

HP Injection Valve HDEV 5.2



The HDEV 5.2 is a high pressure injector, which is developed to be used as a port or a direct injector. The function of the HDEV 5.2 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. 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.

Application

Application at 100 bar (typical)	308 to 1,640 g/min
Fuel input	Top-feed injector
Fuel	Gasoline
Operating pressure	Up to 500 bar
Operating temperature range	-31 to 130°C
Storage temperature range	-40 to 70°C
Max. vibration	600 m/s ²

Technical Specifications

Mechanical Data

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

- ▶ Max. 500 bar
- ▶ Multi hole
- ▶ Flow rate at 100 bar: up to 1,640 g/min (n-heptane)
- ▶ Spray angle 8 to 20°

Flow rate at 100 bar (n-heptane)	up to 1,640 g/min
Number of holes	4 to 7 holes (typical)
Spray type	Multi hole
Spray angle overall	110° (typical)
Spray angle single beam	8 to 20°
Static flow tolerance	±4 %
Dynamic flow tolerance	±6 % at $t_i = 1.5$ ms
Leakage	≤2.5 mm ³ /min at 23°C

Electrical Data

Booster supply	65 V
Booster current	13.4 A
Booster time	480 μs
Power supply	12 V
Pick up current	9.4 A
Pick up time	704 μs
Hold power supply	12 V
Hold current	3.7 A hysteresis 0.8 A
Coil resistance	1,500 mOhm (ambient temp.)

Connectors and Wires

Mating connector Compact	D 261 205 359-01
Connector Jetronic (wire)	D 261 205 288-01
Connector motorsport (wire)	On request
Pin 1	Pos
Pin 2	Gnd

Installation Notes

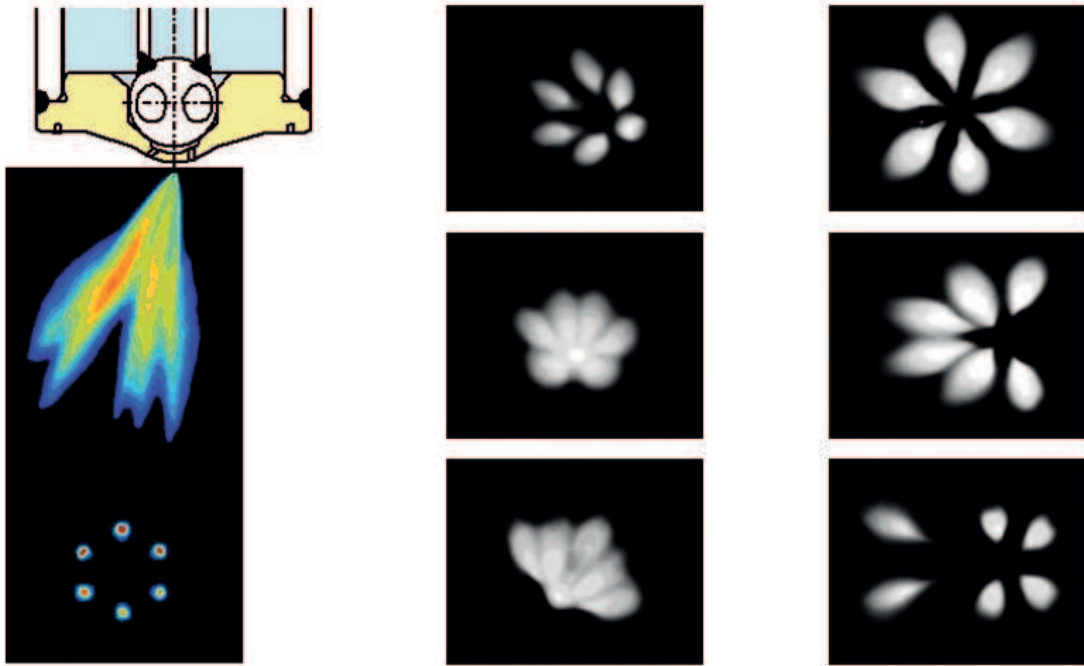
The injector has to be supplied by a Bosch Motorsport Power Stage Unit (e.g. HPI 5 or HPI 1.16).

Listed electrical values may vary according to the application.
The injector can be cleaned (mechanically or chemically), if the tip will not be damaged.
Do not use supersonic cleaning.

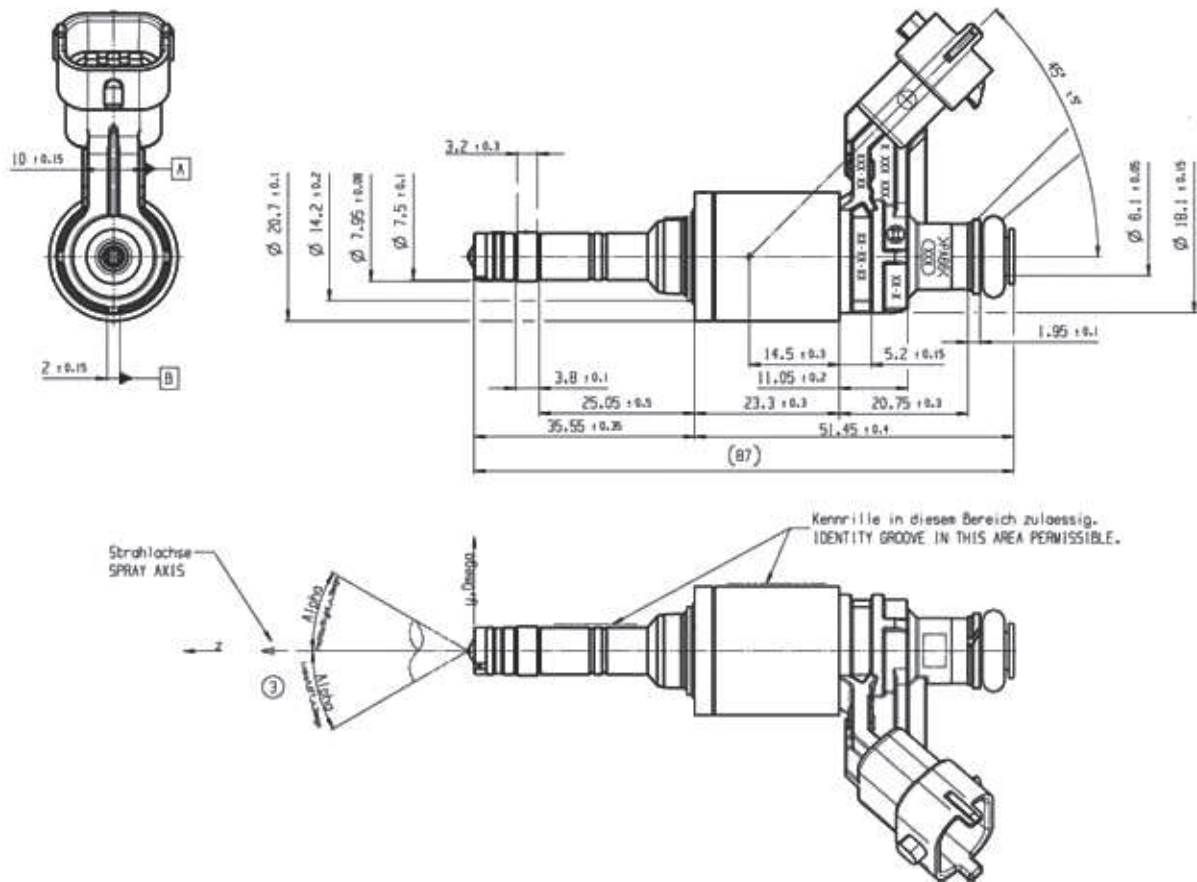
Ordering Information

HP Injection Valve HDEV 5.2
Order number **on request**

Dimensions



Spray variations, further variations on request



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