

Rotary actuator for butterfly valves

- Torque motor Max. 90 Nm
- Nominal voltage AC 100...240 V
- Control Open/close



Nominal voltage	AC 100240 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 85265 V
Power consumption in operation	5 W
Power consumption in rest position	2 W
Power consumption for wire sizing	9 VA
Connection supply / control	Cable 1 m, 3x 0.75 mm ²
Parallel operation	Yes (note the performance data)
Torque motor	Max. 90 Nm (not constant)
Manual override	with push-button, can be locked
Running time motor	150 s / 90°
Sound power level, motor	45 dB(A)
Position indication	Mechanical, integrated
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
Connection flange	F05
Weight	3.7 kg
	Nominal voltage frequency Nominal voltage range Power consumption in operation Power consumption for wire sizing Connection supply / control Parallel operation Torque motor Manual override Running time motor Sound power level, motor Position indication Protection class IEC/EN Protection class UL Degree of protection IEC/EN Degree of protection NEMA/UL Enclosure EMC Low voltage directive Certification IEC/EN UL Approval Type of action Rated impulse voltage supply / control Pollution degree Ambient humidity Ambient temperature Storage temperature Servicing Connection flange



Technical data

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: Mains voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The switch for changing the direction of rotation may not be adjusted.
- The angle of rotation is not permitted to be subjected to mechanical limitation. It is forbidden to alter the mechanical end stops.
- 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.
- Because of its non-constant torque, the actuator is neither suitable nor released for
 motorisation with valves from other manufacturers. No legal entitlement can be claimed,
 even after extensive testing. Belimo will not be held liable and will provide no warranty.

Product features

Simple direct mounting

Simple direct mounting on the butterfly valve. The mounting orientation in relation to the butterfly valve can be selected in 90° (angle) increments.

Manual override

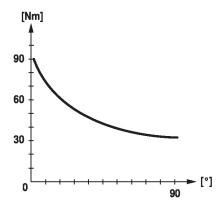
Manual override with push-button possible (the gear train is disengaged for as long as the button is pressed or remains locked).

High functional reliability

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

Torque not constant

Due to the non-linear torque characteristic the actuator can only be used for butterfly valves and not for other armatures.



Accessories

Electrical accessories	Description	Туре	
	Auxiliary switch 1x SPDT add-on	S1A	
	Auxiliary switch 2x SPDT add-on	S2A	
	Feedback potentiometer 140 Ω add-on	P140A	
	Feedback potentiometer 1 kΩ add-on	P1000A	



Accessories

Description	Туре
Feedback notentiometer 10 kO add-on	P10000A

Electrical installation

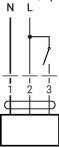


Caution: Mains voltage!

Wire colours:

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

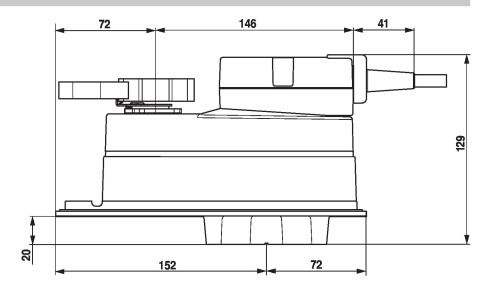
AC 230 V, open/close N L

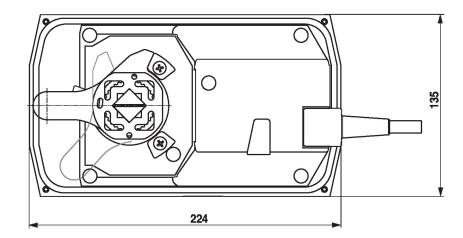


1	2	3	区区
⊸~L	⊸~L	→	A - AB = 0%
⊸~L	⊸^L	₽/L	A - AB = 100%



Dimensions





Further documentation

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