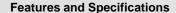


Electric selectable reverse one-way clutch

Electromagnetically actuated clutch reduces CO_2 by limiting parasitic drag associated with traditional largediameter wet friction clutch packs.



- Electromagnetically actuated selectable strut mechanism provides lock in one direction (CW), working in combination with a mechanical one way clutch for the (CCW) direction
- Low current draw: 1.5A actuation, <1.0A continuous hold
- Integrated electronics High Side Failsafe Switch integrated into clutch module
- On demand rapid actuation speed <100ms



Competitive advantage/differentiators

- Replaces existing Low/Reverse Wet Friction Clutch in Automatic Transmissions
- Fits entirely within transmission case splines including electronics
- Unique Actuation Mechanism

Applications/benefits

- 5-10% parasitic drag reduction over entire speed range (measured in unloaded 6spd FWD Automatic)
- No hydraulic circuits simplifies transmission architecture

Ideation Discovery Concept Development Serial Preparation in Production