

Changeover valve with actuator or manual operation  
Mounting- and operating instruction

- Short manipulating time
- Compact design
- Low pressure loss
- No backstroke within the tube system



## Technical Data

**Supply:**  
210 ... 250V (AC),  
50 ... 60Hz  
**Protection type:** IP 65  
**Tube diameter:**  
50mm / DN 40  
63 mm / DN 50  
**Material:**  
Housing: Plastics  
PC-valve/bonded socket  
joint: PVC  
Sealing: PTFE/EPDM  
**Operating pressure:**  
max. 10 bar at 20°C,  
max. 3 bar at 60°C  
**Operating temp.:** 0 ...  
60 °C  
**Manipulating time:**  
90 sec / 90°  
**Actuator:**  
Manual operation (SV36),  
electromotive (SVA37)



## Range of application

The 3-way-valve SV(A)37 is predominantly used in swimming pools. With the help of this valve, other pools and bypasses can be connected in zones. Moreover, according to the requirements individual equipment can be switched-on or switched-out. Due to the choice of the used material and sealings the SV(A)37 is suitable for various liquids, like e.g. chlorinated water, water-glycol mixtures, and therefore can be used multi-purposely.

## Functioning

The 3-way-valve is activated by means of a 2-pole control contact. Depending on the setting of the control contact, the actuator turns the valve ball forwards or backwards until the final stage. During the manipulating process the ball can't be stopped in an intermediate position (SVA37), this can only be carried out manually (SV36).

## Order indications

### RESOL SVA37 - with actuator

DN40 (bonded socket joint connections, PVC 50mm)

Art. Nr.: 270 003 70

DN50 (bonded socket joint connections, PVC 63mm)

Art. Nr.: 270 003 80

### RESOL SV36 - manual

DN40 (bonded socket joint connection, PVC 50mm)

Art. Nr.: 270 002 20

DN50 (bonded socket joint connection, PVC 63mm)

Art. Nr.: 270 002 30

**Thank you for buying a RESOL product.**  
**Please read this manual carefully in order to put this controller to the best possible use..**

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## Imprint

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Editor: RESOL - Elektronische Regelungen GmbH

## Important notice

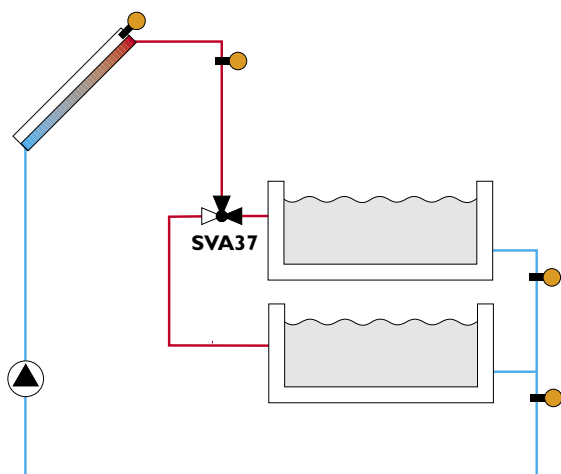
All descriptions and drawings contained in this manual have been prepared to the best of our knowledge and belief. The drawings in this manual are for the purpose of example and should be used at your own risk. We cannot be held responsible for any errors.

## Please note:

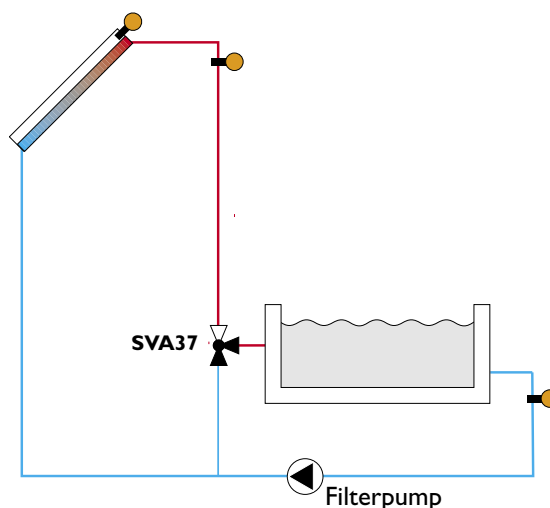
Use only your own calculations and plannings due to the current standards and DIN regulations as a basis for your projects. No responsibility is taken for the accuracy of the drawings and texts included in this manual, they are exclusively for the purpose of example. Use at your own risk. We cannot be held responsible for improper, incomplete or wrong information and the possible damages resulting from this.

Subject to change without notice. Errors excepted.

## Application examples



In this application example the valve SVA37 is used for a volume flow connection for two swimming pools. If the switch-on conditions for one of the swimming pools are met, the controller activates the pump and at the same time the valve will be switched-over accordingly. If the loading conditions are no longer met, the valve switches-on.



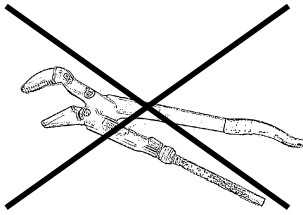
In this application example the valve SVA37 is used together with 1 swimming pool. If the switch-on conditions are met, the controller activates the valve and the collector circuit. If the loading conditions are no longer met, the SVA37 sets the valve back to the filter circuit.

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## 1. Installation and Mounting

### Installation into a

- Unscrew the connecting nuts and push them onto the designated tube ends.
- The terminals have then to be glued- or screwed-on.
- Mount the housing between the terminals.
- For an optimal sealing the connecting nuts have to be screwed down „hand hot“ (don't use any tools at all!).



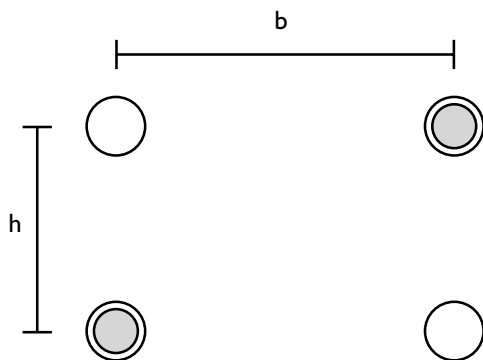
The bonding of the flange sleeves to the tube ends has to be carried out with reasonable care. Make sure that the adhesive or the solvent doesn't come in contact with the ball or the valve sealings.

When using inserted nuts, avoid a connection to external ball-screw threads as well as the using of hemp oakum or something similar to it.

The valve must not be canted. When tightening the connecting nut don't use any tools (**keys, gaspipe pliers etc.**) **at all as this could cause an excessive clamp torque** on the ball and do result in a failure.

If you should take off the actuator during the installation, make sure that the actuator is in the correct position to the flow direction of the valve when putting it on again.

The set flow direction of the valve is marked by two lines on the sticking out stub shaft. The actuator is marked by 2 red dots. These have to be congruent with the line-markings when putting the actuator on again.



For a fixed installation use the designated boreholes on the rear side of the valve housing.

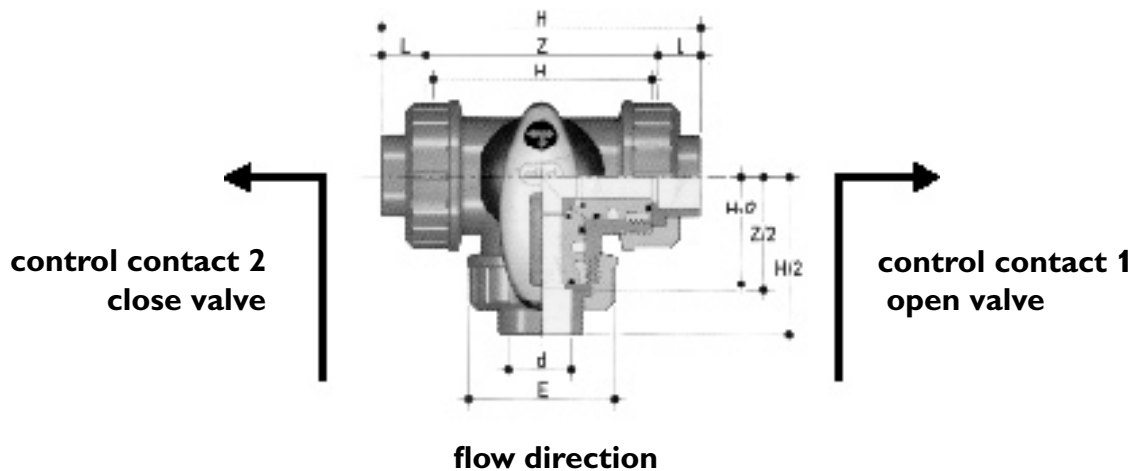
#### DN40:

b = 53 mm  
h = 28 mm  
screw thread: M6

#### DN50:

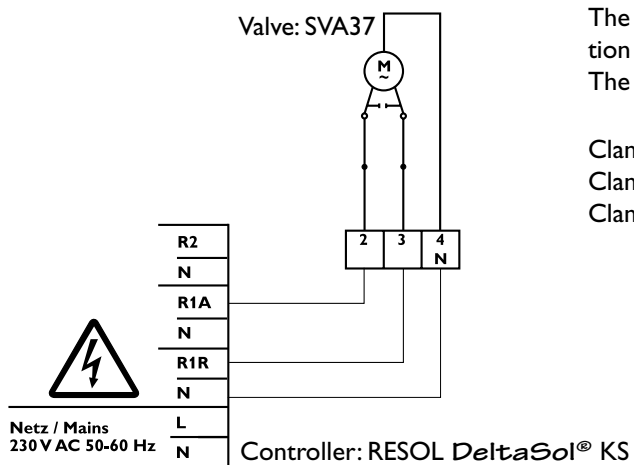
b = 58 mm  
h = 35 mm  
screw thread: M6

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DN	40	50
PN	16	16
E	100	122
H	219	266,5
H <sub>1</sub>	148	179
L	31	38
Z	157	190,5

## 2. Electrical connection



The connection scheme exemplifies the SVA37 in combination with a RESOL DeltaSol® KS controller. The connection is to be carried out as follows:

- Clamp 2: Control contact 1 „on“
- Clamp 3: Control contact 2 „off“
- Clamp 4: Neutral conductor

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### 3. Reversible actuator



**For experts only !**

When mounting the valve a coupling has to be provided, in order to compensate for a possible mismatch of driveshafts and actuator shafts. **Axial and radial forces on both shafts are to be avoided.**

The mounting position is arbitrary, the flange port and the high-strength cable shouldn't be up. Protection type IP 65. The actuator should be easily accessible and be mounted with sufficient space for taking off the gear flap. Make sure that the max. ambient temperature is -10 ... +50 °C, otherwise take action to adjust it.

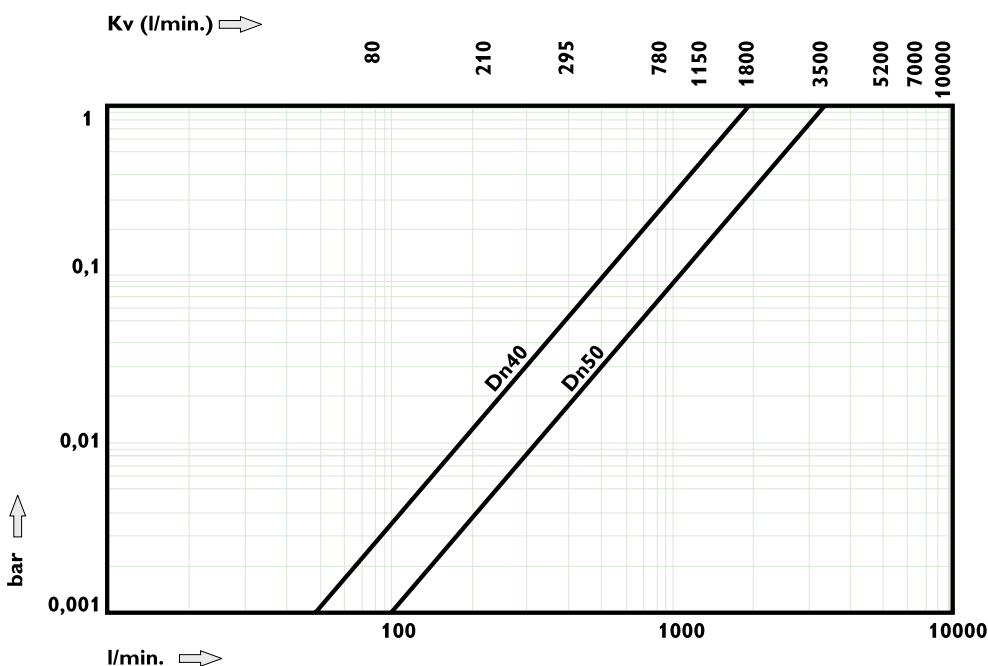
The connection of a spark-extinguishing condenser is not admissible as this way the stability of the rolling direction can no longer be guaranteed. For a contactless activation (solid state final stage) an overhead ignition has to be avoided in order to prevent a possible welding of the end switch contacts.

60 Hz-Operation:

On principle all AC activation can be operated with 60 Hz instead of 50 Hz. In comparison to the 50 Hz operation, the runtime is shortened by 20% , the torque is reduced by 20%. The rolling direction stability is lower but still within the scope of tolerance.

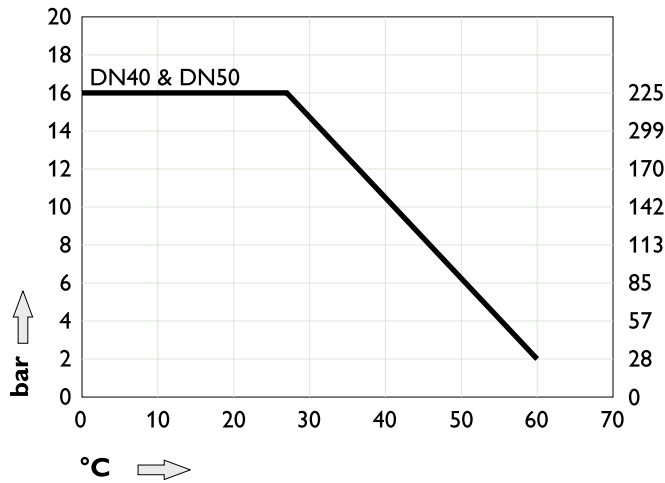
When using reversible actuators with AC voltage keep in mind that: The adjusting commands „open“ and „close“ may only be connected separately. A simultaneous connection a pendulum of the motor appears. The continuous reloading of the operating condenser causes high voltage which result in a welding of the end switch contacts. **For a parallel operation of several actuators, each actuator is to be connected via a separate contact.** By this an interaction of the motors via the operating condensers is being avoided. Parallel operation without separators can cause a reversion of the rolling direction, a damage to condenser and welding of the end switch contacts. By using RESOL swimming pool or difference controllers a simultaneous actuation of „open“ and „close“ is avoided.

### 4. Pressure loss



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## 5. Operating pressure



## 6. Operation

Before starting up the system make sure there are no sand or other impurities as otherwise the ball will be damaged and the tightness of the valve can be affected.

in order to prevent an unexpected backstroke in the tube. The installation and mounting has to be carried out by staff specialised in bonded joint or threading.

When operating the ball valve manually avoid jerky motions

## 7. Maintenance



**Attention!**  
Please ensure separation from power supply voltage before opening the housing!

Maintenance work has only be effected in case of switched-off actuator. Normal operation provided the actuators are oiled maintenance free for their total life.

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## Notes

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## Notes

**Your distributor:**