

Title (en)  
FUEL INJECTION VALVES IN COMBUSTION ENGINES

Title (de)  
KRAFTSTOFFEINSPRITZVENTILE BEI KRAFTMASCHINEN

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

Publication  
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Application  
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Abstract (en)  
[origin: WO2007003458A1] The invention relates to a fuel injection valve with a valve body (2) inside of which a valve needle (4) is placed in a manner that enables it to be longitudinally displaced, this valve needle interacting with a valve seat (7) for controlling at least one injection opening (9). The valve needle (4) surrounds a sleeve (5) at the valve seat end. The valve needle (4) is surrounded by a pressure space (11) at least on a portion of the length of the valve needle, this pressure space being able to be filled with highly pressurized fuel. An annular space (10) is formed between the sleeve (5) and the valve needle (4) and is permanently connected, via a throttle connection (21; 37), to a pressure space (11) surrounding the valve needle (4). A flow cross-section is opened by the opening travel motion of the valve needle (4), whereby the pressure space (11) is connected to the annular space (10) via this flow cross-section.

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