

Title (en)  
FUEL INJECTION VALVE

Title (de)  
BRENNSTOFFEINSPRITZVENTIL

Title (fr)  
INJECTEUR DE CARBURANT

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Application  
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Abstract (en)  
[origin: WO2012034758A1] The invention relates to a fuel injection valve for fuel injection systems in internal combustion engines. The valve comprises an electromagnetic actuation element that includes a solenoid (1), a solid core (2), an outer magnetic circuit component (5), and a movable armature (17) for actuating a valve closing member (19) which cooperates with a valve seat surface (16) on a valve seat member (15). The valve is characterized by its extremely small outer dimensions. By optimizing the size of the electromagnetic circuit, the outer diameter of the outer magnetic circuit component (5) can be kept within a range of 10.5 mm  $M < 13.5$  mm in the circumferential zone of the solenoid (1), which significantly increases the flexibility for mounting fuel injection valves having different lengths, said different lengths being perfectly possible as a result of the special modular design. As a fuel injection valve, the disclosed valve is particularly suitable for fuel injection systems in mixture-compressing internal combustion engines with externally supplied ignition.

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