

Title (en)

VALVE FOR CONTROLLING THE FLOW OF FLUIDS

Title (de)

VENTIL ZUM STEUERN VON FLÜSSIGKEITEN

Title (fr)

VANNE DE COMMANDE DE LIQUIDES

Publication

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Application

**EP 01913616 A 20010213**

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Abstract (en)

[origin: WO0181752A2] The invention relates to a valve for controlling the flow of fluids. Said valve comprises an actuator unit (4) for actuating a valve element (3), which has a first plunger (9) and a second plunger (11) that is separated therefrom by a hydraulic chamber (13), and which actuates a valve closing element (12) that separates a low pressure area (16) with system pressure from a high pressure area (17). A filling device (24), which has a cavity (25) and which can be connected to the high pressure area (17), is provided for compensating for leakage. A flow restrictor (26) is arranged in said cavity in such a manner that a line (33) leading to the high pressure area (17) opens into the cavity (25) at one end of the flow restrictor (26), and a system pressure line (28) leading to the hydraulic chamber (13) branches off at the other end of the flow restrictor (26). The system pressure is built up, according to a pressure existing in the high pressure area, due to the geometric determination of a flow restricting borehole (27) located in the flow restrictor (26) and of the dimensions of the plunger (9), along which the system pressure ( $p_{sys}$ ) is reduced. Alternatively, a second flow restrictor (32) having a flow restricting borehole (34) can be provided in the cavity (25). Said second flow restrictor (32) is connected upstream from a leakage line (35), which branches off from the cavity (25), and the system pressure is reduced along the second flow restrictor.

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