

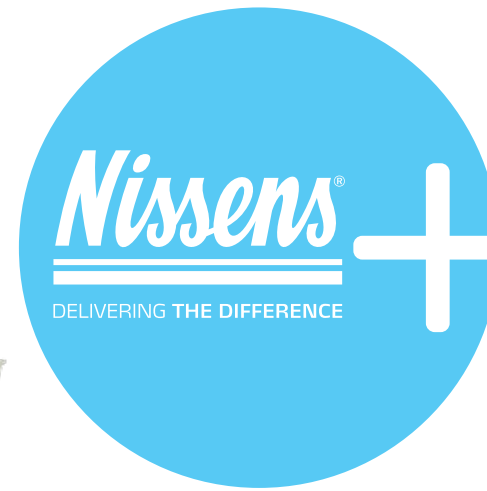
Fan Clutch

EC fan engagement

The fan clutch is a device controlling the engagement of the EC fan. A valve inside the clutch regulates the flow of a special silicon oil. The oil transmits the engine's torque thus, rotating the fan.

The fan clutch can be driven by a belt and pulley or directly by the engine when mounted on the engine's crankshaft. Depending on the cooling needs, the fan can be engaged partially or fully - saving the engine power used for the power transmission.

There are two design types of the sensor causing the clutch to engage. One with a bi-metallic, thermostatic sensor controlling the engagement and another controlled electronically by ECU signals, influenced by engine/transmission oil temperature, coolant temperature, AC system pressures or ambient air temperature.



High Modulation Ability

Perfect modular control of Nissens' fan clutches offers a long line of benefits:

- Freeing of engine power for other tasks
- Reduction of fuel consumption
- Extension of engine life thanks to high temperature control
- Lifespan extension of fan drive belt as a result of smoother speed transitions
- Low noise emission

Extended Durability

Temperature-resistant ball bearing with long lifespan, designed to match the lifetime of the application in question.

Smooth Speed Transition

High-quality silicone oil carefully developed for fine-tuned modular operation.

Bolts for fan blade installation always included!

Precise Operation

Individually-tested electromagnet, manufactured by use of advanced, fully-automated technology. Fine-tuned precision rotor with heavy-duty alloy.

Trouble-free Operation

Well-protected wires and connections.

OE Matching Quality

Tested, long-life, stable and trouble-free operation. Designed and manufactured for the aftermarket, while tested in full accordance to OE requirements, including full compliance with ISO 16750.

Reliability & Performance

Each detail is designed to achieve maximum performance and a high level of modulation, thus improved fuel consumption, less noise and less stress on the engine.

Competitive Range

Nissens' program for fan clutches covers the most popular European truck applications, +100 items covering +400 OE numbers.

Important to know

- The clutch must never be repaired nor opened. The fan clutch is filled with viscous oil and opening the unit will interfere with the system.
- Proper fan clutch modulation is crucial for optimized fan speed, as this affects cooling and engine performance. A good quality clutch can modulate the fan speed with a smooth activation between engagement and disengagement.
- Common symptoms of the fan clutch failure: overheating at idle or when driving in urban traffic, ineffective climate system performance, drop in engine power, grinding noises from the engine compartment or no warm air produced by the heater.