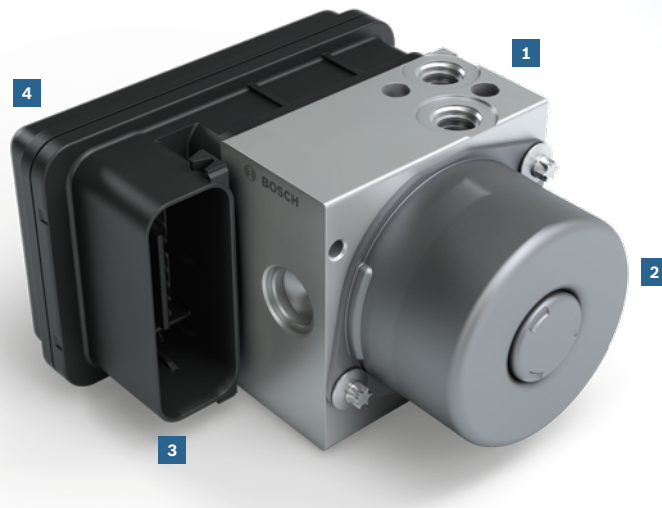


# Active safety systems

## ABS 9 light



**BOSCH**  
Invented for life



### Product benefits

---

- ▶ Improved safety through front-wheel control
- ▶ Intelligent rear-wheel lift-up control
- ▶ Increased vehicle stability and riding comfort
- ▶ Best possible deceleration without wheel lockup
- ▶ Reduced stopping distance under certain conditions
- ▶ Reduction in severe and fatal accidents
- ▶ Optimized box volume and product design specifically for two-wheelers

- 1** Hydraulic unit
- 2** DC motor
- 3** Connector
- 4** Electronic control unit

### Vehicle segments

---



up to **18%**

**of two-wheeler accidents in Germany could be avoided** by the 1-channel ABS 9 light (front wheel).  
Source: GIDAS database (2001–2009)

**–9 m**

**The ABS reduces the stopping distance** and therefore the risk of collision. For example, when an average rider has a starting speed of 100 km/h, ABS decreases the stopping distance from 58.5 to 49.5 m.

Source: Austrian Road Safety Board

**Task** Bosch's antilock braking system light (ABS light) is the cost-efficient, entry-level version of the ninth generation of Bosch brake control systems for two-wheelers. The system assists the rider while braking in critical riding situations. It prevents wheel lockup and ensures vehicle stability as well as optimal deceleration while braking. ABS 9 light therefore significantly reduces the risk of falling and shortens the stopping distance.

**Function** The hydraulic unit comprises two control valves, a storage chamber, and a pump element. As in more powerful ABS systems, the electric motor that drives the return pump is mounted here, as is the control unit – in this case a circuit board. The wheel-specific reference velocity is calculated by the system on the basis of speed information transmitted by a sensor on the front wheel. For the highest possible stability during braking, the wheel-specific reference velocity is continuously adapted to the vehicle's actual speed. More precise braking control is possible if a second sensor is installed on the rear wheel. With this setup, deceleration rates match those of the two-channel system, and counteract lifting of the rear wheel.

**Variants** Two-wheeler manufacturers can optionally integrate an on-off switch.

#### Technical characteristics

Size (w × h × d)	89.6 × 59.7 × 92.7 mm
Weight	0.63 kg
Volume	0.496 liters
Channels	1
Exchangeable ECU	no
Connector	18 pins