

Title (en)  
LOAD-HOLDING BRAKE VALVE

Title (de)  
LASTHALTE-BREMSVENTIL

Title (fr)  
SOUPAPE DE FREIN A MAINTIEN DE CHARGE

Publication  
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Application  
**EP 97907055 A 19970228**

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Abstract (en)  
[origin: WO9732136A1] The invention relates to a hydraulically controlled valve for double-acting consumers, which discharges during the lowering mode in a throttled manner a load volume flow from connection B to connection A. To this end, the valve has a valve seat (5) which comes into contact with a sealing surface (4) of a main piston (3) in which a pilot piston (8) is guided concentrically which comes into contact with a sealing surface (7) of a pilot valve seat (7) in the main piston. Said main piston (3) and said pilot piston (8) are held by load pressure and/or by resilient force on the valve seat (5) or the pilot valve seat (6). The pilot piston (8) has on the pressure-relieved side a piston shank (9) extending in a seat bore and having a continuously decreasing throttling action, in particular throttle grooves (10) which form a throttling point. When hydraulically actuated the pilot piston (8) can be axially displaced by a control piston (20) with the result that the pilot valve (5, 6) opens and there is a load volume flow via the throttling point from a pilot chamber (15) accommodating the springs. The resultant decrease in load pressure causes axially displacement of the main piston (3) and opening of the valve seat. An additional damping valve arrangement reduces load oscillations which occur. A pressure-limiting-valve independent of the return pressure is incorporated in the load-holding brake-valve housing.

IPC 1-7  
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IPC 8 full level  
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