

Marking machine

Title

- Indirect actuation of a double-acting cylinder
- Operating a 5/2-way pneumatic double pilot valve
- Application of a shuttle valve (OR-gate)
- Realising that an actuator can be influenced via an OR-connection as well as an AND connection
- Application of a 3/2-way roller lever valve

Training aims

- Drawing the displacement-step diagram (with signal lines)
- Designing and drawing the circuit diagram
- Comparing one's own solution to the one proposed
- Construction of circuit
- Function check
- Follow up
- Dismantling and orderly replacement of components

Problem

Problem description Surveyor's measuring rods in 3 or 5 m length are marked in red with 200 mm graduations. There is a choice of two push buttons to start the forward movement of the measuring rods via cylinder (1A), which has the exhaust air throttled. The idle stroke, also started by a push button, can only take place when the double-acting cylinder (1A) has reached its forward end position.



