Rotary actuator for butterfly valves

- Torque motor Max. 90 Nm
- Nominal voltage AC/DC 24 V
- Control Open/close
- Running time motor 35 s

Technical data

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V
	Power consumption in operation	9 W
	Power consumption in rest position	2 W
	Power consumption for wire sizing	12 VA
	Connection supply / control	Cable 1 m, 3x 0.75 mm²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Max. 90 Nm (not constant)
	Manual override	with push-button, can be locked
	Running time motor	35 s / 90°
	Sound power level, motor	45 dB(A)
	Position indication	Mechanical, integrated
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Power source UL	Class 2 Supply
	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
	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	0.8 kV
	Pollution degree	3
	Ambient humidity	Max. 95% RH, non-condensing
	Ambient temperature	-30...50°C [-22...122°F]
	Storage temperature	-40...80°C [-40...176°F]
	Servicing	maintenance-free
Mechanical data	Connection flange	F07
Weight	Weight	3.8 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.
- 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.

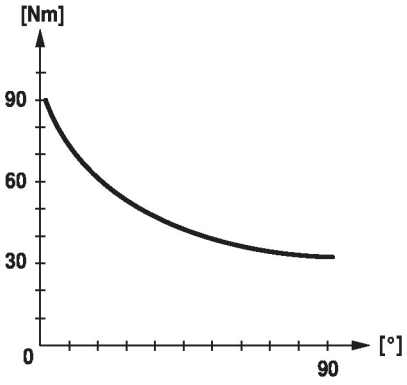
Product features

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

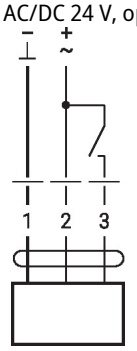
Description	Type
Auxiliary switch 1x SPDT add-on	S1A
Auxiliary switch 2x SPDT add-on	S2A
Feedback potentiometer 140 Ω add-on	P140A
Feedback potentiometer 1 kΩ add-on	P1000A
Feedback potentiometer 10 kΩ add-on	P10000A

Electrical installation

Supply from isolating transformer.

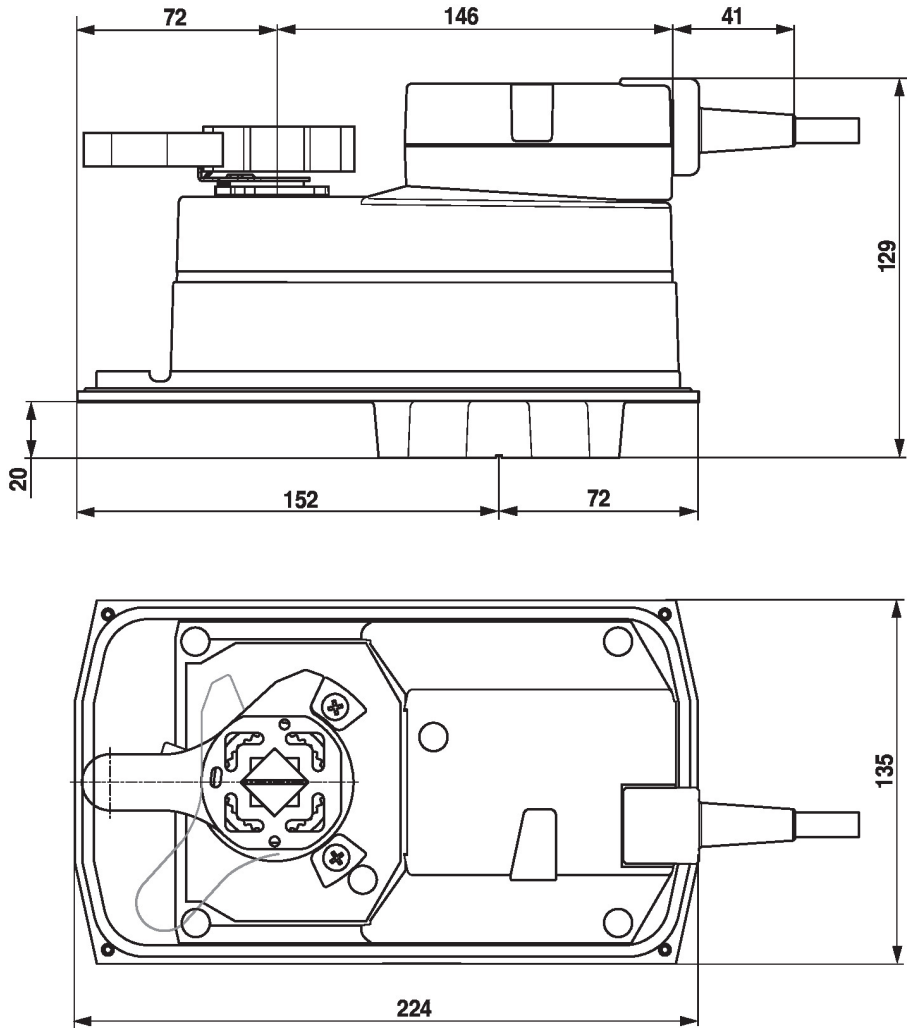
Wire colours:
1 = black
2 = red
3 = white

Wiring diagrams
AC/DC 24 V, open/close



1	2	3	
			A - AB = 0%
			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