

Title (en)
FUEL INJECTION VALVE

Publication
EP 0195440 B1 19890927 (DE)

Application
EP 86103736 A 19860319

Priority
DE 3510075 A 19850320

Abstract (en)
[origin: EP0195440A2] 1. A fuel injection valve for an internal combustion engine, the valve comprising a valve body (1) and an insert (2) in and along the axial extent of which a valve needle (3) is located, wherein the needle is arranged to rest at one of its axial end portions on a needle seat (5) and is actuatable - in the direction to the seat (5) - by a force originating from a force reservoir, wherein a discharge aperture in the form of at least one outlet (23) is arranged to be controlled by the needle (3), wherein fuel is arranged to be fed by a - separate - injection pump through ducts and channels (7, 8, 9, 10, 13, 20) to a first pressure chamber (11) at a pressure shoulder (12) on the needle (3) and onwards to a second pressure chamber (15), wherein the channel between the first pressure chamber (11) and the second chamber (15) is the sole feed channel to the second chamber (15) and includes an inset operable as a check valve, wherein the check valve (28) is arranged to open in the direction of flow to the second chamber and to block the flow in the opposite direction, and wherein the needle (3) is actuatable in the direction to the needle seat (5) by a force generated by the fuel pressure in the second chamber (15), characterized in that the channel between the first chamber (11) and the second chamber (15) has a first section extending from the first chamber (11) to the needle seat (5), a second - control - section linked to the needle seat (5) and a third section leading to the second chamber (15), that the second and third sections are connectable by at least one connecting aperture (21), and in that at least one outlet (23) in the insert (2) is located in the region of the needle seat and/or of the second section.

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Cited by
CN117627833A; GB2203795A; GB2299374A; US5645224A; GB2299374B; CN113423945A

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