

Modulating rotary actuator with failsafe for ball valves

- Torque motor 2.5 Nm
- Nominal voltage AC/DC 24 V
- Control modulating 2...10 V
- Position feedback 2...10 V
- Deenergised open (NO)



Technical data			
E	Electrical data	Nominal voltage	AC/DC 24 V
		Nominal voltage frequency	50/60 Hz
		Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
		Power consumption in operation	2.5 W
		Power consumption in rest position	1 W
		Power consumption for wire sizing	4 VA
		Connection supply / control	Cable 1 m, 4 x 0.75 mm ²
	Functional data	Parallel operation	Yes (note the performance data)
Fu		Torque motor	2.5 Nm
		Torque fail-safe	2.5 Nm
		Operating range Y	210 V
		Input Impedance	100 kΩ
		Position feedback U	210 V
		Position feedback U note	Max. 0.5 mA
		Position accuracy	±5%
		Direction of motion motor	Y = 0 (0 V = A - AB = 0%)
		Direction of motion fail-safe	Deenergised NO, valve open $(A - AB = 100\%)$
		Running time motor	90 s / 90°
		Running time fail-safe	<25 s / 90°
	Safety	Sound power level, motor	35 dB(A)
		Position indication	Mechanical
		Service life	Min. 60'000 fail-safe positions
		Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
		Degree of protection IEC/EN	IP42
		EMC	CE according to 2014/30/EU
		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
		Ambient temperature	-3050°C
		Storage temperature	-4080°C
		Ambient humidity	Max. 95% r.H., non-condensing
		Servicing	maintenance-free
			·

Weight

Weight

0.57 kg



Safety notes



- This device has been designed for use in stationary heating, ventilation and airconditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation
 or aggressive gases interfere directly with the actuator and that is ensured that the
 ambient conditions remain at any time within the thresholds according to the data
 sheet.
- 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.
- · Cables must not be removed from the device.
- The device contains electrical and electronic components and must not 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 0...10 V. The actuator moves the valve to the operating position at the same time as tensioning the return spring. The valve is turned back to the fail-safe position by spring force when the supply voltage is interrupted.

Simple 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° steps.

High functional reliability

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

Electrical installation

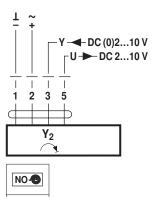


Notes

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

Wiring diagrams

AC/DC 24 V, modulating



A - AB = 0%

Cable colours:

1 = black

2 = red

3 = white

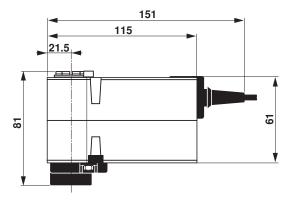
5 = orange

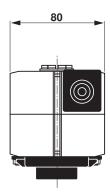
Y = 0



Dimensions [mm]

Dimensional drawings





Further documentation

- The complete product range for water applications
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- · General notes for project planning