New to the Bosch range:
Steering systems for cars and trucks
Always safely on track with Bosch steering systems and components

Steering fascinates. With innovative Bosch steering systems, vehicles are heading for a modern future with high directional stability.

Workshop support through complete range
Vehicles of all categories, from compact cars and sedans to light commercial vehicles and even to heavy-haulage trucks, are equipped with high-precision steering systems by Bosch. The range of spare parts for workshops includes complete steering systems and all main components in original-equipment quality.

Remanufacturing
Sustainable with Bosch eXchange
Repairs pay off – particularly for commercial-vehicle steering systems. The Bosch eXchange range thus includes the most important Bosch steering systems. This allows repairing the vehicles based on their current value – and with a 100 % warranty.

Main areas
- Hydraulic steering
- Electric steering
- Electric steering
- Steering column
- Active steering
- Steering pumps
- Steering gearbox
- Servocom
- Steering shafts
- Bevel gearbox

Passenger cars
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- LCVs
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- Trucks
- – – –
- Buses
- – – –

Proven steering system
- Rack-and-pinion power steering – robust classic among servo-assisted steering systems
- Proven a million times over
- Compact dimensions
- Low weight
- High functional reliability

Servolectric for cars and LCVs
- Power assistance can easily be adapted to any type of vehicle
- High driving comfort
- Energy is only required during the actual steering process
- Energy savings
- Maintenance-free

Mechanical classic
- Electric motor installed onto the steering column
- No steering pump or hoses
- Low space requirements
- Low fuel consumption

Safe active steering
- Situation-dependent variation of the steering ratio
- Improved driving dynamics
- Comfortable and easy handling of the vehicle
- Driving-stability functions for increased safety in critical situations

Pumps for all systems
- Vane pumps
- Energy-saving vane pumps (e.g. with ECO valve or Varioserv variable-displacement pump)
- Tandem pumps for trucks – a combination of vane and gear pumps
- Radial-piston pumps – the emergency-steering pump for trucks

The standard power-steering system
- Compact ball-nut power steering system for trucks and buses
- The most-used steering system for commercial vehicles
- Can also be installed in vehicles with high steering-axle loads or several steered axles requiring a dual-circuit steering system in order to comply with legal safety criteria
- Prevent any influence of possible movements between driver’s cab and chassis on the steering behavior
- Low wear
- Maintenance-free
- Also available in a light-alloy design

Steering shafts for trucks
- Ball-track telescopic shafts or ball-track relay shafts with additional universal joints linking the steering wheel to the steering gearbox
- Flange-mounted directly onto the steering column
- Can also be supplied for separate installation
- Low weight (2.1 kg)

Steering buses safely
- At buses and special vehicles, they redirect the steering movement in case the position of the driver and the arrangement of the steering gearbox impede a direct connection to the steering column
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Bosch steering systems increase both driving comfort and active safety

The Bosch product range reaches from rack-and-pinion power-steering systems to electric steering systems (Servolectric) and to the intelligent active steering system.

Electric steering in passenger cars does not only allow fuel savings of up to 0.8 liters per 100 kilometers; this technology is, at the same time, the basis for several driver assistance systems and for automated driving. This includes automatic evasion in hazardous situations, lane-departure warning systems or start/stop sailing with the engine turning off during coasting phases.

Electric steering

Servolectric works with an electronically controlled electric motor. Depending on the type of vehicle, it saves up to 90% of energy in comparison to hydraulic steering systems and allows the application of assistance functions.

2 Rack-and-pinion power steering

The robust classic among servo-assisted steering systems has proven its worth millions of times over and stands out for its compact dimensions, its low weight and its high functional reliability.

Electric steering: steering column

At electric steering systems, the electric motor is not mounted onto the steering gearbox, but onto the steering column.

Active steering

The active steering system includes a superposition gear system with an electric motor. Depending on the driving situation, it intervenes by changing the transmission ratio yet before the driver could even react.

Steering pumps for optimum performance

When operating hydraulic power-steering systems, steering pumps are a major factor for the performance, the energy consumption and the noise level of the steering system. Despite their compact design and low weight, Bosch steering pumps achieve highest possible delivery capacities and a high efficiency.
Commercial vehicles are also subject to constant technological further development. Ecological and economical circumstances are increasingly demanding. Close cooperation with the vehicle manufacturers right from the early stage of development ensures the efficient adaption of Bosch steering systems to new vehicle concepts.

Full power – economical and ecological
Renowned manufacturers of modern trucks and buses rely on Bosch steering systems and components with particularly high quality. As an international company, Bosch supplies customers around the world with parts from local production sites and supports local commercial-vehicle workshops with technical know-how. In doing so, both innovative products and modern production technologies contribute to environmental protection.

Steering systems meeting toughest quality demands
Robust, reliable and highly accurate steering systems are of major importance, particularly for buses and heavy trucks. The Bosch product range reaches from the best-seller Servocom and the electro-hydraulic Servotwin steering system to electronically controlled rear-axle steering systems and to semi-integral power-steering systems even for the heaviest trucks. In addition, Bosch also produces components such as operating cylinders, steering shafts, steering pumps or bevel gearboxes.

The foundation for CV-driver assistance systems
Electric power-steering systems are gradually prevailing at the commercial-vehicle sector as well. The innovative Servotwin electro-hydraulic steering system presented at the IAA CV 2014 in Hannover is the first step into the electrification of commercial-vehicle steering systems. It paves the way for the implementation of driver assistance systems in commercial vehicles.

Replacement parts
Value-based repairing with Bosch eXchange
Particularly for older vehicles with high mileage, Bosch eXchange provides repair solutions paying off for professional logistics companies. Including a 100 % warranty – just like for new parts.

1 Servocom – the truck standard
Reliable and compact ball-nut power-steering system for trucks and buses – also applicable as dual-circuit steering system for high steering-axle loads or several steered axles.

2 Steering pumps
The range consists of vane pumps, energy-saving vane pumps (e.g. the variable-displacement pump Varioserv), tandem pumps combining vane and gear pumps and radial-piston pumps as emergency-steering pump for trucks.

3 Steering shafts
Ball-track telescopic shafts or ball-track relay shafts with additional universal joints ensure steady steering despite possible movements between driver cab and chassis.

4 Bevel gearboxes
Redirect the steering movement of trucks and buses if the position of the driver or the steering gearbox impedes a direct connection to the steering column.
What drives you, drives us.

Technology from Bosch is used in practically every vehicle in the world. For us, the focus is on people and helping them to stay mobile.

We have been dedicated to people for more than 125 years with our pioneering spirit, research, production and expertise.

Our dedication is an unwavering commitment to providing them with a unique combination of parts, diagnostics, workshop equipment and services:
- innovative solutions for efficient vehicle repairs
- innovative workshop equipment and software – also available on favorable lease terms
- the world’s largest range of new and remanufactured spare parts
- fast, reliable delivery service
- expert customer care via our hotline
- extensive range of training courses
- specific sales and marketing support
- plus many other services

New! Bosch steering systems
The Bosch spare-parts range includes complete systems and all main components.

Bosch eXchange steering systems
The Bosch eXchange replacement-parts range includes the most important Bosch steering systems.

Robert Bosch GmbH
Automotive Aftermarket

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Bosch products and services
- Diagnostics
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- Gasoline systems
- Brake systems
- Steering systems
- Spark plugs
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- Batteries
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- Wiper systems
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- Comfort electronics
- Hybrid/e-mobility
- Technical hotline
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- Service training
- Workshop concepts

Subject to technical and program changes.