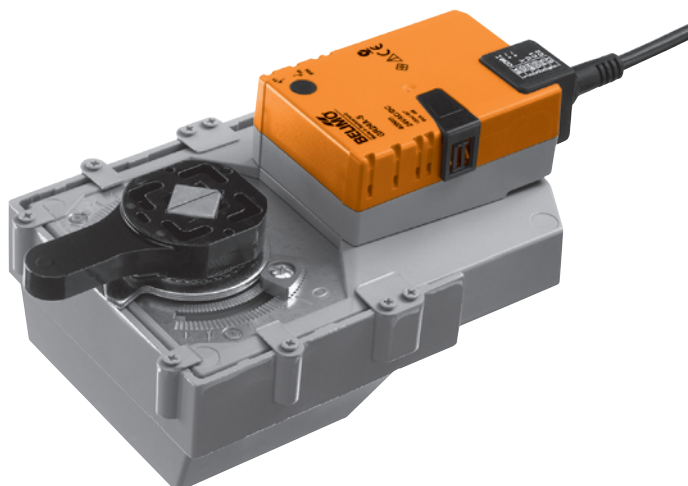


Modulating rotary actuator for butterfly valves with mounting flange ISO 5211-F05

- Torque 40 Nm
- Nominal voltage AC/DC 24 V
- Control: modulating DC 0 ... 10 V
- Position feedback DC 2 ... 10 V



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	4.5 W @ nominal torque
		At rest	1.5 W
	For wire sizing	6.5 VA	
	Connection	Cable 1 m, 4 x 0.75 mm ²	
	Parallel operation	Possible, note the performance data	
Functional data	Torque (nominal torque)	Min. 40 Nm @ nominal voltage	
	Control	Control signal Y	DC 0 ... 10 V, typical input impedance 100kΩ
		Operating range	DC 2 ... 10 V
	Position feedback	DC 2 ... 10 V, max. 1 mA (Measuring voltage U)	
	Position accuracy	±5%	
	Manual override	Gearing latch disengaged with pushbutton, can be locked	
	Angle of rotation	Max. 95°↔ at 10 V 90°↔ at 9.7 ... 9.75 V	
	Running time	150 s / 90°↔	
	Sound power level	Max. 45 dB (A) (without butterfly valve)	
	Position indication	Mechanical, pluggable	
Safety	Protection class	III Safety extra-low voltage / UL Class 2 Supply	
	Degree of protection	IP54 in any mounting position NEMA 2, UL Enclosure Type 2	
	EMC	CE in accordance with 2004/108/EU	
	Certification	cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02 Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14	
	Mode of operation	Type 1	
	Rated impulse voltage	0.8 kV	
	Control pollution degree	3	
	Ambient temperature	0 ... +50 °C	
	Medium temperature	-20 ... +120 °C 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 2	
	Weight	Approx. 2.5 kg	

Safety notes



- 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 only be operated by authorised personnel. The direction of rotation must not be reversed in a frost protection circuit.
- 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 cable must not be removed from the device.
- 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.

Product features

- Mode of operation** The actuator is controlled with a standard modulating signal of DC 0 ... 10 V and travels to the position defined by the control signal. Measuring voltage U serves for the electrical display of the actuator position 0 ... 100% and as slave control signal for other actuators.
- Simple direct mounting** Simple direct mounting on a butterfly valve with ISO 5211-F05 mounting flange. The mounting position in relation to the butterfly valve 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).
- Adjustable angle of rotation** Adjustable angle of rotation with mechanical end stops.
- High functional 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

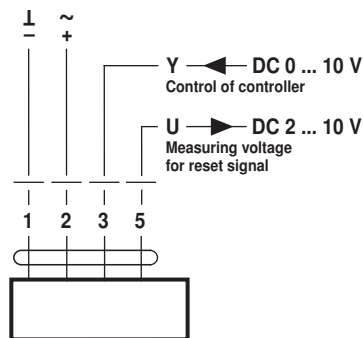
Notes

- Connect via safety isolation transformer.
- Other actuators can be connected in parallel. Note performance data for supply.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2

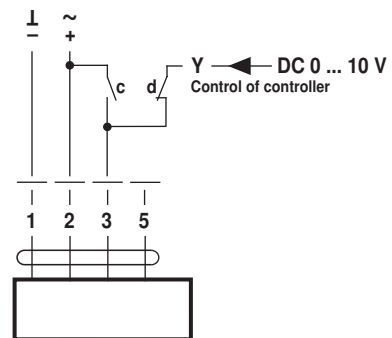
Direction of rotation



Standard connection



Override control (Frost protection circuit)

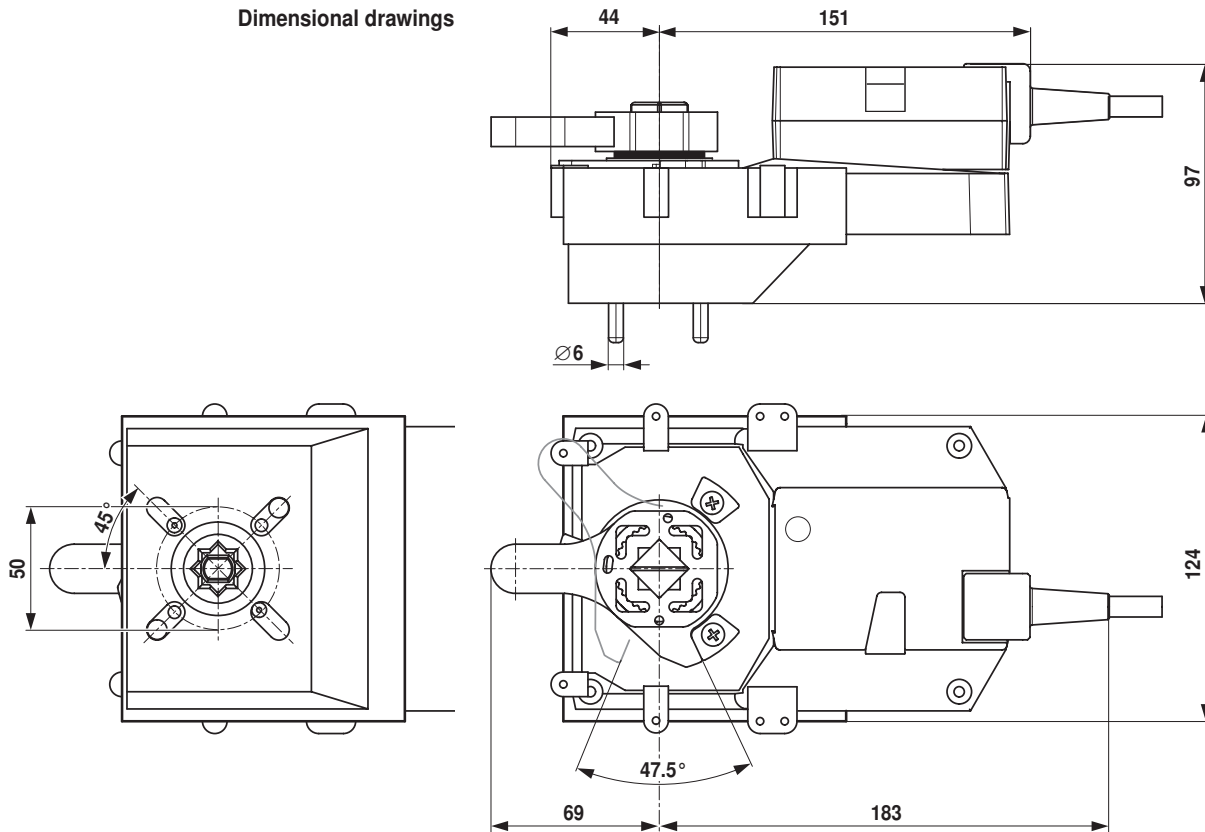


Cable colours:
 1 = black
 2 = red
 3 = white
 5 = orange

c	d	Actuator	Butterfly valve
↘	↘	Y1 ↺	A - AB = 100%
↘	↘	Y2 ↻	A - AB = 0%
↘	↘	Modulating operation	

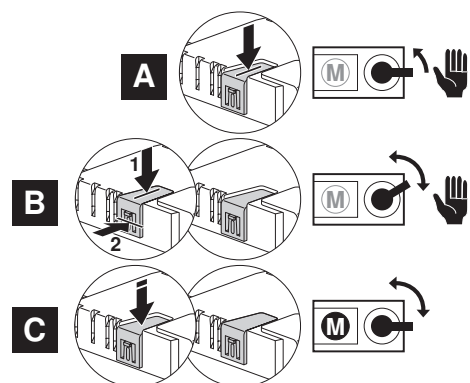
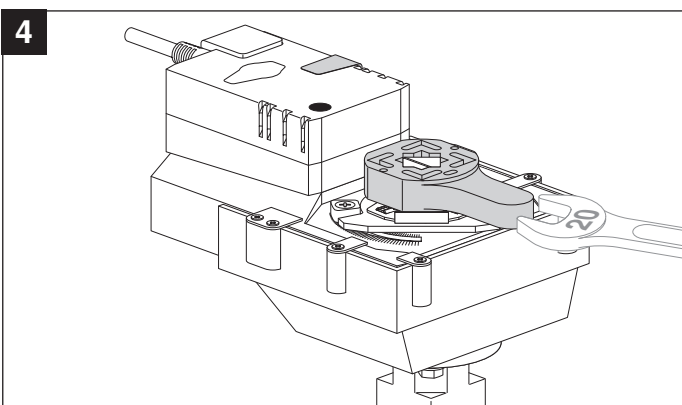
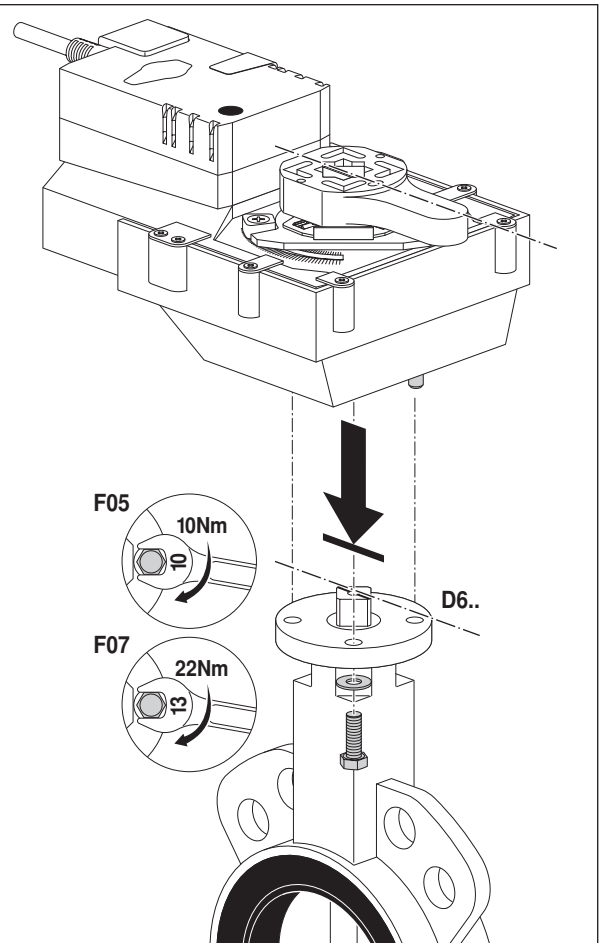
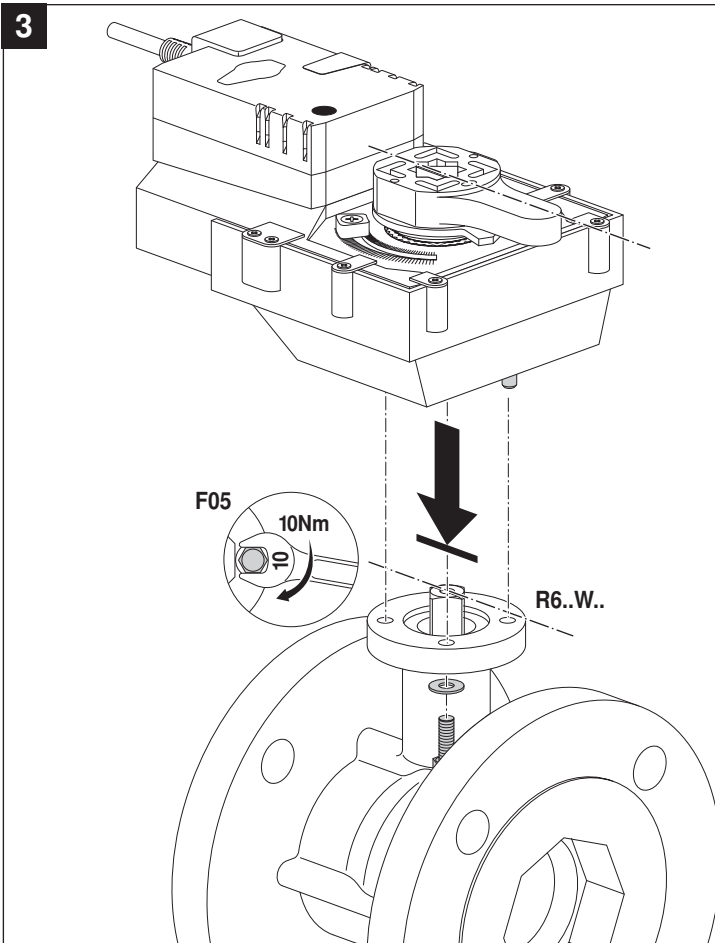
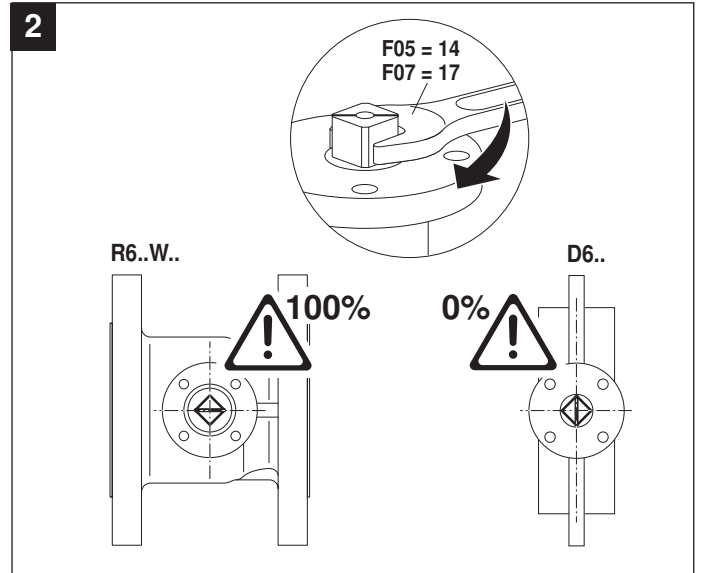
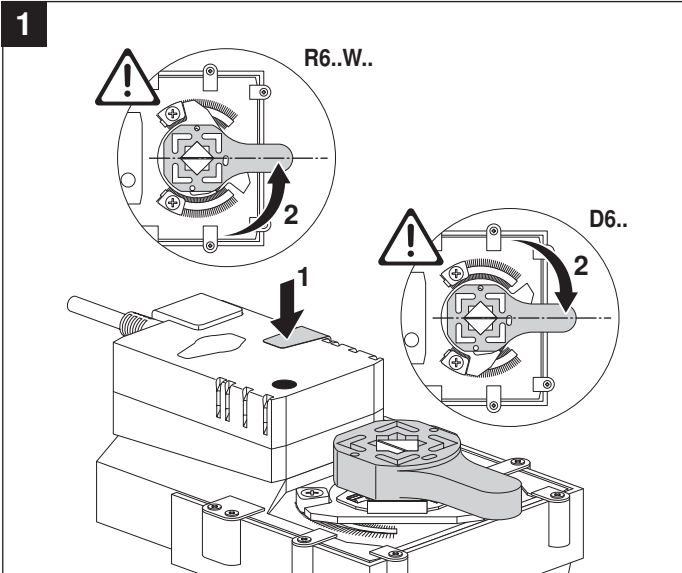
Dimensions [mm]

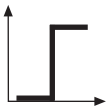
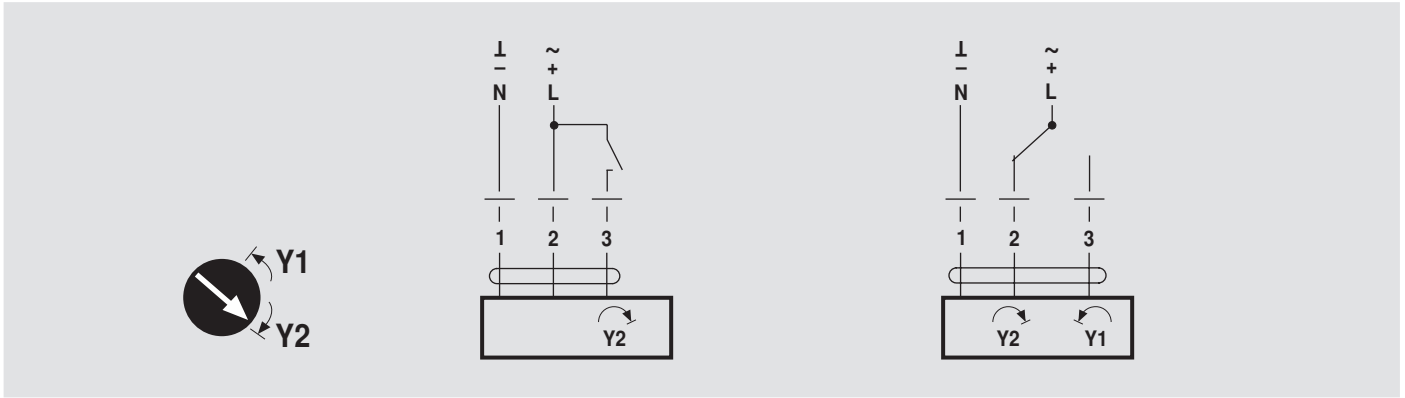
Dimensional drawings



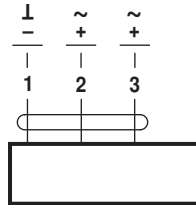
Further documentations

- Complete overview «The complete range of water solutions»
- Data sheets for 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.)



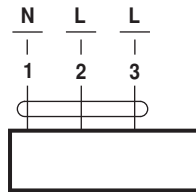


AC 24 V / DC 24 V

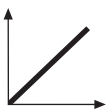


GR24A-5
GR24A-7

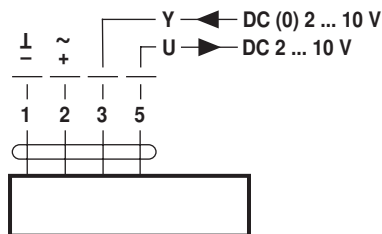
AC 100 ... 240 V ⚠



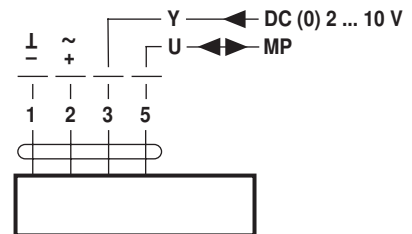
GR230A-5
GR230A-7



AC 24 V / DC 24 V



GR24A-SR-5 GR24A-MF-5
GR24A-SR-7 GR24A-MF-7



GR24A-MP-5
GR24A-MP-7

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AC 24 V / DC 24 V

