

Title (en)
COMMON RAIL INJECTOR

Title (de)
COMMON-RAIL-INJEKTOR

Title (fr)
INJECTEUR COMMON RAIL

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Application
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Abstract (en)
[origin: WO0148369A1] The invention relates to a common rail injector for injecting fuel in a common rail injection system of an internal combustion engine. The inventive injector is provided with an injector housing (1) having a fuel supply (24), is connected to a central high pressure fuel accumulator situated outside the injector housing (1) and can be connected to a high pressure channel (25) situated inside the injector housing (1). Fuel that is impinged upon with high pressure is injected from the channel and into the combustion chamber of the internal combustion engine when a control valve member (8) which can be axially moved to-and-fro in a longitudinal bore (4) of the injector (1), together with a first valve sealing surface (9), is lifted from a first valve seat (10) according to the pressure in a control chamber (29). The aim of the invention is to provide a quickly responding common rail injector which at least partially works in such a way that forces are equilibrant. The control chamber (29) is formed by an essentially cylindrical recess (12) that is provided at the end (11) of the control valve member (8), whereby said end faces away from the combustion chamber. The diameter (d2) of said recess is greater than the diameter (d1) of the first valve seat (10). The recess at least partially embraces a guiding pin (13) which is stationary in relation to the injector housing (1).

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