

Title (en)

HYDRAULIC CONTROL FOR A DOUBLE LOADABLE ADJUSTING CYLINDER OF A CONTINUOUS CASTING PLANT

Publication

EP 0025852 B1 19831012 (DE)

Application

EP 80104703 A 19800809

Priority

DE 2936146 A 19790907

Abstract (en)

[origin: EP0025852A1] 1. A hydraulic control system for a double-acting setting cylinder (1), for positioning and securing the position of a guide roller (4) in the strand guideway of a continuous casting plant, including reversing valves (15, 16), which are in the form of solenoid valves which are mechanically actuated by a spring when the solenoid is de-energised, in the two main control lines (13, 14), characterised by : an additional 4/2-way pilot valve (18) which is actuated exclusively electro-mechanically for both its switching positions (III/IV), comprises detaining means for detaining the valve in the selected switching position and is connected in parallel with the alternately reversible 3/2-way valves (15, 16) such that the inputs (P, T) of the pilot valve respectively communicate with the high-pressure line (6) and the return line (19) upstream of the reversing valves ; a first pilot controlled nonreturn valve (20) in the first main control line (13) which leads to the cylinder pressure chamber (1a) (for raising) the guide roller (4), which nonreturn valve closes when this line is relieved of load and can be opened by a pressure in the other, second main control line (14) by means of a second pilot controlled nonreturn valve (21) which is connected to the second main control line and, when open, supplies control pressure for opening the first nonreturn valve (20) in the first main control line ; and a third pilot controlled valve (22), which when opened connects the control pressure line (23) between the second nonreturn valve (21) and the first nonreturn valve (20) to the return line (19, 11) of the control system, the second and the third controlled nonreturn valves (21, 22) being alternately actuated open by way of the pilot valve (18) and, on loss of power, being kept in the respective switching position by the pilot valve (18) detained in its selected position.

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IPC 8 full level

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Cited by

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