Rotary actuator for butterfly valves for indoor applications
- Torque 90 Nm (not constant)
- Nominal voltage AC/DC 24 V
- Control: Open-close

Technical data

Electrical data	Nominal voltage	AC 24 V, 50/60 Hz / DC 24 V
	Nominal voltage range	AC 19.2 ... 28.8 V / DC 21.6 ... 28.8 V
	Power consumption In operation	9 W @ nominal torque
	At rest	2 W
	For wire sizing	12 VA
	Connection	Terminals 4 mm² (cable ⌀ 4 ... 10 mm)
	Parallel operation	No
Functional data	Torque	≤90 Nm @ nominal voltage (not constant)
	Manual override	Gearing latch disengaged with push-button, can be locked
	Running time	≤35 s / 90°⊲
	Sound power level	≤62 dB (A) (without butterfly valve)
	Position indication	Yes
Safety	Protection class	**III** Safety extra-low voltage UL Class 2 Supply
	Degree of protection	IP54 NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Certification	Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02
	Mode of operation	Type 1
	Rated impulse voltage	0.8 kV
	Control pollution degree	3
	Ambient temperature	–30 ... +50 °C
	Medium temperature	–20 ... +120 °C / +130 °C/1 h (in the butterfly valve)
	Non-operating temperature	–40 ... +80 °C
	Ambient humidity	95% r.h., non-condensating
	Maintenance	Maintenance-free
Dimensions / weight	Dimensions	See «Dimensions» on page 3
	Weight	Approx. 3.6 kg (without butterfly valve)

Rotary actuator for butterfly valves for indoor applications,
AC/DC 24 V, 90 Nm

BELIMO®

Safety notes

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- **The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.**
- **It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.**
- **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.**
- **The device contains electrical and electronic components and is not allowed to 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 BELIMO butterfly valves with ISO 5211-F07 mounting flange.
The mounting position in relation to the fitting can be selected in 90° ⊲ steps.

Manual override

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

High operational reliability

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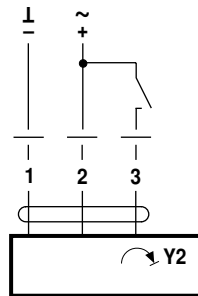
Accessories

	Description	Data sheet
Electrical accessories	Auxiliary switch S..A..	T2 - S..A..
	Feedback potentiometer P..A..	T2 - P..A..

Electrical installation

Wiring diagrams

Notes
- Connection via safety isolation transformer. ⚠
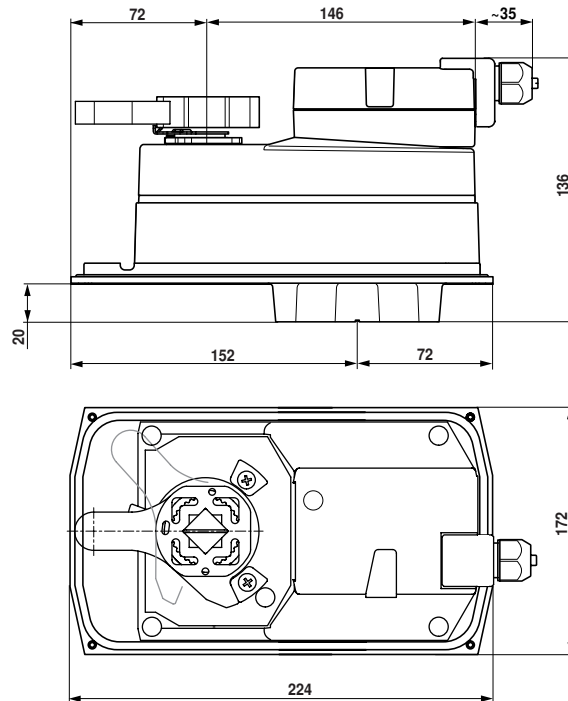- Direction of rotation switch is covered. Factory setting: direction of rotation Y2 (may not be changed to Y1)

⊥ ~
     +

1   2   3

Direction of rotation

Y1
Y2

Y2

Rotary actuator	Rotary valve
Y2	A – AB = 0%

Dimensions [mm]

Dimensional drawings

72   146   ~35

136

20

152   72

172

224
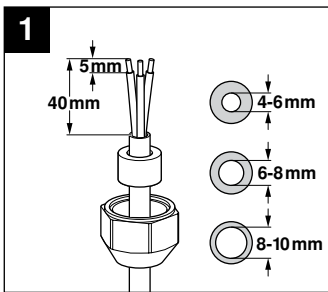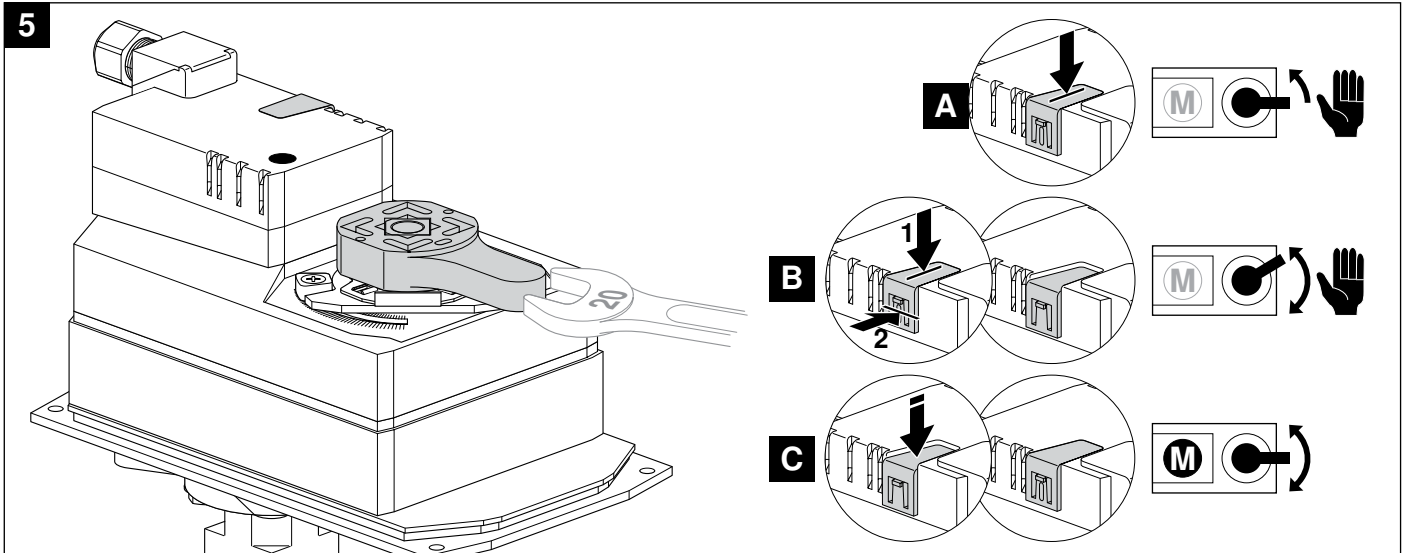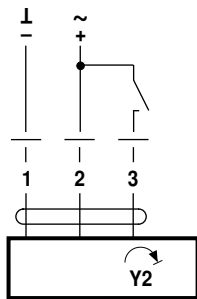
Further documentation
- Complete overview «The complete product range of water solutions»
- Data sheets, butterfly valves
- Installation instructions for actuators and/or butterfly valves, respectively
- Notes for project planning (hydraulic characteristic curves and circuits, installation regulations, commissioning, maintenance, etc.)
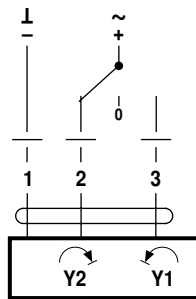
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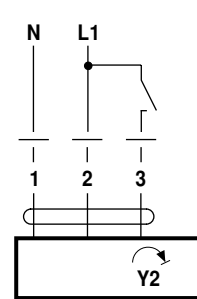
2

0%

3

F07

22Nm

13

4

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5

A [M] 🖐

B **1** **2** [M] 🖐

C **(M)**

1

5 mm
40 mm
4-6 mm
6-8 mm
8-10 mm

2

2
1

3

№ 1

4

1
max. 4 Nm
2

AC 24 V / DC 24 V

⊥ ~
− +

1   2   3

Y2

DR(C)24AX(-T)-7

⊥ ~
− +
0

1   2   3

Y2   Y1

DR24AX(-T)-7

AC 230 V

N   L1

1   2   3

Y2

DR230AX(-T)-7

N   L1
0

1   2   3

Y2   Y1
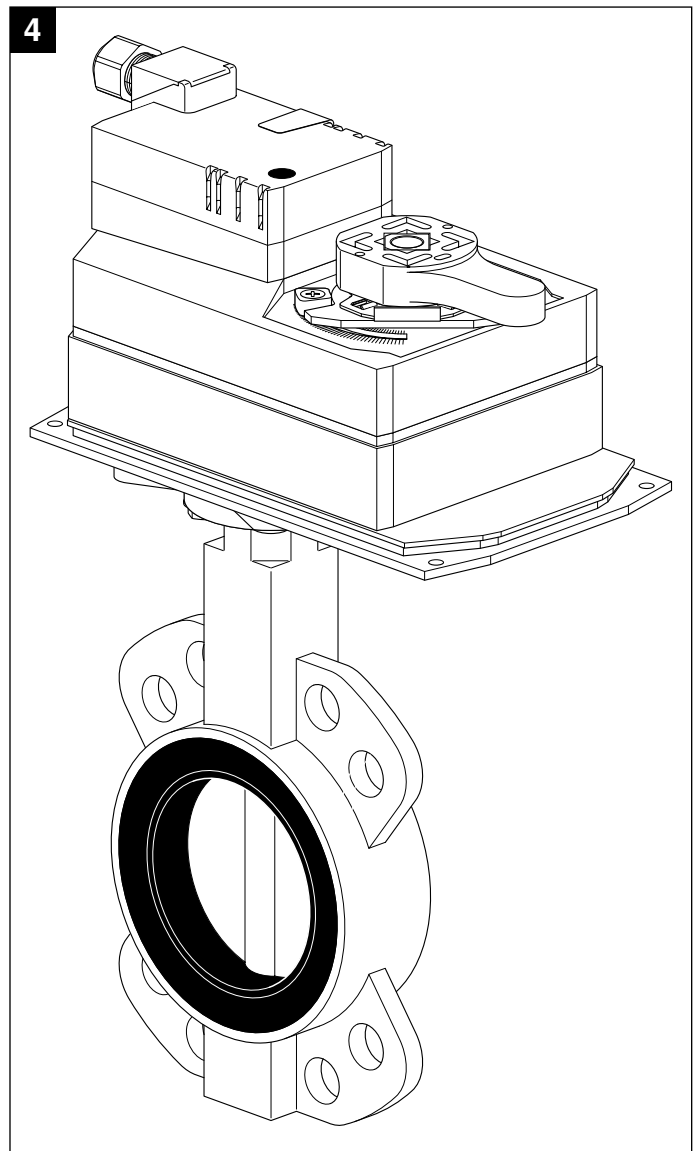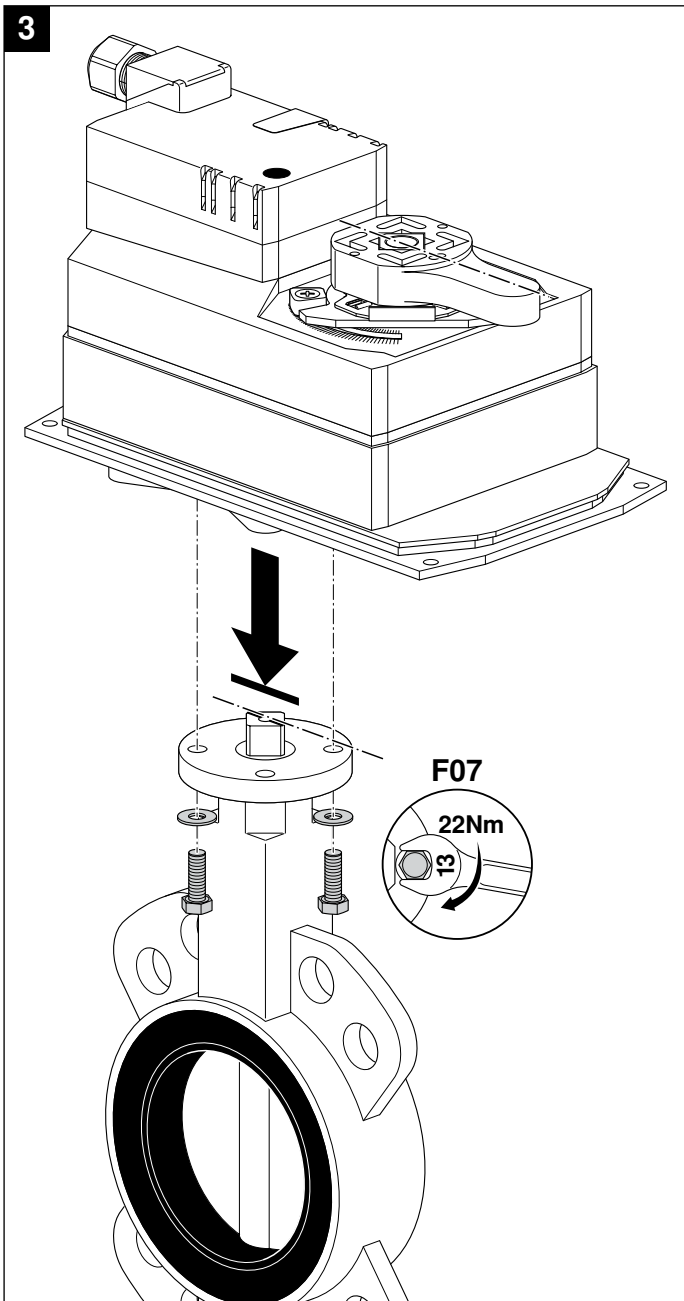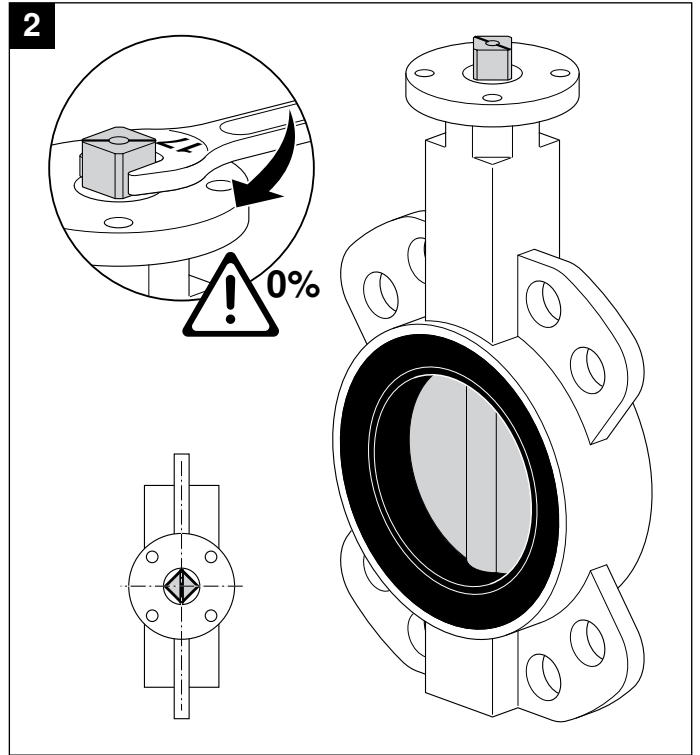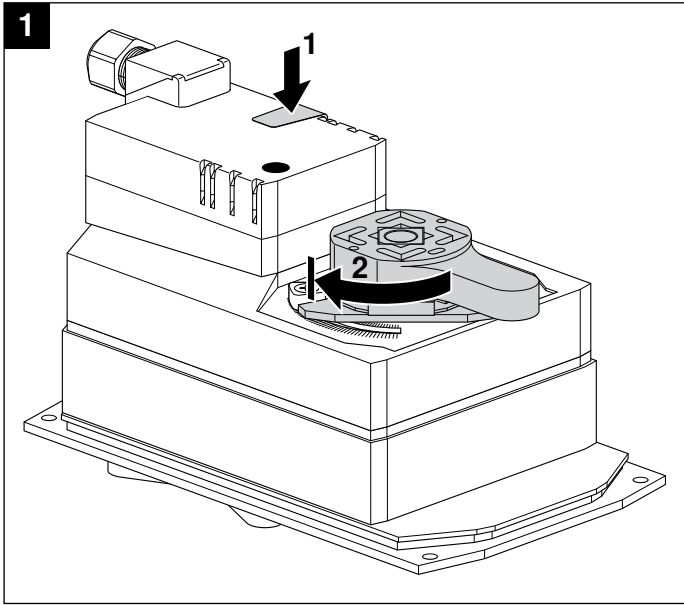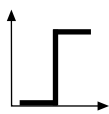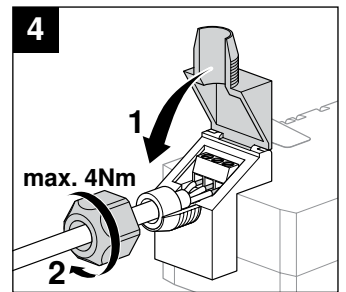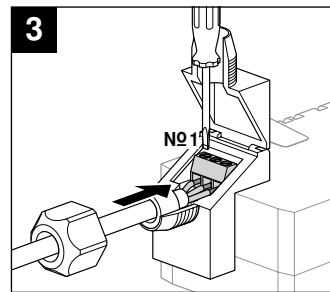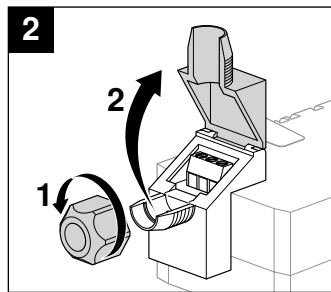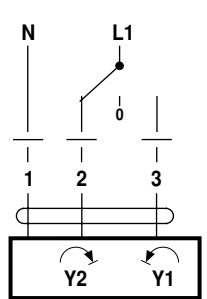
DR230AX(-T)-7

AC 24 V / DC 24 V

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− +

Y ◄ DC 0 ... 10 V
U ► DC 0 ... 10 V

1   2   3   5
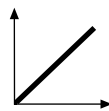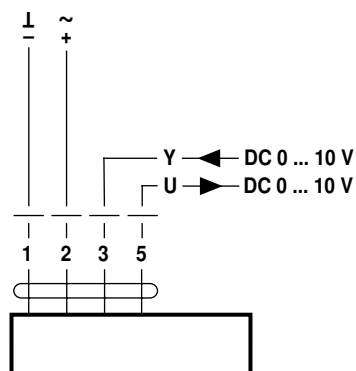
DRC24A(X)-MF(-T)-7

AC 24 V / DC 24 V

⊥ ~
− +

a / b

e.g. 1N 4007

U ►

1   2   3   5

DRC24A(X)-MF(-T)-7