



Electronic
Control Unit



Remote
Control Unit



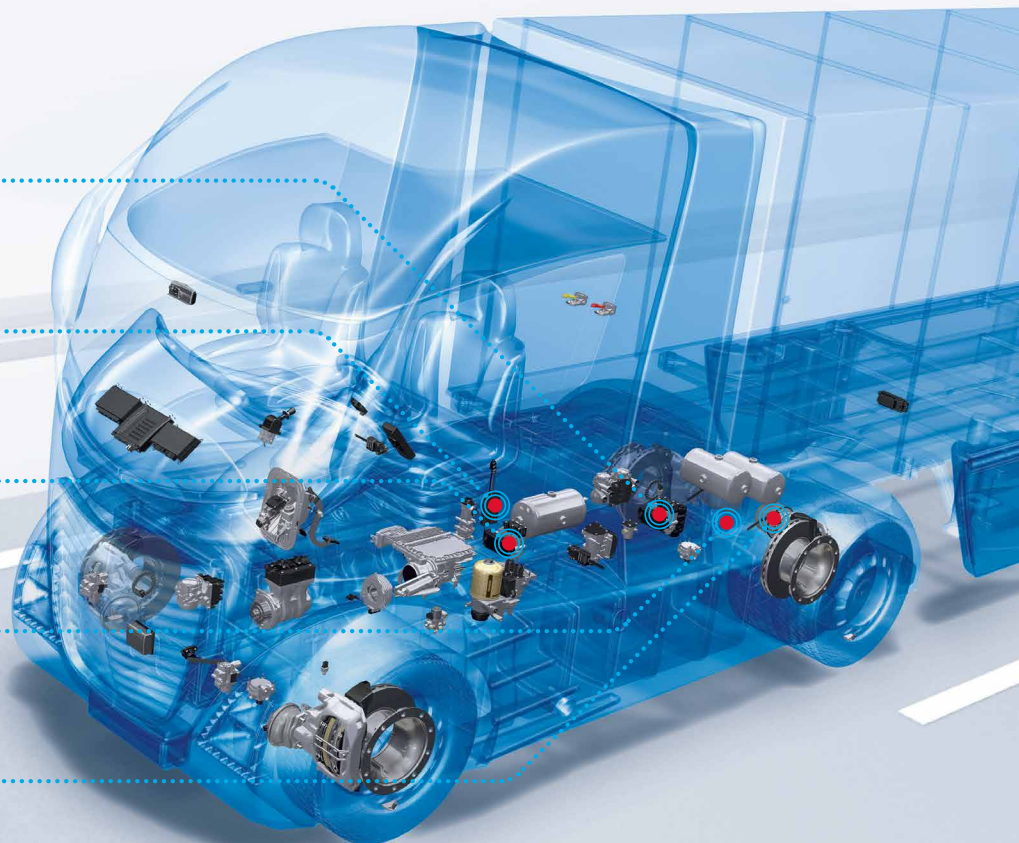
Solenoid
Valve



Pressure
Sensor



Height
Sensor



OptiRide™

Electronically Controlled Air Suspension (ECAS)

Award-winning state-of-the-art technology
brings daily fleet operations to another level



ZF's Smartest Air Suspension Control for Commercial Vehicles

This market-leading technology helps fleets to improve operational efficiency, safe vehicle handling and driver comfort through premium suspension quality and remote-controlled chassis height adjustments. A broad variety of value-adding functionalities enable fleets to bring their daily operations to a whole new level.

Value to Customers

- Supports daily routines such as trailer coupling or loading and unloading
- Increases driver safety and comfort while supporting landing gear operations
- Ensures excellent cargo treatment
- Enhances driver effectiveness across all levels of experience

Technical Features

- Provides electronic control of air suspension systems
- Optimizes the vehicle's chassis height on air-suspended axles
- Offers quick & easy height adjustment via dashboard switch or remote control unit
- Ensures automatic return-to-ride height after drive-off
- Worldwide application support for both 24 V and 12 V systems
- Comes with modular and scalable technical design
- Comes as building block technology for autonomous driving





Electronic Control Unit

- Provides mounting flexibility and overcomes space limits on cabin
- Monitors and evaluates incoming signals from sensors
- Initiates corresponding actions by the solenoid valve
- Allows for customized parametrization of functions
- Software design enables modular system upgrades
- Enables access to internally compiled operating data
- Housing design enables stacking with Solenoid Valve



Remote Control Unit

- Wired high-end RCU attached to cabin
- Dedicated for ECAS functionality on trucks
- Standardized interface with LIN protocol
- Protected against environmental influences through IP64 protection



ECAS Solenoid Valve

- Activated by the ECU to control bellow pressure precisely
- Composite body design for durability and low weight
- Durable design allows for a specified one million activations
- Comes with three fixation points to support stacking



Pressure Sensor

- Measures bellow pressure on air suspended axle
- Piezoresistive measurement principle enables high measuring sensitivity
- Operates within a pressure range of 0 bar to 16 bar
- Designed to perform within a temperature window of -40°C to 100°C



Height Sensor

- High linearity leading to very high measurement precision
- Converts measurement results into electric signals to transmit to ECU
- Supports flexible positioning inside the vehicle



For further details contact your sales representative.

About Us

ZF is a global technology company and supplies systems for passenger cars, commercial vehicles and industrial technology, enabling the next generation of mobility. ZF allows vehicles to see, think and act. In the four technology domains Vehicle Motion Control, Integrated Safety, Automated Driving, and Electric Mobility, ZF offers comprehensive solutions for established vehicle manufacturers and newly emerging transport and mobility service providers. ZF electrifies different kinds of vehicles. With its products, the company contributes to reducing emissions and protecting the climate.

ZF, which acquired WABCO Holdings Inc. on May 29, 2020, now has 160,000 employees worldwide with approximately 260 locations in 41 countries. In 2019, the two then-independent companies achieved sales of €36.5 billion (ZF) and \$3.4 billion (WABCO).

With the integration of WABCO, the leading global supplier of braking control systems and other advanced technologies that improve the safety, efficiency and connectivity of commercial vehicles, ZF will create a new level of capability to pioneer the next generation of solutions and services for original equipment manufacturers and fleets globally. WABCO, with almost 12,000 people in 40 locations worldwide, will now operate under the ZF brand as its new Commercial Vehicle Control Systems division.