

## HP Injection Valve HDEV 5

The HDEV 5 is a high pressure injector, which is developed to be used as a port or a direct injection.

The function of the HDEV 5 is both to meter out the fuel and to obtain a well-defined mixture of fuel and air. It is an inward opening solenoid injector which is optimized regarding very short opening and closing times, which ensures a very stable linearity at short injection times.

The benefit of this injector is a high spray variability concerning spray angle and spray shape. Also the flow rate can be defined in a big range.



Application	
Application	308 ... 1,026 g/min @ 100 bar
Fuel input	top-feed-injector
Fuel	gasoline
Operating pressure	200 bar
Operating temperature range	-31 ... 130 °C
Storage temperature range	-40 ... 70 °C
Max. Vibration	600 m/s <sup>2</sup>

Electrical Data	
Booster supply	65 ... 90 V
Booster current	13.2 A
Booster time	500 µs
Power supply	12 V
Pick-up current	9.6 A
Pick-up time	800 µs
Hold power supply	12 V
Hold current	3 A hysteresis 0.8 A
Coil resistance	1,500 mΩ

Mechanical Data	
Weight w/o wire	68 g
Diameter	20.7 mm
Length	87 mm

Characteristic	
Spray type	Multihole
Number of holes	4 ... 7 holes
Spray angle overall	110°
Spray angle single beam	8 ... 20°
Static flow tolerance	±5 %
Dynamic flow tolerance	±6 % @ t <sub>i</sub> = 1.5 ms
Leakage	≤ 2.5 mm <sup>3</sup> /min @ 23 °C

Connectors and Wires	
Connector	Kompakt
Mating connector	A 928 000 453
Pin 1	Pos
Pin 2	Gnd
Pin 3	-
Pin 4	-
Pin 5	-

**Application Hint**

The injector has to be supplied by a Bosch Motorsport power stage (e.g. HPI 5 or HPI 1.16).

Listed electrical values may vary according to the application.

Bosch offers the spray targeting design according to the individual customer requirements.

If your application conditions will not match the listed performance data, please ask for consultancy at Bosch Motorsport.

In addition to the specific designed sample, Bosch offers cost effective production HDEV 5.2 on request.

The injector can be cleaned (mechanically or chemically) if the tip will not be damaged.

Do not use supersonic cleaning.

Please find further application hints in the offer drawing (<http://www.bosch-motorsport.com>).

**Part Number**

HDEV 5.2

**F 02U V00 868-01**

**Examples of variations, further variations on request**


