

Title (en)
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)
BRENNSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

Publication
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Application
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Abstract (en)
[origin: DE19503269A1] In prior art injection valves, when the internal combustion engine is hot, especially on hot-starting or hot idling, fuel evaporates off upstream of the injection nozzle disc and at the injection nozzles, as a result of which the running is adversely affected owing to the low fuel supply. The running of the engine is therefore to be improved by preventing the formation of vapour bubbles. The provision of a transition component reducing the heat transfer between the valve seat body (16) and the injection nozzle disc (21) in the form of a raised step (18) formed on the valve seat body (16) ensures that the injection nozzle disc cools off as a result of the drawn-off heat of evaporation of the injected fuel, thus reducing the risk of the formation of vapour bubbles at or upstream of the injection nozzles (25). The fuel injection valve is especially suitable for fuel injection systems in mixture-compressing spark-ignition internal combustion engines.

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