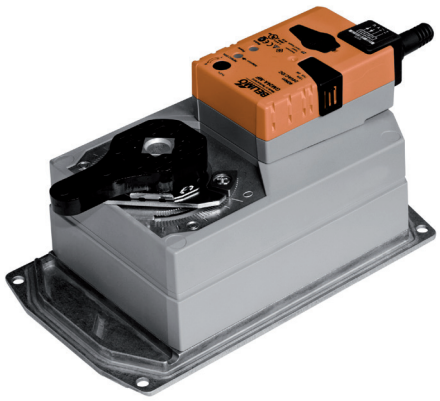
BELIMO

Technical data sheet DR230A-7

Rotary actuator for butterfly valves
- **Nominal torque <90 Nm (not constant)**
- **Nominal voltage AC 230 V**
- **Control Open-close**



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	5 W
	Power consumption in rest position	2 W
	Power consumption for wire sizing	9 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm²
	Parallel operation	No
Functional data	Torque motor	Max. <90 Nm (not constant)
	Manual override	Gear disengagement with push-button, can be locked
	Running time motor	150 s / 90°
	Sound power level motor	45 dB(A)
	Position indication	Mechanically (integrated)
Safety	Protection class IEC/EN	II Protective insulated
	Protection class UL	II Protective insulated
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	EMC	CE according to 2004/108/EC
	Low voltage directive	CE according to 2006/95/EC
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	cULus according to UL 60730-1A, UL 60730-2-14 and CAN/CSA E60730-1:02
	Mode of operation	Type 1
	Rated impulse voltage supply / control	2.5 kV
	Control pollution degree	3
	Ambient temperature	-30...50°C
	Non-operating temperature	-40...80°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Mechanical data	Connection flange	F07
Weight	Weight approx.	4.1 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.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied 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.

Safety notes

- 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

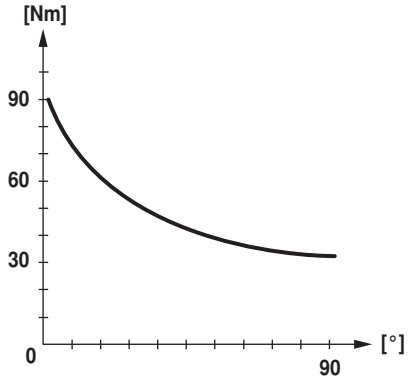
Simple direct mounting Simple direct mounting on the butterfly valve. The mounting orientation in relation to the butterfly valve can be selected in 90° (angle) increments.

Manual override Manual override with push-button possible (the gear 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.

Combination valve/actuator For valves with the following mechanical specifications in accordance with ISO 5211 F07:
- Square stem head SW = 17 mm for form-fit coupling of the rotary actuator.
- Hole circle d = 70 mm

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, add-on, 1 x SPDT	S1A
Auxiliary switch, add-on, 2 x SPDT	S2A
Feedback potentiometer 140 Ohm, add-on	P140A
Feedback potentiometer 200 Ohm, add-on	P200A
Feedback potentiometer 500 Ohm, add-on	P500A
Feedback potentiometer 1 kOhm, add-on	P1000A
Feedback potentiometer 2.8 kOhm, add-on	P2800A
Feedback potentiometer 5 kOhm, add-on	P5000A
Feedback potentiometer 10 kOhm, add-on	P10000A

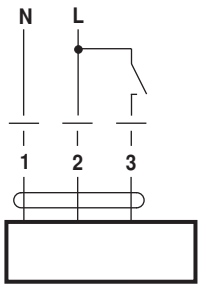
Electrical installation

Notes

- Caution: Power supply voltage!

Wiring diagrams

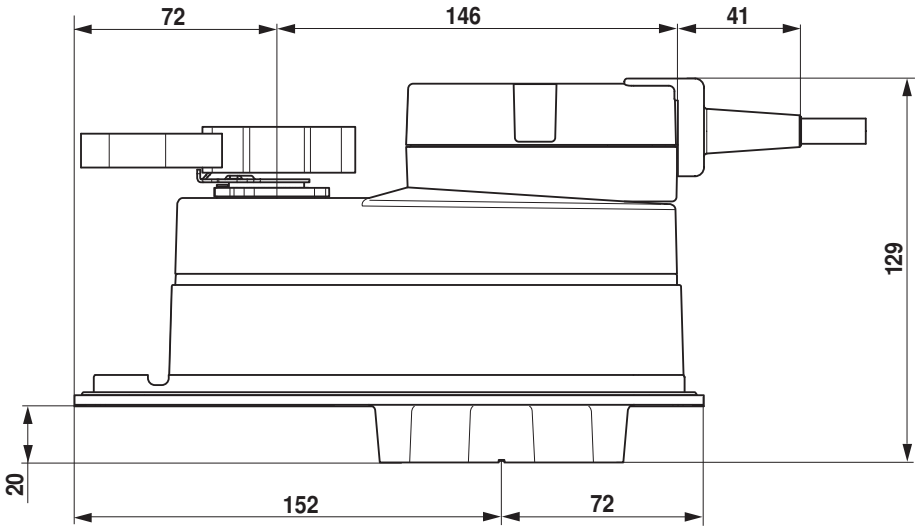
AC 230 V, open-close

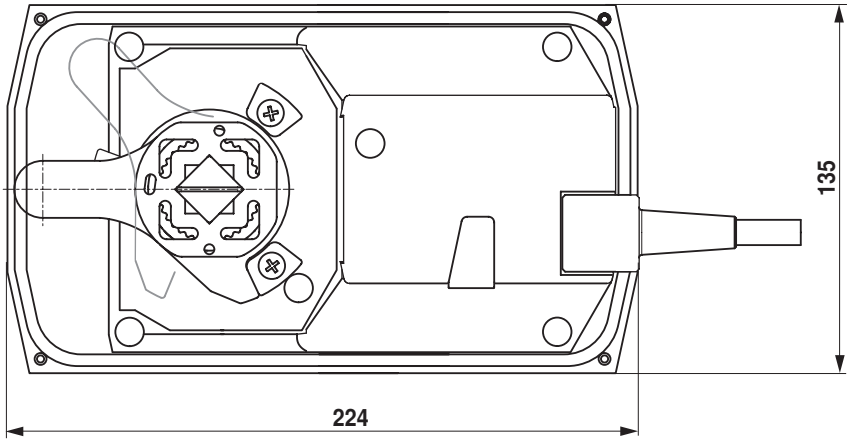


Cable colours:
1 = blue
2 = brown
3 = white

Dimensions [mm]

Dimensional drawings





Further documentation

- Overview Valve-actuator combinations
- Data sheets for butterfly valves
- Installation instructions for actuators and/or butterfly valves
- General notes for project planning