

eSelectable Grounding Clutch

Electromagnetically actuated grounding clutch locks shafts or gears to the transmission case.



Features and Specifications

- Lever actuated mechanism that locks rotating elements to a powertrain housing
- No power consumption when de-activated
- Low Power Input (5A actuation / 1A steady state locked)
- Integrated position sensor
- Designed to ratchet if engaged above 30rpm
- Electromechanical actuation eliminates need for high pressure oil actuation reducing energy consumption
- Rapid actuation (25ms)

Competitive advantage/differentiators

- Low power requirements to activate
- Compact packaging
- Scalable design to accommodate various torque ranges
- No parasitic drag loss in open condition

Applications/benefits

- Locking of shaft or gear to transmission case
- Locking of planetary ring gear for speed actuation
- Protects system through ratcheting function
- Improved CO₂ reduction by reducing parasitic drag associated with traditional friction clutches

SOP

Ideation

Discovery

Concept

Development

Serial Preparation

in Production