

Fuel injection

Fuel injector



BOSCH
Invented for life



Product benefits

- ▶ Adaptable to different engine displacements
- ▶ Ready for future emissions requirements
- ▶ Reduced weight and size
- ▶ Large dynamic flow rate
- ▶ Various spray patterns with small droplet size
- ▶ Functionality and manufacturing processes of a highly experienced international production network (quality & reliability)

- 1** O-Ring seal
- 2** Grommet seal
- 3** Orifice plate
- 4** Electrical connector

Vehicle segments



flexible mounting

Small size and clipless fixation for different engine types and layouts

optimized spray

Engine-specific spray targeting: different combinations of spray types, angle options, and reduced droplet size for a highly efficient combustion

Task The fuel is injected so that it forms a homogeneous mixture with the air; this mixture is fed into the area of the combustion chamber most favorable for combustion. The aim is to prevent excessive fuel condensation on the wall of the intake manifold or intake valve.

Function The fuel injector is installed in the intake manifold in front of the intake valve, where its solenoid valve controls injection start and duration. Several ultra-precisely manufactured orifices ensure fine fuel atomization. The shape of the fuel spray is determined for each engine by the position of the injector as well as the configuration and number of orifices. For small engines in particular, the reduced size allows for more flexible mounting. A low-noise injector is relevant for operators of two-wheelers, as they are more exposed to noise from the vehicle and from the environment.

Technical characteristics

Sealing	grommet (manifold side) + O-Ring (fuel side)
Connector	standard mini-trapezoid at a 30° angle other connectors available
Design	adapted for smaller size and two-wheeler-specific mounting
Tip	flat or extended