

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

Publication
EP 0975866 A1 20000202 (DE)

Application
EP 98965574 A 19981117

Priority
• DE 9803387 W 19981117
• DE 19802244 A 19980122

Abstract (en)
[origin: DE19802244A1] A fuel injection valve for IC engines has a housing (1) that has a supply for fuel from a high pressure fuel source plus an injection needle guided in the housing that works with a sealing face located at its one end with a valve seat in the housing. Thereby the needle controls a connection between a pressure chamber permanently connected to the supply and at least one injection opening. At its other end it is exposed directly to the pressure in a control pressure chamber (7) bounded by a movable wall (6) via a Z- throttle (8) permanently connected to the supply (5) in a cylinder (4). The movable wall is in working connection with the injection needle. From the control pressure chamber, a relief pipe containing a drain throttle (26) leads away, whose outlet is controlled in a relief chamber by a solenoid valve (29). Its valve member (45,50) is connected with an armature (40) and is guided in an insert (10) which accommodates the valve seat (28) of the solenoid valve, the relief pipe with drain throttle and the control pressure chamber. It is tensioned by the housing of the solenoid valve with the housing of the fuel injection valve. The insert additionally accommodates the cylinder with the movable wall.

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IPC 8 full level
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