

Rotary actuator with emergency control function for ball valves

- Nominal torque 4 Nm
- Nominal voltage AC/DC 24 V
- · Control Open-close
- · with 2 integrated auxiliary switches
- Deenergised open (NO)



### **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	5 W
Power consumption in rest position	2.5 W
Power consumption for wire sizing	7 VA
Auxiliary switch	2 x SPDT, 1 x 10° / 1 x 85°
Switching capacity auxiliary switch	3 (0.5) A, AC 250 V (II Protective insulated)
Connection supply / control	Cable 1 m, 2 x 0.75 mm <sup>2</sup>
Connection auxiliary switch	Cable 1 m, 6 x 0.75 mm <sup>2</sup>
Parallel operation	Yes (note the performance data)
Torque motor	Min. 4 Nm
Torque spring return	Min. 4 Nm
Direction of rotation spring-return	Deenergised NO, valve open (A - AB = 100%)

#### **Functional data**

Parallel operation	Yes (note the performance data)
Torque motor	Min. 4 Nm
Torque spring return	Min. 4 Nm
Direction of rotation spring-return	Deenergised NO, valve open (A - AB = 100%)
Manual override	With hand crank, can be fixed in any position
Angle of rotation	95°
Running time motor	75 s / 90°
Running time emergency setting position	<20 s / 90°
Sound power level motor max.	50 dB(A)
Position indication	Mechanical
Service life	Min. 60,000 emergency positions
Protection class IEC/EN	III Safety extra-low voltage
Degree of protection IEC/EN	IP54
EMC	CE according to 2004/108/EC

### Safety

Service life	Min. 60,000 emergency positions
Protection class IEC/EN	III Safety extra-low voltage
Degree of protection IEC/EN	IP54
EMC	CE according to 2004/108/EC
Low voltage directive	CE according to 2006/95/EC
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
Rated impulse voltage auxiliary switch	2.5 kV
Control pollution degree	3
Ambient temperature	-3050°C
Non-operating temperature	-4080°C
Ambient humidity	95% r.h., non-condensing
Maintenance	Maintenance-free
Weight approx.	1.5 kg

# Weight

## Safety notes



- This device has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- 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.

# Rotary spring-return actuator, Open-close, AC/DC 24 V, 4 Nm, with 2 integrated auxiliary switches



## Safety notes

• The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

### **Product features**

Mode of operation The actuator moves the valve to the operating position at the same time as tensioning

the return spring. The valve is turned back to the emergency position by spring force

when the supply voltage is interrupted.

Simple direct mounting on the ball valve with only one screw. The mounting orientation **Direct mounting** 

in relation to the ball valve can be selected in 90° steps.

Manual override The ball valve can be manually operated and fixed in any position using a hand crank.

Unlocking is manual or automatic by applying the operating voltage.

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

when the end stop is reached.

Signalling The actuator has two auxiliary switches with fixed settings. They permit a 10° or 85°

angle of rotation to be signaled.

### **Electrical installation**

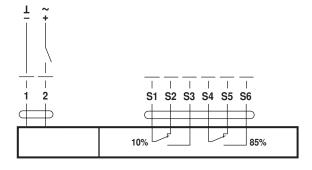


#### **Notes**

- 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 = redS1 = violet

S2 = red

S3 = white

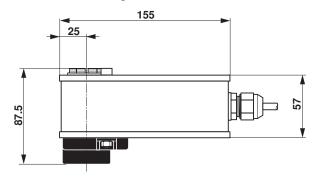
S4 = orange

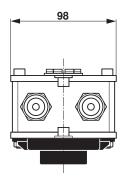
S5 = pink

S6 = grey

### **Dimensions** [mm]

#### **Dimensional drawings**





### **Further documentation**

- Overview Valve-actuator combinations
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- General notes for project planning