# Rotary actuator for ball valves

- Nominal torque 2 Nm
- Nominal voltage AC/DC 24 V
- · Control modulating (0) 2...10 V



#### **Technical data Electrical data** Nominal voltage AC/DC 24 V Nominal voltage frequency 50/60 Hz AC 19.2...28.8 V / DC 21.6...28.8 V Nominal voltage range Power consumption in operation 0.5 W 1 VA Power consumption for wire sizing Connection supply / control Cable 1 m, 3 x 0.75 mm<sup>2</sup> Parallel operation Yes (note the performance data) **Functional data** Torque motor Min. 2 Nm DC 0...10 V Positioning signal Y Positioning signal Y note Input impedance 100 k $\Omega$ Operating range Y DC 2...10 V Control operating range Y note for 0...100% (0...90°) Manual override Gear disengagement with push-button Running time motor 35 s / 90° Sound power level motor max. 45 dB(A) Position indication Mechanical Safety Protection class IEC/EN III Safety extra-low voltage Degree of protection IEC/EN CE according to 2004/108/EC **EMC** Certification IEC/EN IEC/EN 60730-1 and IEC/EN 60730-2-14 Mode of operation Type 1 Rated impulse voltage supply / control 0.8 kV Control pollution degree 3 -7...50°C Ambient temperature -40...80°C Non-operating temperature 95% r.h., non-condensing Ambient humidity

# Safety notes



Weight

Maintenance

Weight approx.

 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.

0.4 kg

Maintenance-free

- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- 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 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 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.



### **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.

**Direct mounting** Simple direct mounting on the ball valve with only one screw. The mounting orientation

in relation to the ball valve can be selected in 90° increments.

Manual override Manual override possible with lever (the gearing is disengaged as long as the self-

resetting lever is pressed).

High functional reliability The actuator is overload protected and automatically stops when the end stop is

reached.

The actuator switches off for seven seconds in the case of blocking, then attempts to restart. If the blocked condition persists, the actuator attempts to restart once every

two minutes a total of 15 times and subsequently only once every two hours.

Combination valve/actuator Refer to the valve documentation for suitable valves, their permitted medium

temperatures and closing pressures.

# **Electrical installation**

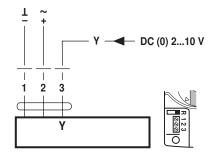


#### **Notes**

- · Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.

### Wiring diagrams

### AC/DC 24 V, modulating



Cable colours:

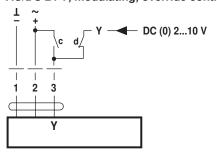
1 = black

2 = red

3 = white

Direction of rotation R (standard) when switch set to right position

### AC/DC 24 V, modulating, override control



С	d	Υ	MM
1	/-	14	A – AB = 100%
/-	/-	<b>&gt;</b> 0	A – AB = 0%

Cable colours:

1 = black

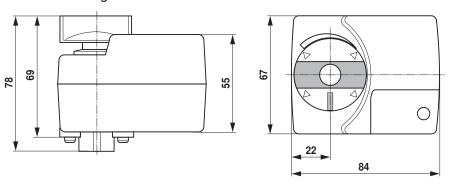
2 = red

3 = white



# Dimensions [mm]

# **Dimensional drawings**



# **Further documentation**

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