

Title (en)

VALVE CONTROL UNIT FOR A FUEL INJECTION VALVE

Title (de)

VENTILSTEUEREINHEIT FÜR EIN KRAFTSTOFFEINSPRITZVENTIL

Title (fr)

UNITE DE COMMANDE POUR SOUPAPE D'INJECTION DE CARBURANT

Publication

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Application

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Abstract (en)

[origin: DE19826719A1] The invention relates to a valve control unit (1) for a fuel injection valve, comprising two communicating valve control chambers (5, 8). The end member (13) of a valve control piston (3) that may be impinged upon with pressure is located inside the first valve control chamber (5) that is connected to a supply channel (6). Said member can be displaced in such a way that the flow cross section for fuel exchange may be shifted from the first valve control chamber (5) to the second valve control chamber (8) that is connected to a drain channel (9). A throttle channel (17) for fuel exchange between the valve control chambers (5, 8) is embodied in the end member (13) of the valve control piston (3). Due to the configuration of the throttle channel (17), mechanical stop of the end member (13) of the valve control piston (3) is made possible on the edge areas of the passage between the valve control chambers (5, 8). The stop makes it possible to enlarge the volume of the first valve control chamber (5), said volume enlargement having no negative effect on the performance of the stop of the end member (13). Increased reaction speed of the valve control piston (3) after conclusion of the injection process can be obtained as final result of these constructional measures.

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