

**Technical data sheet** 

# Retrofit rotary actuator for rotary valves and butterfly valves

- Nominal torque 40 Nm
- Nominal voltage AC/DC 24 V
- Control Open-close





# **Technical data**

Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 19.228.8 V
	Power consumption in operation	4 W
	Power consumption at rest	2 W
	Power consumption for wire sizing	6 VA
	Connection supply	Cable 1 m, 3 x 0.75 mm <sup>2</sup>
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Min. 40 Nm
	Manual override	Gear disengagement with push-button,
		can be locked
	Running time motor	150 s / 90°
	Sound power level motor max.	45 dB(A)
	Position indication	Mechanical, pluggable
Safety	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	Certified to 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 current voltage supply	0.8 kV
	Control pollution degree	3
	Ambient temperature	050°C
	Non-operating temperature	-4080°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Mechanical data	Connection flange	F05/F07
Weight	Weight approx.	2.1 kg

## Safety notes



• This actuator has been designed for use in stationary heating, ventilation and airconditioning 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 authorized personnel. 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 cable must not be removed from the device.



Safety notes				
	<ul> <li>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.</li> </ul>			
Product features				
Application	For rotary valves and butterfly valves (field of application up to approximately DN80) with the following mechanical specifications: – ISO 5211: F05 or F07 (hole circle diameter on the flange for mounting the fitting) – ISO 5211: quadratic or flat head stem head geometry			
Form fit adapter	The form fit adapter is not included in the scope of delivery (see «Accessories»).			
	S       S         Image: S       Image: S         Image: S       Image: S         Image: ZGV-14       14         Image: ZGV-16       16         Image: ZGV-17       17         Image: ZGV-19       19			
Direct mounting	Simple direct mounting on the rotary actuator or butterfly valve with mounting flange. The mounting orientation in relation to the fitting can be selected in 90° steps.			
Manual override	Manual operation is possible with the push-button (the gearing latch remains disengaged as long as the push-button is pressed or detented).			
High functional reliability	The actuator is overload-proof, 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.			
Accessories				

Accessories

	Description	Туре
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
	Description	Туре
Mechanical accessories	Form fit adapter GR, 14x14x40 mm	ZGV-14
	Form fit adapter GR, 16x16x40 mm	ZGV-16
	Form fit adapter GR, 17x17x20 mm	ZGV-17
	Form fit adapter GR, 19x19x40 mm	ZGV-19
	Form fit adapter GR, 14xØ18x33 mm	ZGF-14
	Form fit adapter GR, 17xØ22x33 mm	ZGF-17

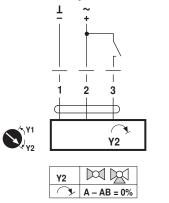


# Electrical installation

Notes	<ul> <li>Connection via safety isolating transformer.</li> <li>Parallel connection of other actuators possible. Observe the performance data.</li> <li>Direction of rotation switch is covered. Factory setting: Direction of rotation Y2.</li> </ul>

#### Wiring diagrams

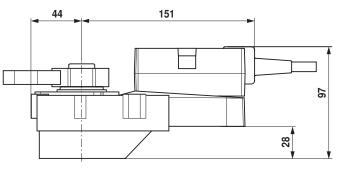
#### AC/DC 24 V, open-close

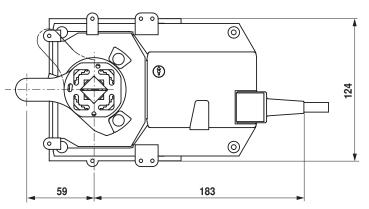


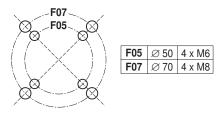
Cable colours: 1 = black 2 = red 3 = white

### **Dimensions** [mm]

## **Dimensional drawings**









**Further documentation** 

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