

Title (en)
PILOT CONTROLLED SERVO-VALVE

Title (de)
VORGESTEUERTES SERVOVENTIL

Title (fr)
SERVO-SOUPAPE A COMMANDE PILOTE

Publication
EP 0828945 A1 19980318 (DE)

Application
EP 95937068 A 19951113

Priority
• EP 9504454 W 19951113
• LU 88558 A 19941116

Abstract (en)
[origin: WO9615373A1] A pilot controlled servo-valve has four main flow connections (20, 22, 24, 26), an axially sliding main control piston (18) with four control edges (28', 30', 32', 34') and a front restoring spring (78) that defines a spring-centred middle position of the main control piston (18). A control sleeve (12) has ring-shaped openings (20', 22', 24') for the first, second and third main flow connections (20, 22, 24) and a front opening (26') for the fourth main flow connection (26). A first front face of the main control piston (18) is axially opposed to said opening (26'). A pressure compensating surface (60) is formed by the second front face of the main control piston (18) in a spring chamber (52). The main control piston (18) applies the pressure in the fourth main flow connection on said pressure compensating surface (60) through a pressure relief channel (44). A transverse bore (46) connects said pressure relief channel to an auxiliary connection chamber (36) connected to the third main flow connection (24) by the fourth control edge (34'). This valve may be space-savingsly integrated in a hydraulic block and has a clearly defined middle position, as well as a remarkable dynamic performance.

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