

Title (en)

MAGNETIC VALVE WITH PRESSURE LIMITATION FOR CONTROLLED-SLIP MOTOR VEHICLE BRAKING SYSTEMS

Title (de)

MAGNETVENTIL MIT DRUCKBEGRENZUNG FÜR SCHLUPFGEREGLTE KRAFTFAHRZEUG-BREMSANLAGEN

Title (fr)

VANNE ELECTROMAGNETIQUE A LIMITATION DE PRESSION POUR SYSTEMES DE FREINAGE D'AUTOMOBILES A REGULATION ANTIPATINAGE

Publication

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Application

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Priority

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Abstract (en)

[origin: DE4438336A1] The invention is to provide a low-noise magnetic valve on switch-off from the pressure limitation function. The magnetic valve (10) has a two-part tappet (23), the inner component (26) of which comprises the closing member (51) of a seat valve (35). The closing member (51) is surrounded by and spaced from a sheath-like section (57) of the outer tappet component (25) forming a gap (59). From the gap, a pressure medium pipe (65) leads to a control chamber (68) between the end face, away from the seat valve, of a magnetic armature (22) co-operating with the tappet (23) and a valve dome (14). When the magnetic valve (10) is switched off, the seat valve (35) goes from its closed to a partly open position in which ram pressure in the gap (59) takes effect and is transferred through the pressure medium pipe (65) to the control chamber (68). The hydraulic force acting there on the magnetic armature (22) counteracts the opening forces of the magnetic valve (10) and slows its opening movement. A pressure surge is prevented through the thus throttled flow of the pressure medium through the seat valve (35). The magnetic valve (10) is applicable to controlled-slip motor vehicle braking systems.

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