

3-point rotary actuator with fail-safe for ball valves

- Torque motor 10 Nm
- Nominal voltage AC 100...240 V
- Control 3-point
- Deenergised closed (NC)



## **Technical data**

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Nominal voltage	AC 100240 V		
Nominal voltage frequency	50/60 Hz		
Nominal voltage range	AC 85265 V		
Power consumption in operation	4 W		
Power consumption in rest position	3 W		
Power consumption for wire sizing	15 VA		
Connection supply / control	Cable 1 m, 4 x 0.75 mm <sup>2</sup>		
Parallel operation	Yes (note the performance data)		

#### **Functional data**

Torque motor	10 Nm	
Torque fail-safe	10 Nm	
Direction of motion motor	Y = 0 (A - AB = 0%)	
Direction of motion fail-safe	Deenergised NC, valve closed (A – AB = 0%)	
Manual override	by means of hand crank and locking switch	
Running time motor	90 s / 90°	
Running time fail-safe	<20 s @ -2050°C / <60 s @ -30°C	
Sound power level, motor	45 dB(A)	
Position indication	Mechanical	
Service life	Min. 60'000 fail-safe positions	
Protection class IEC/EN	II, reinforced insulation	

# Safety data

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Protection class IEC/EN	II, reinforced insulation
Protection class UL	II, reinforced insulation
Degree of protection IEC/EN	IP54
Degree of protection NEMA/UL	NEMA 2
Enclosure	UL Enclosure Type 2
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
Certification UL	cULus according to UL60730-1A, UL60730-2-14 and CAN/CSA E60730-1
	The UL marking on the actuator depends on the production site, the device is UL-compliant in any case
Mode of operation	Type 1.AA
Rated impulse voltage supply / control	2.5 kV
Pollution degree	3
Ambient temperature	-3050°C
Storage temperature	-4080°C
Ambient humidity	Max. 95% RH, non-condensing
Servicing	maintenance-free

2.0 kg

Weight Weight

## Safety notes



- This device has been designed for use in stationary heating, ventilation and air-conditioning
  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 device and that it is ensured that the ambient
  conditions remain within the thresholds according to the data sheet at any time.
- · 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

By using the hand crank the valve can be operated manually and engaged with the locking switch at any position. Unlocking is carried out manually or automatically by applying the operating voltage.

Adjustable angle of rotation

Adjustable angle of rotation with mechanical end stops.

High functional reliability

The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

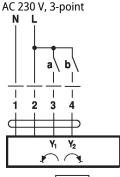
### **Electrical installation**

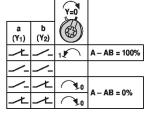


Caution: Power supply voltage!

Parallel connection of other actuators possible. Observe the performance data.

# Wiring diagrams





#### Cable colours:

1 = blue

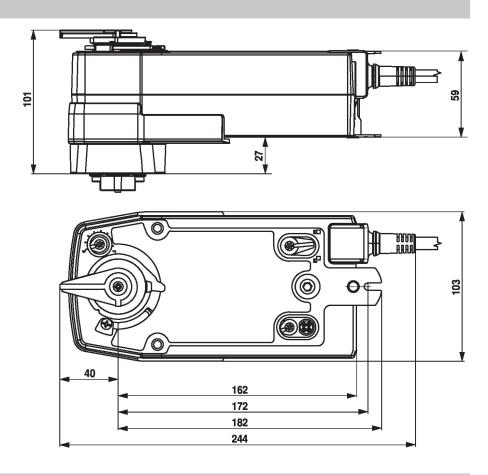
2 = brown

3 = white

4 = white



# **Dimensions**



# **Further documentation**

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