

eBeam™ – Electric Axle Drive System

Heavy Duty electric drive for frame-based vehicle usage. Structure-oriented design to support high payload and towing capability with matching power for continuous duty usage, high peak torque and robustness.



Features and Specifications

- Targeting up to 150 kW continuous power / 200 kW peak power and up to 7,000 Nm at the wheels
- Reduction ratio range: 12 – 18
- ePark-lock, locking differential, mLSD & eLSD options
- Fulfills ISO 26262 - ASiL “D”
- Integrated or remote mounted inverter design possible
- Coaxial architecture with offset gearbox
- High speed PSM 3 phase motor: nMax = 16,500 rpm
- Steerable version and dual motor architecture optionally available

Competitive advantage/differentiators

- **Safety**
Robust design for safe towing and hauling
- **Dynamics**
Scalable power to 150 kW_{cont} / 200 kW_{peak} and 7,000 Nm peak axle torque
- **Vehicle Integration**
Adaptable to current suspension, achieves required clearances during full suspension movement

Applications

- Battery electric vehicle / FuelCell
- PUP / SUV / LCV
- Primary and complementary propulsion
- Coaxial e-motor for GAWR up to 3,250 kg

SOP

Ideation

Discovery

Concept

Development

Series Preparation

in Production

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Heavy Duty electric drive for frame-based vehicle usage. Structure-oriented design to support high payload and towing capability with matching power for continuous duty usage, high peak torque and robustness.



EtelligentDrive

Features and Specifications

- Targeting up to 225 kW continuous power / 300 kW peak power and up to 12,000 Nm at the wheels
- Reduction ratio range: 12 – 25 (w/ 2-speed option)
- ePark-lock, locking differential, mLSD & eLSD options
- Fulfills ISO 26262 - ASiL “D”
- Integrated or remote mounted inverter design possible
- Coaxial or offset architecture w/ option for 2-speed gearbox for increased towing capability
- High speed PSM 3 phase motor: nMax = 16,500 rpm
- Steerable version and dual motor architecture optionally available

Competitive advantage/differentiators

- **Safety**
Robust design for safe towing and hauling
- **Dynamics**
Scalable power to 225 kW_{cont} / 300 kW_{peak} and 12,000 Nm peak axle torque
- **Vehicle Integration**
Adaptable to current suspension, achieves required clearances during full suspension movement

Applications

- Battery electric vehicle / FuelCell
- PUP / LCV
- Primary and complementary propulsion
- Coaxial e-motor for GAWR up to 3,250 kg and Offset e-motor w/banjo axle for GAWR up to 7,850 kg

SOP

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