

Title (en)
CONTROL DEVICE FOR AT LEAST ONE HYDRAULIC CONSUMER

Title (de)
STEUERANORDNUNG FÜR MINDESTENS EINEN HYDRAULISCHEN VERBRAUCHER

Title (fr)
DISPOSITIF DE COMMANDE POUR AU MOINS UN CONSOMMATEUR HYDRAULIQUE

Publication
EP 0650558 B1 19970129 (DE)

Application
EP 93915747 A 19930630

Priority

- DE 4223389 A 19920716
- EP 9301680 W 19930630

Abstract (en)
[origin: DE4223389A1] The invention concerns a control unit for at least one hydraulic consumer, the direction and speed of operation of the consumer being controlled by means of a distributor valve (14). Two lines (21, 22) lead from the distributor valve (14) to the consumer, each consumer line being connected by means of a distributor-valve piston (15) and a calibrated orifice (30) to a pump (85) and hence a reservoir. Each consumer line has a throttle valve (23) with a control piston (34). The aim of the invention is to be able to keep the consumer in a particular position without loss of hydraulic fluid. This is achieved by virtue of the fact that the throttle-valve (23) control piston (34) is located downstream of the distributor-valve piston (15) and the calibrated orifice (30) in the line (21, 22). A valve seat (35) is acted on by the control piston (34). The front of the control piston (34) has a first pressure surface (36) which is acted on, to open the throttle valve (23), by the pressure in the respective consumer line (21, 22) downstream of the distributor valve (14) and the calibrated orifice (30), the rear of the control piston (14) has a second pressure surface (41) which is acted on, to close the throttle valve (23), by a control pressure generated only by the load in the position of rest of the distributor valve (15), and the front of the control piston has a third pressure surface (40) which is acted on, to open the throttle valve (23), by the load pressure in the respective consumer line (21, 22) between the throttle valve (23) and the consumer. When the pressure is released in the respective consumer line (21, 22) to the reservoir, the pressure acting on the second pressure surface (41) is reduced.

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