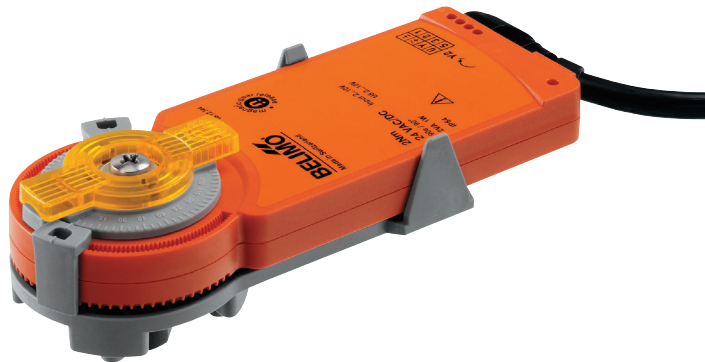# BELIMO®

Rotary actuator for ball valves
- Torque motor 2 Nm
- Nominal voltage AC 230 V
- Control Open/close, 3-point
- kv setting (angle of rotation limiting)

Technical data

Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85...265 V
	Power consumption in operation	1.5 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	3 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	2 Nm
	Manual override	with magnet
	Running time motor	75 s / 90°
	Sound power level, motor	35 dB(A)
	Position indication	Mechanically, pluggable
	Flow setting	Angle of rotation limitation starting with 90° (A - AB = 100%) in 2.5° steps (Scale: 25…100% of kvs)
Safety	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 E60730-1:02
	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
	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
Weight	Weight	0.25 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.
- 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	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	Manual override with magnet possible (gear disengagement as long as the magnet adheres to the magnet symbol). The Z-MA magnet for the gear disengagement is enclosed.
Adjustable angle of rotation	The rotary actuator can be adjusted beginning with 90° (A – AB = 100%) in 2.5° increments. The scale corresponds to 25...100% of the kvs value.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.

Accessories

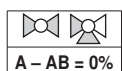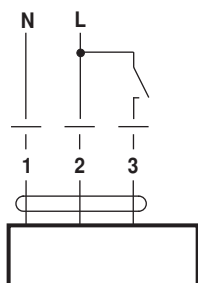|	Description	Type
Mechanical accessories	Gear disengagement magnet, Multipack 20 pcs.	Z-MA

Electrical installation

⚠️ **Notes**
- Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
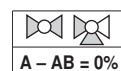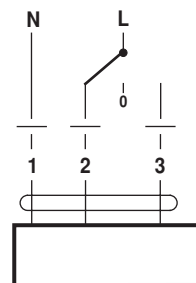
Wiring diagrams

AC 230 V, open/close

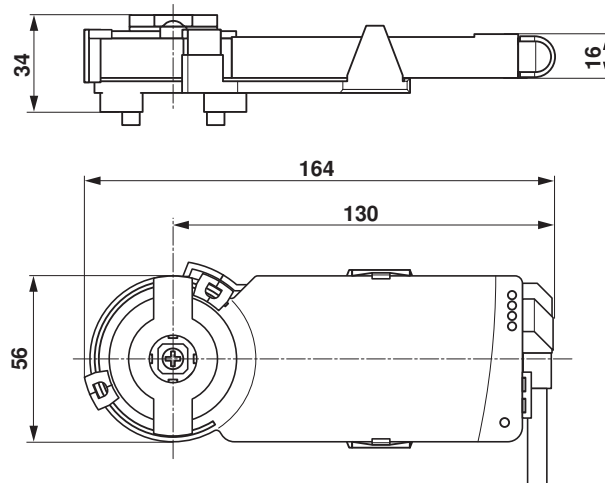**Cable colours:**
1 = blue
2 = brown
3 = white

AC 230 V, 3-point

Cable colours:
1 = blue
2 = brown
3 = 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