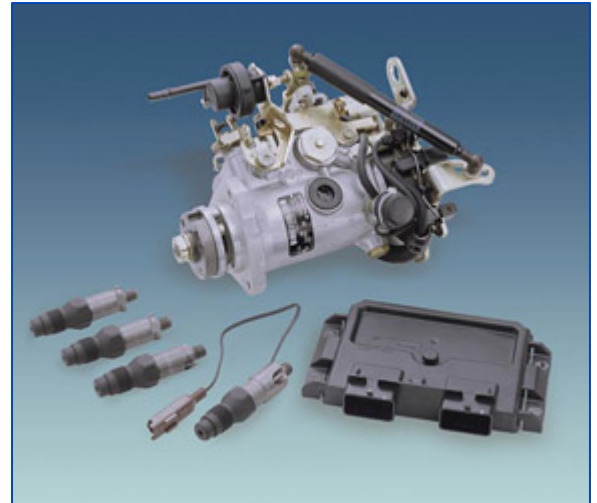


Delphi DPCN Diesel Rotary Fuel Pump

The Delphi DPCN Diesel Rotary Fuel Pump was developed specifically for indirect injection (IDI) diesel engines for passenger cars and light trucks and vans. The DPCN Series is based on Delphi's DPC Rotary Mechanical Fuel Pump, but it is operated by an electronic control unit (ECU) to provide advancements in emissions control and passenger comfort. The DPCN Series features the well-proven internal cam pumping technology used on the Delphi DPC pump which requires no external lubrication and provides improved hot and cold starting. Other major features of the Delphi DPCN Series include:

- Flexible timing control
- Exhaust gas recirculation (EGR) control
- Pre- and post-heating
- Anti-start device
- Fast idle control
- Throttle lever damper
- Throttle lever dash-pot
- Turbocharger boost control
- Altitude compensation



Delphi DPCN Diesel Rotary Fuel Pump

► Benefits

- Proven rotary mechanical pump technology with the benefits of an ECU.
- Precision fuel injection helps reduce emissions to assist manufacturers with meeting emissions standards.
- Exhaust gas control, including close loop control to help manufacturers meet Euro-3 emissions requirements.
- Available electronic anti-start device, operated via dash-mounted keypad, helps provide vehicle security.
- Fast idle device, controlled by the ECU, enables increasing idle speed to help improve acceleration from a standing start. It also helps improve cold operation and engine performance on vehicles equipped with air conditioning.
- ECU enables the addition of a range of features, including:
 - Anti-theft
 - Air conditioning
 - Automatic transmission
 - Pre- and post-heating
 - EGR

► Typical Applications

The Delphi DPCN Diesel Rotary Fuel Pump is available for passenger cars and light trucks and vans with four cylinder engines with up to a capacity of 2.5 liters.

► Performance Advantages

The Delphi DPCN Diesel Rotary Fuel Pump is based on the well-proven technology of Delphi's DPC Rotary Mechanical Fuel pump and includes an ECU which offers the benefits of advanced electronics.

The fuel injection process of the DPCN Pump is initiated when the transfer pump draws fuel from the tank, via a filter. The fuel passes into the pumping element. The rate the fuel is introduced is controlled by the cam profile, with optimum cam position determined by the electronic control unit. The start of the injection

is detected by a needle lift sensor and a signal is sent to the electronic control unit to drive the actuator which rotates the cam ring. Fuel is then delivered to the injectors at high pressure, at the optimal time, and in the correct firing order.

▶ **The Delphi Advantage**

Delphi is actively involved in the development of advanced diesel technology that will help manufacturers meet stringent emissions standards while enhancing fuel economy and performance. Extensive experience in high-pressure fuel injection technology has also helped Delphi develop several innovative design and control strategies to meet customer needs for cost-competitive, high-value injection systems that provide accurate injection over the life of the engine, help minimize emissions and provide robust performance and low noise.

Delphi has 15 diesel design and engineering centers located in Europe, Asia, North America and South America, and 21 diesel manufacturing facilities in 13 countries enabling exceptional on-time delivery.