HP Fuel Pump HDP 5

www.bosch-motorsport.com





- ▶ 200 bar or more
- ► Max. 1.1 cm³/rot_{cam}
- ► Integrated Flow Control Valve
- ▶ Internal Pressure Relief Valve

Technical Specifications

Flange hole circle diameter

Flange orientation

▶ 780 g

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

Mechanical Data Mass flow Please see extra sheet Efficiency Please see extra sheet Body design Series Flow capacity and max. engine Depending on cam profile speed Nominal pressure Standard ver-200 bar sion Possible customization Rev B (iPRV) 500 bar or customization Rev C (EVO) = Rev B + reduced internal restrictions + introduction of EVO parts (outlet valve) = Rev C Rev D (Piston) + bigger piston diameter

66 mm or 75 mm

free

2 | HP Fuel Pump HDP 5

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
Weight	Approx. 780 g
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	600m/s^2
Connectors and Wires	
Electrical connector design	Series wire + compact connector
	Series wire + motorsport connector
	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.

Ordering Information

Standard version

Series wire + compact connector Order number F 02U V00 912-03

Standard version

Series wire + motorsport connector Order number **F 02U V01 114-03**

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 F 02U V01 156-01

Roller tappet (26 mm)

Order number F 02U 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: 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

Latin America: Latin America:
Robert Bosch Ltda
Motorsport
Av Juscelino Kubitscheck de
Oliveira 11800
Zip code 81460-900
Curitiba - Parana

Brasilia Tel.: +55 41 3341 2057 Fax: +55 41 3341 2779

Asia-Pacific: Asia-vacriic:
Bosch Engineering Japan K.K.
Motorsport
18F Queen's Tower C, 2-3-5 Minato Mirai
Nishi-ku, Yokohama-shi
Kanagawa 220-6218
Japan Japan Tel.: +81 45 650 5610 Fax: +81 45 650 5611 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