

Title (en)
DISTRIBUTING VALVE FOR LOAD-INDEPENDENT CONTROL OF A HYDRAULIC CONSUMER WITH REGARDS TO DIRECTION AND SPEED

Title (de)
WEGEVENTIL ZUR LASTUNABHÄNGIGEN STEUERUNG EINES HYDRAULISCHEN VERBRAUCHERS HINSICHTLICH RICHTUNG UND GESCHWINDIGKEIT

Title (fr)
DISTRIBUTEUR POUR LA COMMANDE, INDEPENDANTE DE LA CHARGE, D'UN CONSOMMATEUR HYDRAULIQUE AU NIVEAU DU SENS ET DE LA VITESSE

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Application
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Abstract (en)
[origin: US6179393B1] The invention relates to distributing valve for load-independent control of a hydraulic consumer with regard to direction and speed. Similar distributing valves known per se have a control valve (30) which can be axially displaced in a slide bore hole (11) of a valve housing (10). In a neutral position, said control valve (30) blocks off two consumer chambers (13, 15) from a feed chamber (14) and selectably connects one of the two consumer chambers (13, 15) to a feed chamber (14) and the other consumer chamber (15, 13) to a return chamber in two operating positions. In addition, two brake pistons (51, 52) are arranged in two opposite lying receiving areas (33, 34) of the control valve (30). Both pistons can be pressurized in the direction of an enlargement of the opening section of a flow path leading from one consumer chamber (13, 15) to a return chamber (12, 16) via the respective receiving area, said pistons being pressurized in the other consumer chamber (15, 13) in a direction opposite to that of a spring (53) placed in a spring chamber (12). According to the invention, a slide longitudinal bore hole (36) which can be connected to a load indicator channel (22) extends from one pressure chamber (58) on one brake piston (51, 52) to the other pressure chamber (58) on the other brake piston (51, 52), and can be connected, upon displacement of the control valve (30) from the neutral position, to one consumer chamber (13) or another consumer chamber (15) depending on the direction of displacement.

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