

Rotary actuator for rotary valves and butterfly valves

- · Nominal torque 20 Nm
- · Nominal voltage AC 230 V
- Control Modulating DC (0) 2...10 V
- Position feedback DC 2...10 V



Technical data		
Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 85265 V
	Power consumption in operation	4 W
	Power consumption in rest position	1 W
	Power consumption for wire sizing	7.5 VA
	Connection supply	Cable 1 m, 2 x 0.75 mm ²
	Connection control	Cable 1 m, 4 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Min. 20 Nm
	Positioning signal Y	DC 010 V
	Positioning signal Y note	Input impedance 100 kΩ
	Operating range Y	DC 210 V
	Position feedback U	DC 210 V
	Position feedback U note	Max. 1 mA
	Auxiliary supply	DC 24 V ±30%, max. 10 mA
	Position accuracy	±5%
	Manual override	Gear disengagement with push-button, can be
		locked
	Running time motor	90 s / 90°
	Sound power level motor max.	45 dB(A)
	Position indication	Mechanically, integrated, two-section
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 control	0.8 kV
	Control pollution degree	3
	Ambient temperature	-3050°C
	Non-operating temperature	-4080°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Mechanical data	Connection flange	F05
Weight	Weight approx.	1 kg
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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.
- Caution: Power supply voltage!
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.



Safety notes

- The switch for changing the direction of rotation may only be operated by authorised specialists. The direction of rotation must not in particular 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 cables 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 connected with a standard modulating signal of DC 0...10V and travels to the position defined by the positioning signal. Measuring voltage U serves for the electrical display of the valve position 0...100% and as slave control signal for other actuators.

Direct mounting

Simple direct mounting on the rotary valve or butterfly valve with mounting flange. The mounting orientation 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 functional reliability

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

Adjustable angle of rotation Combination valve/actuator Adjustable angle of rotation with mechanical end stops.

For valves with the following mechanical specifications in accordance with ISO 5211

- Square stem head SW = 14 mm for form fit coupling of the rotary actuator.
- Hole circle d = 50 mm

Accessories

Description	Туре
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

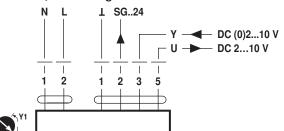


Notes

- · Caution: Power supply voltage!
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

Wiring diagrams

AC 230 V, modulating

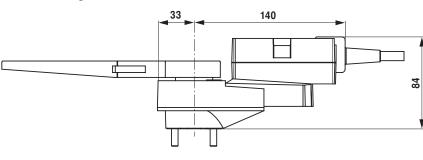


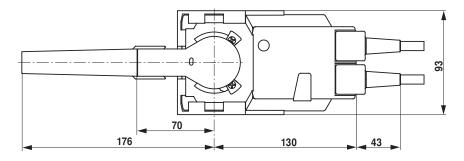
Cable colours:

- 1 = blue
- 2 = brown
- 1 = black
- 2 = red
- 3 = white
- 5 = orange

Dimensions [mm]

Dimensional drawings





Further documentation

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