

Title (en)
FUEL-INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)
SOUPAPE D'INJECTION DE CARBURANT DE MOTEURS A COMBUSTION INTERNE

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Application
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Abstract (en)
[origin: WO2004085824A1] The invention relates to a fuel-injection valve comprising a valve body (1), in which a bore (3) is configured that is delimited by a valve seat (5) at its combustion chamber end, at least two injection orifices (7) originating at said valve seat. An external valve needle (10) and an internal valve needle (12) contained in the latter are located in the bore (3) in a longitudinally displaceable manner, the ends of said needles on the combustion chamber side respectively opening and closing at least one injection orifice (7). A pressure chamber (14) that can be filled with fuel is configured between the external valve needle (10) and the wall of the bore (3). A first guide section (24) and a second guide section (25) that is positioned on the valve seat side in relation to the first section guide the internal valve needle (12) in the longitudinal bore (15) and an annular chamber (22), which is delimited by the internal valve needle (12) and the wall of the longitudinal bore (15), is configured between the guide sections (24; 25). The annular chamber (22) can be connected to the pressure chamber (14) by means of a throttle connection (28; 35). The diameter of the first guide section (24) is greater than the diameter of the second guide section (25).

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