

Title (en)  
FUEL INJECTION VALVE FOR INTERNAL COMBUSTION ENGINES

Title (de)  
KRAFTSTOFFEINSPRITZVENTIL FÜR BRENNKRAFTMASCHINEN

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

Publication  
**EP 0823959 A1 19980218 (DE)**

Application  
**EP 96923856 A 19960716**

Priority  
• DE 9601294 W 19960716  
• DE 19541508 A 19951108

Abstract (en)  
[origin: DE19541508A1] A fuel injection valve for internal combustion engines with a valve body (1) with at least indirect provision for a valve seat (17) at its combustion chamber end and a sprung valve diaphragm (19) forming a valve member, the edge of which is secured against the valve body (1) and which separates a pressure chamber (11) which can be filled with high-pressure fuel from an injection section into the engine's combustion chamber, in which the prestressed valve diaphragm (19) providing a seal via a valve member sealing surface (21) against the valve seat (17) can be lifted therefrom under the effect of the high fuel pressure prevailing in the pressure chamber (11) upstream of the fixed valve seat (17). To detect the start and end of injection at the injection valve, the valve diaphragm (19) forms a movable switching component of an electric sensor detecting the valve opening movement, to which end the valve diaphragm (19) cooperates with a fixed contact surface to which a different voltage potential is applied from that applied to the valve diaphragm (19).

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**F02M 61/04**; **F02M 65/00**

IPC 8 full level  
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