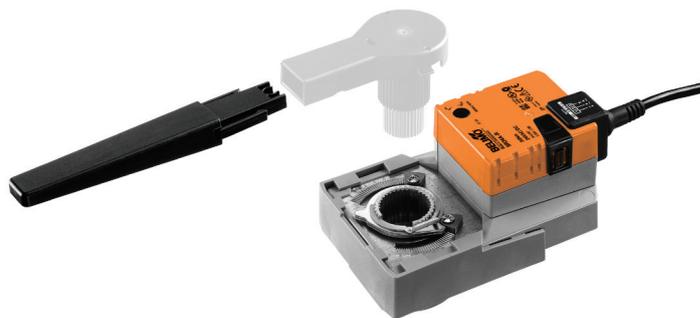


Retrofit rotary actuator for rotary valves and butterfly valves

- Nominal torque 20 Nm
- Nominal voltage AC/DC 24 V
- Control Open-close, 3-point



**Technical data**

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V
	Power consumption in operation	2.5 W
	Power consumption in rest position	0.2 W
	Power consumption for wire sizing	5.5 VA
	Connection supply / control	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
<b>Functional data</b>	Torque motor	Min. 20 Nm
	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
<b>Safety</b>	Protection class IEC/EN	III Safety extra-low voltage
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2, UL Enclosure Type 2
	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	3
Ambient temperature	0...50 °C	
Non-operating temperature	-40...80 °C	
Ambient humidity	95% r.h., non-condensing	
Maintenance	Maintenance-free	
<b>Mechanical data</b>	Connection flange	F03/F04/F05
<b>Weight</b>	Weight approx.	0.9 kg

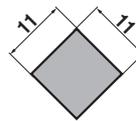
## Safety notes



- 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.
- 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 surface temperature between actuator and fitting may not exceed 50°C.
- 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

- Application** For rotary valves and butterfly valves with the following mechanical specifications:  
– ISO 5211: F03, F04, F05 (hole circle diameter on the flange for mounting the fitting)  
– ISO 5211: quadratic, flat head or wedge-shaped stem head geometry
- Tappet shaft** The form fit adapter is not included in the scope of delivery (see «Accessories»).



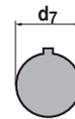
Type
ZSV-11-4K



Type	s [mm]
ZSV-08	8
ZSV-09	9
ZSV-10	10
ZSV-11	11
ZSV-12	12
ZSV-14	14



Type	s [mm]	d8 [mm]
ZSF-08	8	10
ZSF-09	9	12
ZSF-10	10	14
ZSF-11	11	14
ZSF-14	14	18



Type	d7 [mm]
ZSK-12	12
ZSK-14	14

- 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** Adjustable angle of rotation with mechanical end stops.
- Position indication** The two-section position indication (lever) can be reduced to 70 mm, the front part of the lever can be attached to the cable (clip).

## Accessories

	Description	Type
<b>Electrical accessories</b>	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
<b>Mechanical accessories</b>	<b>Description</b>	<b>Type</b>
	Form fit adapter SR, 8x8x57 mm	ZSV-08
	Form fit adapter SR, 9x9x57 mm	ZSV-09
	Form fit adapter SR, 10x10x57 mm	ZSV-10
	Form fit adapter SR, 11x11x57 mm	ZSV-11
	Form fit adapter SR, 11x11x57 mm (square)	ZSV-11-4K
	Form fit adapter SR, 12x12x57 mm	ZSV-12
	Form fit adapter SR, 14x14x57 mm	ZSV-14
	Form fit adapter SR, 8xØ17x57 mm	ZSF-08
	Form fit adapter SR, 9xØ12x57 mm	ZSF-09
	Form fit adapter SR, 10xØ17x57 mm	ZSF-10
	Form fit adapter SR, 11xØ14x57 mm	ZSF-11
	Form fit adapter SR, 14xØ18x57 mm	ZSF-14
	Form fit adapter SR, Ø12x4x57 mm	ZSK-12
	Form fit adapter SR, Ø14x5x57 mm	ZSK-14

Electrical installation

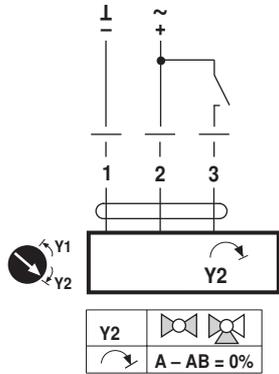


Notes

- Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.
- Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.

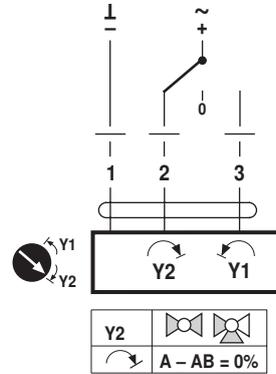
Wiring diagrams

AC/DC 24 V, open-close



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

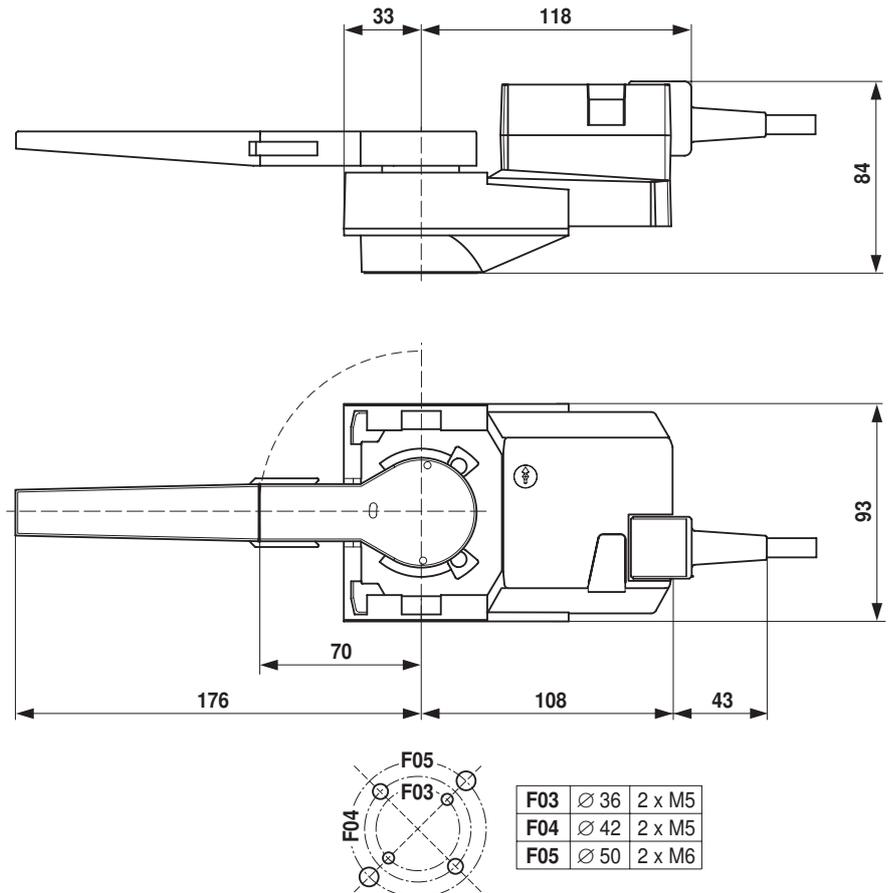
AC/DC 24 V, 3-point



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

Dimensions [mm]

Dimensional drawings



Further documentation

- General notes for project planning