All-Wheel Drive System

Å MAGNA

PerforMax[™] Rear Drive Module

The dual-clutch torque vectoring rear drive system allows for independent torque to be provided to the rear left and right wheels. Two multi-plate wet clutches are each controlled by an integrated actuator and mechanical ball-ramp type actuation system. Together with sophisticated control algorithms, these provide a superior driving performance for handling maneuvers and off-road conditions.



Features and Specifications

- Key function: AWD with torque vectoring including electronic limited slip differential functionality
- Rear drive module with two multi-plate wet clutches and a hypoid gearset
- Two brushless integrated actuators with mechanical ball-ramp type actuation system for fast response times and the highest torque accuracy
- Torque capacity up to 3500 Nm (1750 Nm each coupling)

Competitive advantage/differentiators

- Safety Throttle-off closed loop yaw damping
- Convenience
 Multiple driving modes with noticeable changing
 vehicle behavior

Discovery

Dynamics
 3,500 Nm axle torque capacity
 (1,750 Nm per side)

Applications

Development

Concept

- All-Wheel Drive (AWD)
- C, D segment: Car and SUV

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Ideation

in Production

SOF

Serial Preparation