

Title (en)  
PRESSURE CONTROL VALVE

Title (de)  
DRUCKREGELVENTIL

Title (fr)  
SOUPAPE DE RÉGULATION DE PRESSION

Publication  
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Application  
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Abstract (en)  
[origin: WO2013182366A1] The invention relates to a pressure control valve for a high-pressure accumulator (22) of an injection device of an internal combustion engine, comprising a magnetic actuator (10). The magnetic actuator (10) has a magnetic core (30) having contacting pins (41a, 41b) and a magnetic armature (33) having an armature plate (34), wherein the contacting pins (41a, 41b) protrude from a magnetic core end face (31) and pass through feedthroughs (43a, 43b) formed in the armature plate (34). The armature plate (34) is movably arranged in an armature space (44), which is hydraulically connected by means of a pressure equalization channel (50) to a valve chamber (23) connected to low pressure. The pressure equalization channel (50) has an opening (51) on the magnetic core end face (31), by means of which opening the pressure equalization channel (60) opens into the armature space (44). Furthermore, a passage for the fuel from one end face of the armature plate (34) to the other end face of the armature plate (34) is provided for the pressure equalization, which passage is formed by at least one of the feedthroughs (43a, 43b) in the armature plate (34). A residual air gap disk (50), which has further feedthroughs (53a, 53b) in correspondence with the feedthroughs (43a, 43b), is arranged between the magnetic core (30) and the armature plate (43). The additional feedthrough (53b) in the residual air gap disk (50) lying near the opening (61) has a radial extension (54) that extends in the direction of the opening (61).

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