

Load-compensated flow control block right on the cylinder

Stroking Cylinders Out/In at the Same Time Without Oscillations

Important features

- Can be used with single-acting and double-acting cylinders
- Non-adjustable flow control valves up to Q_{max} 6 l/min (adjustable models: contact Bucher)
- Equipped with differing flow control valves in the case of differential cylinders
- Function can be broadened by means of integrated pilot-operated check valves

Function

This flow control block enables parallel-connected cylinders to be extended and retracted at the same time without any oscillation. The load-compensated flow control blocks are mounted directly on the cylinder. Thanks to the meter-out load-compensated flow control valves, a very "stiff" system is created, and the cylinders can therefore be out-and-in-stroked without oscillations. The cylinder position is maintained either by the tractor valve (spool-valve leakage) or by leak-free pilot-operated check valves incorporated in the block. This type of control system is particularly interesting when four or more cylinders need to be operated simultaneously. The synchronisation is ensured by the accuracy of

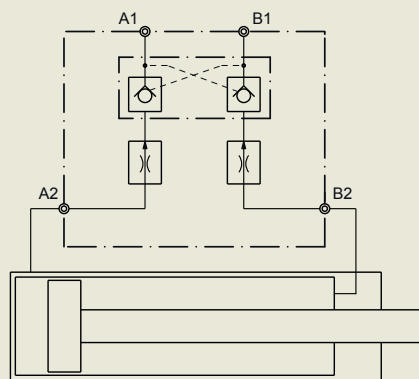
the flow control valves, but over-supply of flow is always needed (available flow always more than total demand). Stroke deviations in the cylinders can be corrected by fully extending them. The re-synchronisation takes place at the full flow rate without any delay.

Applications

- Folding the booms on field sprayers
- Hydraulic depth control of tillage equipment
- Folding and unfolding when changing from field to road

Your advantages

- Very easy operation thanks to highly accurate flow division
- Controlled and oscillation-free movement of the respective function
- Reduced space requirements and greatly reduced pipe/hose lengths by mounting directly on the cylinder
- Precise positioning without additional valves thanks to low-leakage seat valve construction



Technical Data / Circuit Diagrams

Variant 1:
With single-acting cylinder

Pressure-independent flow control in flow and return.

For individually selectable lifting and lowering speed.

Q_{max} 6 l/min, p_{max} 350 bar

Reference: STB MR VW RW

Variant 2:
With double-acting cylinder

Pressure-independent drain-side actuating flow control in A and B with bypass check valve.

For different retraction and extension speed.

Q_{max} 6 l/min, p_{max} 350 bar

Reference: STB SP-GESTAENGE

Variant 3:
With double-acting cylinder

Pressure-independent drain-side actuating flow control in A and B with bypass check valve and hydraulically pilot-operated check valve.

For different retraction and extension speed and tight-seating positioning of the cylinder.

Q_{max} 6 l/min, p_{max} 350 bar

Reference: STB ZYL SPERRV

Variant 4:
With double-acting cylinder

Pressure-independent drain-side actuating flow control in A and B without bypass check valve but with hydraulically pilot-operated check valve.

For identical retraction and extension speed and tight-seating positioning of the cylinder.

Q_{max} 6 l/min, p_{max} 210 bar

Reference: STB ZSV

