

eCoupling

Electromagnetically actuated ON/OFF eCoupling disconnects power flow in HEV and BEV applications.



Features and Specifications

- 2 Functional Modes: Free/Free, Lock/Lock
- Low Power Input (3A actuation / 1A steady state)
- Electromechanical actuation eliminates need for high pressure oil actuation reducing energy consumption
- Ratchets above 150rpm speed difference to prevent unintended engagement
- Rapid actuation

Competitive advantage/differentiators

- Compact on axis packaging
- 2 eCouplings can be combined radially to provide a double ON/OFF function in a compact axial space
- Can be scaled to accommodate various torque ranges

Applications/benefits

- Connecting power flow within Hybrid or EV single or multi speed powertrains: Actuation of planetary or layshaft gear systems, disconnection of power flow to axles
- Improved CO₂ reduction by reducing parasitic drag associated with traditional friction clutches

SOP

Ideation

Discovery

Concept

Development

Serial Preparation

in Production