

HP Injection Valve HDEV 5.1

The HDEV 5.1 is a high pressure injector, which is developed to be used as a port or a direct injection.

The function of the HDEV 5.1 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	150 bar
Operating temperature range	-31 ... 130 °C
Storage temperature range	-40 ... 70 °C
Max. Vibration	600 m/s ²

Electrical Data	
Booster power supply	65 ... 90 V
Booster current	8.5 ... 12 A
Booster sustain time	355 ... 440 µs
Peak power supply	12 V
Peak current	4.8 ... 7.1 A
Peak sustain time	145 ... 160 µs
Hold power supply	12 V
Hold current	2.5 ... 3.1 A
Coil resistance	1,500 Ω

Mechanical Data	
Weight w/o cable	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 _i = 1.5 ms
Leakage	≤ 2.5 mm ³ /min @ 23 °C

Connectors and Cables	
Connector	Kompakt
Connector loom	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 1.1 or HPI 1.16).

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

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 5.1

on request

Examples of variations, further variations on request
