Transmission technology

Linear force solenoid

BOSCH
Invented for life

PRODUCT BENEFITS

- High accuracy
- High level of flexibility due to the adjustable force curve of the solenoid and variable mechanical and electrical interfaces
- Low hysteresis

1 Pin
2 Connector

very high accuracy

for optimum ease of gear shift

versatile

due to variable interfaces and the adjustable force curve of the solenoid

TASK

The linear force solenoid (LFS) is a direct electric shift control for automatic transmission. It is used to control clutch couplings by regulating the pressure on the coupling. In automatic step transmissions, it controls the main pressure, triggers the gear change, modulates the switching pressure and switches the lock-up clutch. In addition to this, the linear force solenoid assists in various safety functions.

FUNCTION

The linear force solenoid activates clutch couplings without the use of an amplification slider. As regards its positioning accuracy, it meets the highest requirements for direct electric shift controls. It is also particularly suitable for robust use in transmission oil. Thanks to the adjustable force curve of the solenoid and the variable mechanical and electrical interfaces, it can be used in a wide range of applications.

TECHNICAL CHARACTERISTICS

Areas of use	automatic step transmission, continuously variable transmission, dual-clutch transmission
Operating current	1.2 A
Resistance range	1.5 Ω – 6.3 Ω
Diameter	28.4 mm and 32.5 mm
Length	33 mm and 40 mm
Stroke	2.2 mm – 3.5 mm
Force	up to 25 N

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