Engine **Chassis** Transmission E-Mobility







## Ball Screw Drive (KGT) for Electromechanical Steering



## Description

- Conversion of rotational motion of an electric motor into translational motion of the steering system
- Conversion of small drive torques into high output forces
- KGT and toothed rack integrated in one component
- With integrated four-point contact bearing (solution with optimized design envelope)
- KGT with high precision forming technology for very high system requirements

## Advantages

- High efficiency, minimum friction
- Reduction in CO<sub>2</sub> emissions and fuel consumption compared to a conventional hydraulic steering system
- High performance density
- Design with optimized noise characteristics
- Flexible design envelope configuration by means of different ball recirculation concepts
- Clearance-free adjustment facility as required
- Maintenance-free throughout operating life
- Comfort functions can be integrated in the steering system (parking assist, side-wind compensation and lane assist)

## Advantages of 48V architecture

- Higher tie rod forces can be implemented
- Higher drive torques are possible (higher pitch can be implemented with lower friction)