

Title (en)
PROPORTIONAL DIRECTIONAL VALVE WITH SINGLE PRESSURE BALANCE

Publication
EP 0224936 B1 19900606 (DE)

Application
EP 86116954 A 19861205

Priority
DE 3543231 A 19851206

Abstract (en)
[origin: EP0224936A2] 1. A proportional directional control valve whose valve housing has a pressure port (P), a tank port (T) and two load ports (A, B), wherein there are provided a valve spool (2) for controlling the communication of said ports (P, T, A, B) in two working positions and a separate pressure balance means (3) for controlling the pressure port (P) in dependence on load pressure, characterised in that the valve spool (2) has the following control conduit systems (5, 10) in three different rotational positions which are fixed in the valve housing (1) by positive connection, about its longitudinal axis : a) in a first rotational position (D) in both working positions of the valve spool (2) the load pressure (PA, PB) of the pressurized load port (A, B) of a double-acting load is fed to the separate pressure balance means (3) ; b) in a second rotational position (EB) in one working position of the valve spool (2) the load pressure of the pressurised load port (B) of a single-acting load is supplied to the separate pressure balance means (3) while in the other working position of the valve spool (2) the load port (A) which is not required and which is therefore closed, like also the separate pressure balance means (3), are relieved towards the tank (T) ; and c) in a third rotational position (EA) control is effected as in b) but with interchange of the load ports (A, B).

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Cited by
DE102007048324A1; EP0405113A1; EP0786598A1; CN110319067A

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