

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

Title (fr)
INJECTEUR DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE

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Application
EP 14703854 A 20140211

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Abstract (en)
[origin: WO2014166651A1] The invention relates to a fuel injection valve for internal combustion engines for injecting highly pressurized fuel, comprising a pressure chamber (14) and a control valve (30) formed in a valve body (4). A nozzle needle (10) is arranged in the pressure chamber (14) in a longitudinally movable manner, said nozzle needle interacting with a nozzle seat (13) by means of the longitudinal movement of the nozzle needle and thereby opening and closing at least one injection opening (12). The nozzle needle (10) is subjected to a closing force directed in the direction of the nozzle seat (13) as a result of the pressure in a control chamber (20). The pressure in the control chamber (20) can be adjusted by means of the control valve (30), said control valve (30) comprising a control valve chamber (31) which can be connected to the control chamber (20) and in which a control valve element (34) is arranged in a longitudinally movable manner. An outlet throttle (1) connects the control chamber (20) to the control valve chamber (31), and an inlet throttle (3) connects the control chamber (14) to the valve chamber (31) in a switchable manner. The control valve chamber (31) can be connected to the control chamber (20) by means of a bypass (2), wherein the control valve element (34) can open and close the bypass (2) and the inlet throttle (3).

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