## DISCONNECT

## ACTUATOR



# TRANSMISSION EFFICIENCY

Improving the performance of transmissions and the drive train





### **Description of functionality:**

The disconnect function is required for management of the drive line in 4-wheel drive vehicles with automatically-controlled AWD.

In these vehicles, an electronic system dedicated to managing this AWD function permanently monitors the driver's demands and the driving conditions. When these conditions require it, for example when there is a demand for high power or in the event of poor grip, the electronic system engages all the elements of the drive train in order to distribute the power to the 4 wheels in an optimized manner.

On the other hand, when driving conditions are stable, the system is able to disconnect a part of the drive train, return to 2-wheel drive and reduce friction to reduce consumption or preserve the battery range.

EFI's Disconnect product benefits from the latest advances in the Greenshift product line, combining high power density and advanced control law to provide a product with unmatched compactness and responsiveness that satisfies the most demanding control systems.

#### **Technical characteristics**

- Highly compact
- Precise, multi-rotation position measurement of the output shaft
- Very fast response time
- Proven watertightness
- Option with and without on-board electronics, compatible with ISO26262 ASIL C
- Broad diagnostic options (for actuators with electronics)
- Cybersecurity protected (for actuators with electronics)

