

Title (en)
INJECTION VALVE

Title (de)
EINSPRITZVENTIL

Title (fr)
SOUPAPE D'INJECTION

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Application
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Abstract (en)

[origin: WO02053904A1] The invention relates to an injection valve that comprises at least one nozzle module (2) provided with a valve control piston (4) interacting with a nozzle needle and a valve control chamber (5) delimited by a spring plate (21) and one front face (6) of the valve control piston (4), said valve control chamber communicating with a high-pressure feed line (9) via a feed channel (7) and being functionally linked with a valve control module (3) via a discharge channel (24). Said valve control module is actuated by means of a piezoelectric actuator device and is configured as a valve. Said valve control module furthermore comprises at least one valve closing member (14), disposed in a valve chamber (18) and interacting with at least one valve seat (16, 17). The nozzle needle is opened via the discharge channel (24) by means of a pressure reduction in the valve control chamber (5) caused by the valve control module (3) and is closed by filling the valve control chamber (5). In order to allow for a rapid closing of the nozzle needle, the injection valve is provided with means for filling the valve control chamber (5) via the feed channel (7) and the discharge channel (24).

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