



## BRIEF INFORMATION

### Fuel Pump Unit and Fuel Pump

- High quality standards
- Fits to a large scale of applications
- Designed to be easily mounted
- Each unit is delivered together with the gasket, according to OEM requirements

## FURTHER PRODUCT FEATURES AND FUNCTIONS

- The fuel pump is an integral part of the fuel delivery system of a vehicle
- Supplies the fuel from the fuel tank to the engine
- It is located inside the fuel tank
- Usually electrically driven
- Higher output and lower current consumption than older pumps

## TECHNICAL DETAILS

### Technical Data

Operating voltage	12 V
Current I [A]	between 5 A and 9 A
Delivery quantities (flow rate) Q [l/h]	between 60 and 250 l/h
Fuel-system pressures P [bar or kPa]	between 3 to 5 bars (300 to 500 kPa)

# FUEL SYSTEMS

## Fuel pumps

An engine is only as reliable as the fuel pump that supplies it with gas. The HELLA fuel pump is part of the fuel supply unit which operates in the tank. It ensures an absolutely reliable fuel supply at all times – and this is the case in a great number of widely differing vehicle makes and models.

## Fuel supply units

The three most important parts of the fuel supply unit are the fuel pump itself, the fuel filter and the flange with its appropriate connections.

The supply unit often has a lever sensor or it operates in conjunction with an immersion tube sensor. The unit can be fitted with a swirl pot.

## Fuel supply systems

When it comes to fuel pumps and feed modules, customers expect goods of the highest quality. With HELLA, workshops can rest assured that they will meet even the most discerning demands of their customers. Fuel supply systems from HELLA meet the same criteria as original parts and, what is more, they are permanently being developed and upgraded.

## Electric fuel pumps

Electric fuel pumps are suitable for a wide range of applications and engine types. They can be easily installed and they always provide the optimal and exact amount of fuel required. Electric pumps boast a long service life and first-class functional reliability while at the same time keeping noise levels to a minimum.

They are manufactured in accordance with stringent quality standards and consequently one of their advantages is a high level of interference suppression.

# GENERAL INFORMATION

## What are the most common causes of fuel pump failures?

One of the top causes of fuel pump failure is contamination. This can be caused by dirt and debris entering the system from re-fueling or the use of poor quality fuel. Fuel pump overheating and wear can also cause failure.

Driving frequently on a low fuel tank can accelerate wear on the fuel pump due to debris on the bottom of the fuel tank being disturbed and entering the pump. It is interesting to note that over half of all fuel pump replacements are the result of misdiagnosis.

The complexity of modern vehicles leads to several systems that can disable the vehicle's fuel pump. Systems that one would not normally associate with the fuel system now have the ability to

render the fuel pump inactive (e.g. security, drive train, oil / fuel pressure switches, etc.). This can lead to misdiagnosis.

## Vehicle symptoms that indicate the fuel pump may need to be replaced?

- Difficult or non starting
- Longer start process
- Engine stalls again after start process
- Increased noise from the pump
- Poor acceleration