

# Rotary actuator with fail-safe for ball valves

- Torque motor 4 Nm
- Nominal voltage AC 230 V
- · Control Open/close
- Deenergised open (NO)
- · with 2 integrated auxiliary switches



Technical data		
Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 198264 V
	Power consumption in operation	5 W
	Power consumption in rest position	3 W
	Power consumption for wire sizing	7 VA
	Auxiliary switch	2 x SPDT, 1 x 10° / 1 x 85°
	Switching capacity auxiliary switch	1 mA3 A (0.5 A inductive), AC 250 V
	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)
Functional data	Torque motor	4 Nm
	Torque fail-safe	4 Nm
	Direction of motion fail-safe	Deenergised NO, valve open (A – AB = 100%)
	Manual override	hand lever
	Running time motor	75 s / 90°
	Running time fail-safe	<20 s / 90°
	Sound power level, motor	50 dB(A)
	Position indication	Mechanical
	Service life	Min. 60'000 fail-safe positions
Safety	Protection class IEC/EN	II reinforced insulation
	Protection class auxiliary switch IEC/EN	II reinforced insulation
	Degree of protection IEC/EN	IP54
	EMC	CE according to 2014/30/EU
	Low voltage directive	CE according to 2014/35/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1
	Rated impulse voltage supply / control	2.5 kV
	Rated impulse voltage auxiliary switch	4 kV
	Control pollution degree	3
	Ambient temperature	-3050°C
	Storage temperature	-4080°C
	Ambient humidity	Max. 95% r.H., non-condensing

maintenance-free

1.5 kg

Servicing

Weight

Weight

# Rotary actuator fail-safe, Open/close, AC 230 V, 4 Nm, with 2 integrated auxiliary switches



### Safety notes



- 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.
- 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.
- Caution: Power supply voltage!
- 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**

**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 fail-safe position by spring force

when the supply voltage is interrupted.

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

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

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

Unlocking is carried out manually or automatically 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**

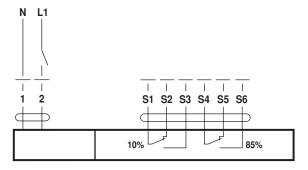


#### Notes

- · Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.

#### Wiring diagrams

AC 230 V, open/close



#### Cable colours:

1 = blue

2 = brown

S1 = violet

S2 = redS3 = white

S4 = orange

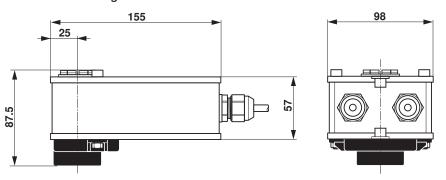
S5 = pink

S6 = grey



# Dimensions [mm]

# **Dimensional drawings**



## **Further documentation**

- The complete product range
   Data sheets for ball valves
   "" " instructions for a The complete product range for water applications
- Installation instructions for actuators and/or ball valves
- · General notes for project planning