

Use

The electric actuated control valves SVE-2 and SVE-3 helps to supply both main lines A I and A II of dual line central lubrication systems. The actuation is effected alternately. For this purpose, the pump outlet is connected to connection P.

The lubricant return of relieved main line is effected from the connection R to the reservoir.

The accessory connections A I and A II are planned for the connection of e.g. pressure gauges.

An LED indicates the pressurized main lines A I or A II by permanently glowing green.

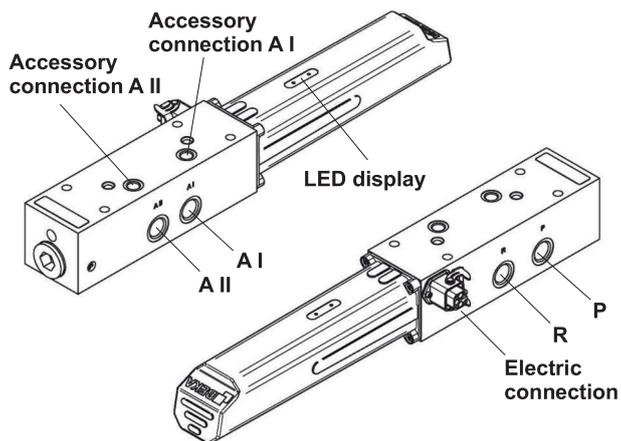
In the SVE-3 version, the middle position (both main lines pressure-relieved) is additionally indicated by a blue LED.

Due to the separation of piston controls of the control channels, there are no dead spots that could collect possible residuals of hardened grease.

In consequence of large channel cross sections, the pressure difference between the control valves is very low. This favours a use at low temperatures.

Recommendation of use

The electric controlled 4/2 and 4/3-way control valves are especially used in systems, that have no compressed air for the actuation of devices.



Technical data

Electric data

Nominal voltage:	24 V DC
Voltage range:	18 to 24 V DC
Charging rate:	4 A at 24 V DC

Mechanic data

Volume flow:	$Q_{max} = 24 \text{ L/min}$
Operating pressure:	400 bar
Lubricant:	oil up to 20.000 mm ² /s grease up to NLGI-cl. 2 (or on demand)
Housing material connection block:	steel
Sealings	NBR
Temperature range:	- 40 °C to 60 °C
Weight:	approx. 10 kg

Operation of SVE-2

The superior control sends a signal to the motor of the device. This can either be effected by brief impulse or a permanent signal. The motor actuates a control piston into direction A I (In1) until the signal outlet 1 (OUT 1) reaches the final position and indicates this to the superior control.

The superior control sends a signal for switching over to the motor of the device. The control piston is now actuated into direction A II (IN2) until the signal outlet 2 (OUT2) of the device, indicates the final position to the superior control. Now the pump is activated and the main pressure line A II is pressurized until the pressure switch at the end of the main pressure line A II indicates the pressurization to the superior control.

Now the pump is switched off and the lubrication cycle for both lines is finished. The superior control is in pause mode.

Operation of SVE-3

The superior control sends a signal to the motor of the device. This signal must be a permanent signal. The motor activates the control piston towards direction A I (IN1) while there is an active signal. Reaching the end position is signaled to the superior control by output 1 (OUT 1).

Now the pump is activated and the main pressure line A I is pressurized until the pressure switch at the main pressure line end of A I signals the pressurization to the superior control. The pump is switched off.

As long as the signal is still active, the control piston remains in end position. It returns into middle position when the signal stops. Both main pressure lines are relieved then. A delay time (to be defined by the customer) begins in order to ensure that the main pressure lines are relieved. Duration of that delay time depends on different parameters (e.g. temperature, length of lines, lubricant and further).

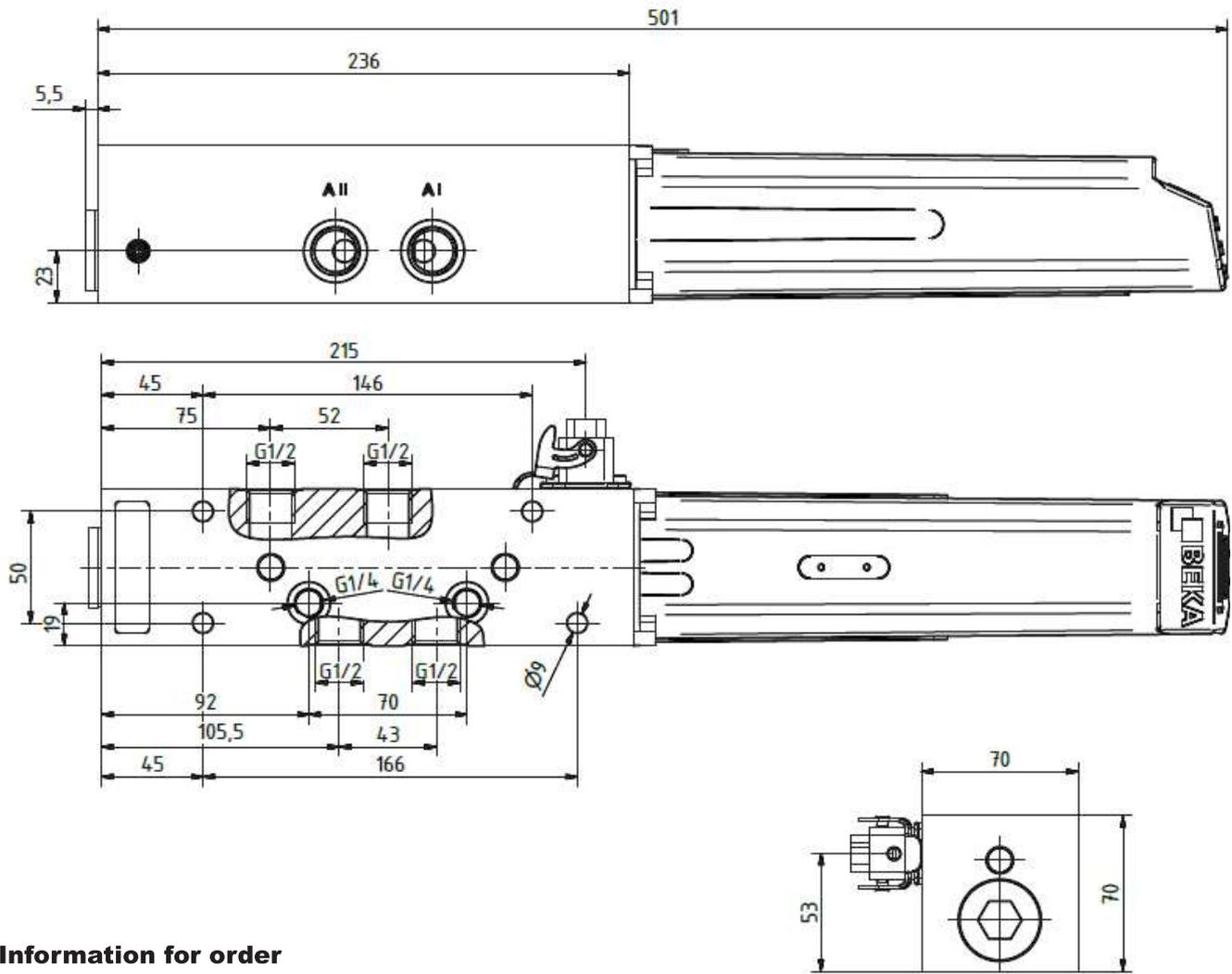
After the delay time, the superior control must send a signal for switching over to the motor of the device. The motor activates the control piston towards A II (IN2) as long as there is an active signal. Reaching the end position is signalled by output 2 (OUT 2) to the superior control.

Now the pump is activated and the main pressure line A II is pressurized until the pressure switch at the end of main pressure line A II indicates the pressurization to the superior control.

The pump is switched off and the signal for activation of the control piston must stop. The control piston returns into middle position (again pressure relief of both main lines).

The lubrication cycle for both lines is finished. The superior control is in pause mode.

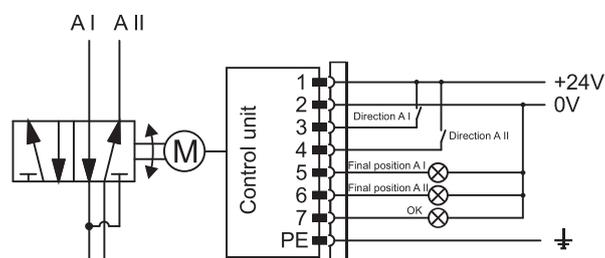
Dimensional drawing:



Information for order

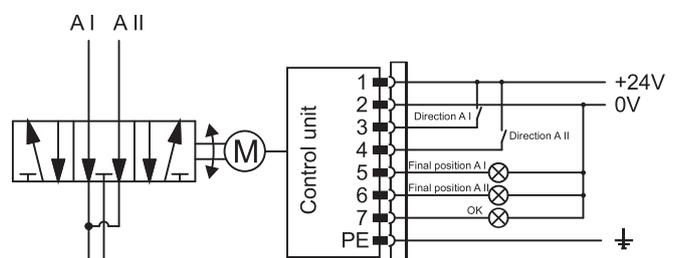
Article-no. SVE-2: 10117816
Article-no. SVE-3: 10117596

Wiring diagram SVE-2



- 1 = +24 V
- 2 = 0V
- 3 = IN 1 (Motor active, direction A I, +24V)
- 4 = IN 2 (Motor active, direction A II, +24V)

Wiring diagram SVE-3



- 5 = OUT 1 (Final position A I reached, +24V)
- 6 = OUT 2 (Final position A II reached, +24V)
- 7 = OK (No error, +24V)
- PE

