

Idle speed control

The idle speed control valve is designed as a non-wearing two-winding rotary actuator. The rotary slide valve in the idle speed control valve may only be tested by way of activation via a tester or by shaking. Moving the rotary slide valve with the finger or with a tool such as a screwdriver is not permitted. This would mean that the rotary slide valve would no longer function correctly.

The idle speed control valve is now responsible for several tasks and is therefore an important component in the intake air tract of the engine.

Small air leaks which may occur, for example, at leaking gaiters/cylinders or in the event of a varying gap in the throttle valve can be compensated up to a certain extent by the idle speed control valve.

The idle speed control valve opens a little more during the engine coasting phase and closes just before reaching idle speed. This prevents a high intake pipe vacuum and blue smoke emission (oil vapour via valve stem seals).

During engine start, the idle speed control valve enables an opening cross section that is above that of idle speed. This ensures the engine starts more efficiently.

The idle speed control valve features an emergency operation opening gap which ensures certain emergency running functions in the event of power failure.