# Rotary actuator for ball valves

- Torque motor 2 Nm
- Nominal voltage AC 100...240 V
- Control Open/close, 3-point
- kv setting (angle of rotation limiting)



## Technical data

Electrical data	Nominal voltage	AC 100240 V
Liecti icai data	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85265 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 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
Functional data	·	<u> </u>
runctional data	Torque motor	2 Nm
	Manual override	with magnet
	Running time motor	75 s / 90°
	Sound power level, motor	35 dB(A)
	Position indication	Mechanical, pluggable
	Flow setting	Angle of rotation limitation starting with 90° (A - AB = 100%) in 2.5° steps (Scale: 25100% of
		kvs)
Cafeta data		**
Safety data	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
	UL Approval	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
	Type of action	Type 1
	Rated impulse voltage supply / control	2.5 kV
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-3050°C [-22122°F]
	Storage temperature	-4080°C [-40176°F]
	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 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.
- 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 train disengagement as long as the magnet adheres to the magnet symbol). The Z-MA magnet for the gear train 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**

Mechanical accessories

Description	Туре
Gear train disengagement magnet, Multipack 20 pcs.	Z-MA

## **Electrical installation**



Caution: Power supply voltage!

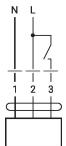
Parallel connection of other actuators possible. Observe the performance data.

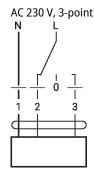
#### Wire colours:

- 1 = blue
- 2 = brown
- 3 = white

#### Wiring diagrams

AC 230 V, open/close

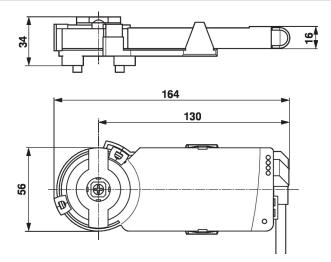




1	2	3	国阻
	_~	_/_	A - AB = 0%
~	~	~	A - AB = 100%
	_/_	_/_	stop
_~	_/_	~	A - AB = 100%



# **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