

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

Publication
EP 2459866 A1 20120606 (DE)

Application
EP 10720789 A 20100601

Priority

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Abstract (en)
[origin: WO2011012355A1] Fuel injection valve for internal combustion engines having a valve body (1), in which a pressure chamber (5) is formed, in which a valve needle (3) is arranged such that it can be displaced longitudinally, which valve needle (3) interacts by way of a valve sealing surface (11) which is formed on the valve needle (3) with a valve seat (9) which delimits the pressure chamber (5). As a result of the interaction of the valve needle (3) with the valve seat (9), a fuel flow to at least one injection opening (7) is made possible or interrupted, wherein the fuel flow flows through between the valve needle (3) and the wall of the pressure chamber (5) to the injection openings (7). A collar (17) is formed on the valve needle (3), with the result that a gap throttle (15) is formed between the wall of the pressure chamber (5) and the collar (17), wherein the collar (17) has an inlet-side surface (20) and an outlet-side surface (24), wherein the inlet-side surface (20) is of rounded or conical configuration.

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