

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

- Torque motor 5 Nm
- Nominal voltage AC 100...240 V
- Control 3-point
- Deenergised open (NO)


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 100...240 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 198...264 V
	Power consumption in operation	5 W
	Power consumption in rest position	3 W
	Power consumption for wire sizing	16 VA
	Connection supply / control	Cable 1 m, 4 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	Torque motor	5 Nm
	Torque fail-safe	5 Nm
	Direction of motion motor	Y = 0 (A – AB = 0%)
	Direction of motion fail-safe	Deenergised NO, valve open (A – AB = 100%)
	Manual override	No
	Running time motor	35 s / 90°
	Running time fail-safe	<20 s / 90°
	Running time fail-safe note	@ -20...50°C / <60 s @ -30°C
	Sound power level, motor	45 dB(A)
	Position indication	Mechanical
	Service life	Min. 60'000 fail-safe positions
	<b>Safety</b>	Protection class IEC/EN
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 E60730-1:02
Certification UL note		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
Control pollution degree		3
Ambient temperature		-30...50°C
Storage temperature		-40...80°C
Ambient humidity		Max. 95% r.H., non-condensing
Servicing		maintenance-free
<b>Weight</b>	Weight	2.0 kg

**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 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.
- 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**

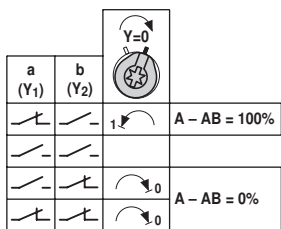
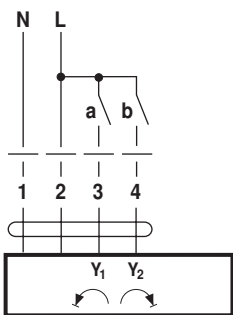


**Notes**

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

**Wiring diagrams**

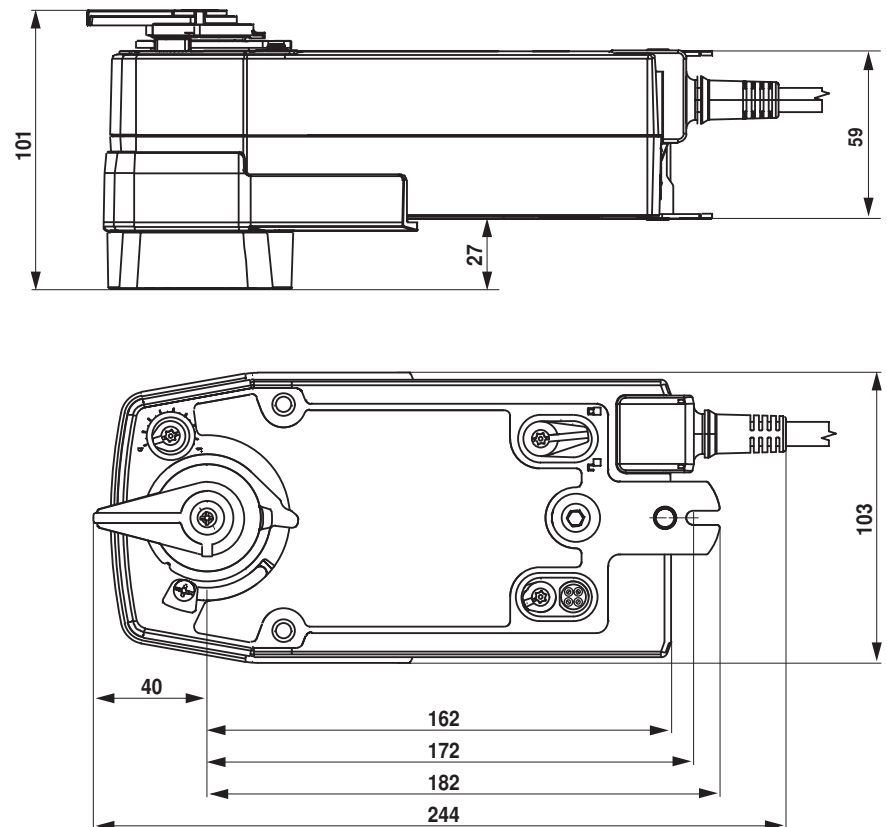
AC 230 V, 3-point



**Cable colours:**  
 1 = blue  
 2 = brown  
 3 = white  
 4 = white

## Dimensions [mm]

## Dimensional drawings



## 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