ELECTRIC POWER STEERING

Advanced safety & performance along with precise, predictable feel of the road

Choose Nexteer Electric Power Steering (EPS) for:

- **Advanced Development** for Next-Gen Steering
- **Superior Systems & Software Integration** on Safety-Critical Electro-Mechanical Systems
- **In-House Ownership** of Software, Electro-Mechanical Design, Testing & Manufacturing
- **Product Range Adaptability** from Small Cars to Heavy-Duty Trucks & Light Commercial Vehicles
- **Proven Experience & Product Reliability** in All Segments & Product Technologies
- **Fast & Flexible** Product Development & Customized Solutions

STEER-BY-WIRE: THE FUTURE OF STEERING

Steer-by-Wire (SbW) replaces the mechanical steering connection between the hand-wheel and road-wheels with algorithms, electronics and actuators. SbW enables a new era of safety and performance for traditional driving and varying levels of automated driving. SbW also opens new possibilities for packaging flexibility, vehicle light-weighting, components reuse across vehicle platforms and enables advanced safety and performance features like Automatic Emergency Steering, dynamic variable steering ratio and enhanced stability control.

SOFTWARE: ADVANCING EPS CAPABILITIES

As the industry migrates toward vehicle-level designs that are more defined by software rather than hardware, we're capitalizing on our software and electronics expertise to deliver advanced safety and performance features in safety-critical steering.

Nexteer's EPS software solutions enable advanced safety and performance capabilities, such as driver assist features, low FIT levels, cybersecurity and even customized steering feel that can be tailored to an OEM's brand.

GLOBAL STEERING EXPERT WITH DIVERSE EPS & SbW PORTFOLIO

Our full portfolio of steering technologies meets global OEM needs for everything from small cars to heavy-duty trucks and light commercial vehicles.

RACK ASSIST (REPS)

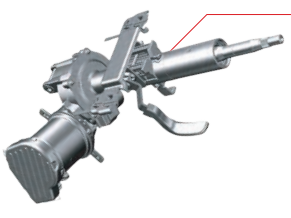
Designed for heavier vehicles to handle higher front-axle loads and optimize packaging space.

DUAL PINION ASSIST (DPEPS)

Enables the primary pinion to be optimized for vehicle dynamics and performance, while a secondary pinion is optimized for assist.

SINGLE PINION ASSIST (SPEPS)

Expands the range and flexibility compared to CEPS by integrating the electric assist mechanism into the primary steering gear pinion shafts.



COLUMN ASSIST (CEPS) BRUSHLESS & BRUSH MOTORS

Integrates the system electronics and assist mechanism with the steering column.

STEER-BY-WIRE

Replaces mechanical steering connection between the hand wheel and road wheels with algorithms, electronics and actuators.

REAR-WHEEL STEERING (RWS)

Allows the rear wheels to turn up to 12 degrees in coordination with the front wheels, optimizing handling at both low and high speeds.

ADDITIONAL OPTIONS

HIGH AVAILABILITY

Ensures the steering safety net is always on through intelligently optimized software designed for simultaneous, multi-path processing and hardware redundancies.

MODULAR

Leverages a cost-effective, modular EPS platform design with flexibility to meet OEMs' wide-ranging requirements for advanced steering systems.

HIGH OUTPUT

Increases the steering capabilities of our EPS systems to allow heavier vehicles, like EVs, to take advantage of EPS's advanced safety, comfort and fuel economy benefits. Also, increases OEMs' steering options for cost-effectiveness without sacrificing performance.

A KEY ENABLER ACROSS INDUSTRY MEGATRENDS

ELECTRIFICATION

Nexteer offers advanced steering technologies like SbW and High Output EPS that are capable of handling EVs' heavier load requirements, plus packaging and NVH needs. They can also accommodate electrified variants of current vehicles or mixed ICE/EV programs.

SOFTWARE / CONNECTIVITY

All Nexteer software solutions start with proven, high-quality safety and cybersecurity. As OEMs require steering systems with advanced safety and functionality, this demands complex software solutions like those found in our 10 FIT High Availability EPS system.

ADAS / AUTOMATED DRIVING

Our EPS systems enable many driver assist features used on the road today, such as lane keeping, park assist, traffic jam assist, cross-wind compensation, lane departure warning and more. Our advanced motion control technologies like, High Availability EPS, provide extra back-up layers of software and hardware that enable greater safety, comfort and convenience across all ADAS levels – from traditional hands-on driving to fully automated vehicles with no driver.

SHARED MOBILITY

Nexteer's advanced motion control solutions, like High Availability EPS, enable built-in redundancies and higher durability to support autonomous people movers, last mile delivery vehicles and more. The extra safety layers and durability are especially important in these applications without a human driver, or when the vehicle is running many more hours than typical duty cycles.

Visit Nexteer.com/electric-power-steering for more details.

nexteer AUTOMOTIVE

a leader in intuitive motion control

Revised March 2025