

Rotary actuator for zone valves

- · Torque motor 1 Nm
- Nominal voltage AC/DC 24 V
- Control Open/close, 3-point
- Snap-assembly of the actuator
- · Flow setting variable



Technical data		
Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
	Power consumption in operation	0.3 W
	Power consumption in rest position	0.2 W
	Power consumption for wire sizing	0.6 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	1 Nm
	Manual override	with actuator (clicked out)
	Running time motor	75 s / 90°
	Sound power level, motor	35 dB(A)
	Position indication	Yes
	Flow setting	see product features
Safety	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP40
	EMC	CE according to 2014/30/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage supply / control	0.8 kV
	Control pollution degree	2
	Ambient temperature	540°C
	Storage temperature	-4080°C
	Ambient humidity	Max. 95% r.H., non-condensing
	Servicing	maintenance-free

Safety notes



Weight

Weight

• This device has been designed for use in stationary heating, ventilation and airconditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.

0.21 kg

- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation
 or aggressive gases interfere directly with the actuator and that is ensured that the
 ambient conditions remain at any time within the thresholds according to the data
 sheet.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- · Cables must not be removed from the device.
- The device contains electrical and electronic components and must not be disposed
 of as household refuse. All locally valid regulations and requirements must be
 observed.



Product features

Simple direct mounting Tool-free snap assembly.

The actuator can be plugged on the valve by hand (Caution! Just vertical movements).

Pins must match the holes on the flange.

The mounting orientation in relation to the valve can be selected in 180° increments.

(Possible two times)

Manual override

Click out the actuator and rotate the valve stem with the help of the actuator.

Adjustable angle of rotation

The angle of rotation of the actuator can be changed by clip in 2.5 $^{\circ}$ increments. This is

used to set the maximum flow rate of the valve.

High functional reliability

The actuator is overload protected, requires no limit switches and automatically stops

when the end stop is reached.

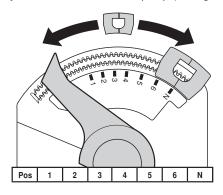
Flow setting

 $\label{eq:conditional} Adjustable \ kv-values \ (C2..Q-..,\ C4..Q-..)\ /\ V'max-values \ (C2..QP(T)-..) \ are \ given \ in \ the$

respective zone valve data sheets.

2-way valve: Remove end stop clip and place at desired position.

3-way valve: Remove end stop clip (change-over application).



Accessories

	Description	Туре
Mechanical accessories	Spindle extension CQ for cooling applications only	ZCQ-E
	Housing cover CQ, Colour: RAL-white	ZCQ-W

Electrical installation

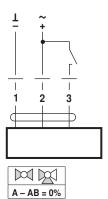


Notes

- Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.

Wiring diagrams

AC/DC 24 V, open/close



Cable colours:

1 = black

2 = red3 = white A – AB = 0%

AC/DC 24 V, 3-point

Cable colours:

1 = black

2 = red

3 = white



Installation notes

Servicing

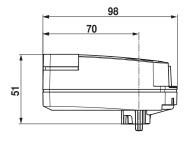
Ball valves and rotary actuators are maintenance-free.

Before any service work on the final controlling device is carried out, it is essential to isolate the rotary actuator from the power supply (by unplugging the electrical cable if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow all components to cool down first if necessary and always reduce the system pressure to ambient pressure level).

The system must not be returned to service until the ball valve and the rotary actuator have been correctly reassembled in accordance with the instructions and the pipeline has been refilled by professionally trained personnel.

Dimensions [mm]

Dimensional drawings





Further documentation

- The complete product range for water applications
- · Data sheet for zone valves
- · Installation instruction for zone valves and actuators
- · General notes for project planning