BELIMO

Technical data sheet DRC24G-7

Rotary actuator for butterfly valves
- **Nominal torque 90 Nm**
- **Nominal voltage AC/DC 24 V**
- **Control Open-close**
- **Running time motor 35 s**
- **Optimum weather protection for use outdoors**

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 21.6...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, 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	35 s / 90°
	Sound power level motor max.	62 dB(A)
	Position indication	Yes
Safety	Protection class IEC/EN	III Safety extra-low voltage
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP66
	Degree of protection NEMA/UL	NEMA 4, UL Enclosure Type 4
	EMC	CE according to 2004/108/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	0.8 kV
	Control pollution degree	4
	Ambient temperature	-30...50°C
	Non-operating temperature	-40...80°C
	Ambient humidity	100% r.h.
	Maintenance	Maintenance-free
Mechanical data	Connection flange	F07
Weight	Weight approx.	5.8 kg

Safety notes

- This device 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.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- Junction boxes must at least correspond with enclosure IP degree of protection!
- The cover of the protective housing may be opened for adjustment and servicing. When it is closed afterwards, the housing must seal tight (see installation instructions).
- The switch for changing the direction of rotation may not be adjusted.

Safety notes

- The angle of rotation is not permitted to be subjected to mechanical limitation. It is forbidden to alter the mechanical end stops.
- The device on the inside may only be opened in the manufacturer's factory. 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.
- The actuator is not designed for applications where chemical influences (gases, fluids) are present or for utilisation in corrosive environments in general.
- The actuator may not be used in plenary applications (e.g. suspended ceilings or raised floors).
- The materials used may be subjected to external influences (temperature, pressure, constructional fixture, effect of chemical substances, etc.), which cannot be simulated in laboratory tests or field trials. In case of doubt, we definitely recommend that you carry out a test. This information does not however imply any legal entitlement. BELIMO will not be held liable and will provide no warranty.
- If cables which are not authorised for UL (NEMA) Type 4 applications are guided out of the unit, then flexible metallic cable conduits or suitable threaded cable conduits of equal value are to be used.

Product features

Fields of application
The actuator is particularly suitable for utilisation in outdoor applications and is protected against the following weather conditions:
- UV radiation
- rain / snow
- dirt / dust
- Humidity
- Changing atmosphere / frequent and severe temperature fluctuations
(recommendation: use the actuator with integrated factory-installed heating which can be ordered separately to prevent internal condensation)

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).
The housing cover must be removed for manual override.

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

Adjustable angle of rotation
Adjustable angle of rotation with mechanical end stops. Standard setting 0 ... 90°. The housing cover must be removed to set the angle of rotation.

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

Accessories

	Description	Type
Electrical accessories	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
	Heating with mechanical humidistat HH24-MG	HH24-MG
	Heating with adjustable thermostat HT24-MG	HT24-MG

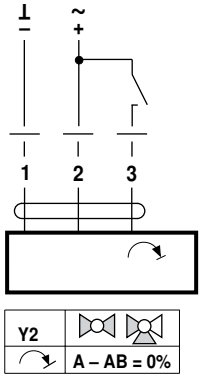
Electrical installation

Notes

- Connection via safety isolating transformer.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

Wiring diagrams

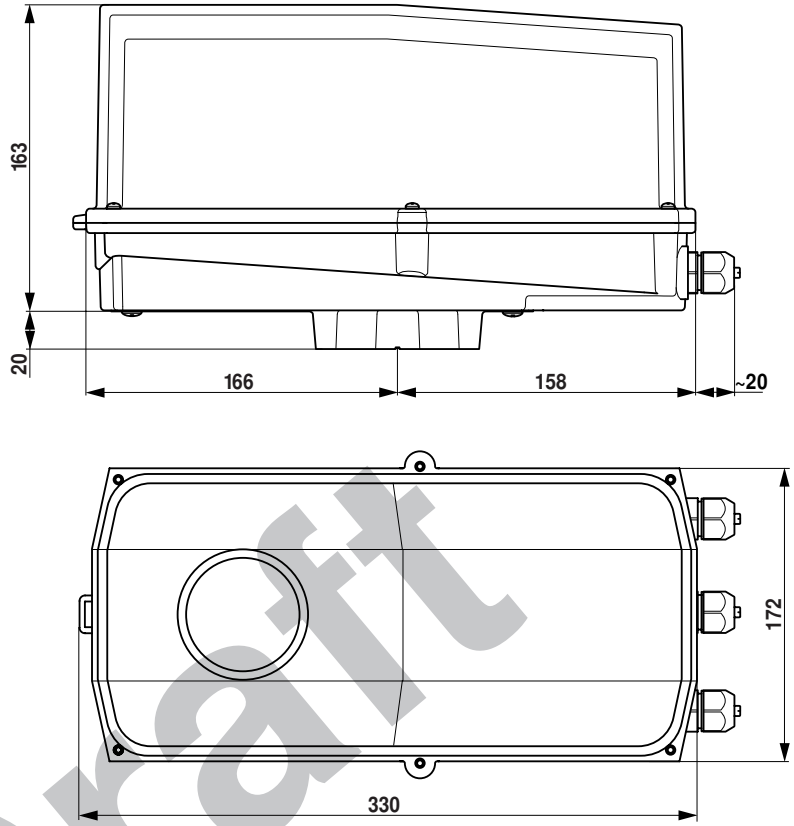
AC/DC 24 V, open-close



Cable colours:
1 = black
2 = red
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