

HP Fuel Pump HDP 5



The HDP 5 is a compact high pressure single piston pump. The design allows achieving a big delivery volume as well as high efficiency, as needed in motorsport applications. Modifications in the number of cam lobes and cam lifts allow different flow requirements to be addressed.

The HDP 5 is equipped with an internal pressure relief valve to limit the maximum fuel pressure. It does not require a fuel return line into the fuel tank.

The pump has an integrated demand control for metering the amount of fuel supplied into the high pressure fuel system. It can be ordered with a compact connector or a motorsport connector.

Depending on the requirements of your engine (e.g. fuel consumption over rotation ratio) we recommend different types of tappets, piston springs and cam profiles. Please notice: Fuel delivery and maximum driveshaft speed depend on cam profile and type of tappet.

Application

For high pressure manifold injection or gasoline direct injection

Technical Specifications

Mechanical Data

Mass flow	Please see extra sheet
Efficiency	Please see extra sheet
Body design	Series
Flow capacity and max. engine speed	Depending on cam profile
Nominal pressure Standard version	200 bar
Weight	Approx. 780 g

- ▶ Max. $1.1 \text{ cm}^3/\text{rot}_{\text{cam}}$
- ▶ 200 bar
- ▶ 780 g
- ▶ Integrated Flow Control Valve
- ▶ Internal Pressure Relief Valve

Supply pressure	4 to 7 bar
Operating temperature	-40 to 120°C
Storage temperature	-40 to 70°C
Compatible fuels	Unleaded fuels, E22, E85, M15
Fuel temperature	80°C, short term 130°C
Max. vibration	300 m/s ²

Possible customization

Rev B (iPRV)	500 bar or customization
Rev C (EVO)	= Rev B + reduced internal restrictions + introduction of EVO parts (outlet valve)
Rev D (Piston)	= Rev C + bigger piston diameter
Flange hole circle diameter	66 mm or 75 mm
Flange orientation	free
Electrical connector orientation	45° or customization
Hydraulic connection design	M14 x 1.5 or customization
Hydraulic connection orientation	LP 240° or customization, HP 180°, or customization

Connectors and Wires

Electrical connector design
Motorsport wire + open end
Motorsport wire + motorsport connector

Installation Notes

- Mounting on cylinder head or adapter flag.
- Available cam profiles on request.
- Select the cam profile on fuel consumption requirements.
- Avoid interference with FCV and hydraulic connections at flange orientation.
- Avoid interference with flange at electrical connector orientation.
- Please specify the electrical connector design and the wire length with your order.

Legal Restrictions

Due to embargo restrictions, sale of this product in Russia, Belarus, Iran, Syria, and North Korea is prohibited.

Ordering Information

Standard version

Motorsport wire + compact connector
Order number **0261.520.08F-01**

Standard version

Motorsport wire + motorsport connector
Order number **F02U.V03.542-01**

Rev B (iPRV)

Order number **on request**

Rev C (EVO)

Order number **on request**

Rev D (Piston)

Order number **on request**

Accessories

Flat tappet (26 mm)

Order number **F02U.V01.156-01**

Roller tappet (26 mm)

Order number **F02U.V01.163-01**

Represented by:

Europe:
Bosch Engineering GmbH
Motorsport
Robert-Bosch-Allee 1
74232 Abstatt
Germany
Tel.: +49 7062 911 9101
Fax: +49 7062 911 79104
motorsport@bosch.com
www.bosch-motorsport.de

North America:
Bosch Engineering North America
Motorsport
38000 Hills Tech Drive
Farmington Hills, MI 48331-3417
United States of America
Tel.: +1 248 876 2977
Fax: +1 248 876 7373
motorsport@bosch.com
www.bosch-motorsport.com

Asia-Pacific:
Bosch Engineering Japan K.K.
Motorsports Department
1-9-32 Nakagawachuo, Tsuzuki-ku
Yokohama-shi
Kanagawa, 224-8601
Japan
Tel.: +81 45 605 3032
Fax: +81 45 605 3059
www.bosch-motorsport.jp

Australia, New Zealand and South Africa:
Robert Bosch Pty. Ltd
Motorsport
1555 Centre Road
Clayton, Victoria, 3168
Australia
Tel.: +61 (3) 9541 3901
motor.sport@au.bosch.com