

Rotary actuator for
2 and 3-way ball valves

- Torque 2 Nm
- Nominal voltage AC/DC 24 V
- Control: modulating DC 0 ... 10 V


Technical data

Electrical data	Nominal voltage	AC 24 V, 50/60 Hz DC 24 V
	Power supply range	AC 19.2 ... 28.8 V DC 21.6 ... 28.8 V
	Power consumption	In operation 0.5 W at nominal torque For wire sizing 1 VA
	Connection	Cable 1 m, 3 x 0.75 mm ²
	Parallel connection	Yes (Note performance data for supply!)
Functional data	Torque (nominal torque)	Min. 2 Nm at nominal voltage
	Control	Control signal Y DC 0 ... 10 V, typical input impedance 100 kΩ Working range DC 2 ... 10 V
	Manual override	Temporary disengagement of gearing latch
	Running time	90 s / 90° \leq
	Noise level	Max. 35 dB (A)
	Position indication	Mechanical
Safety	Protection class	III Extra low voltage
	Degree of protection	IP40
	EMC	CE according to 89/336/EEC
	Mode of operation	Type 1 (to EN 60730-1)
	Rated impulse voltage	0.8 kV (to EN 60730-1)
	Control pollution degree	3 (to EN 60730-1)
	Ambient temperature range	-7 ... +50 °C
	Media temperature	+5 ... +100 °C (in ball valve)
	Non-operating temperature	-40 ... +80 °C
	Ambient humidity range	95% r.H., non-condensating (to EN 60730-1)
	Maintenance	Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions» on page 2
	Weight	Approx. 400 g (without ball valve)

Safety notes


- The actuator 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.
- It may only be installed by suitably trained personnel.
All applicable legal or institutional installation regulations must be complied with.
- 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 trained personnel. The direction of rotation may not be reversed in a frost protection circuit.

Product features

- Mode of operation** The actuator is controlled by means of a standard control signal DC 0 ... 10 V. It opens to the position dictated by this signal.
- Simple direct mounting** Straightforward direct mounting on the ball valve with only one screw. The mounting position in relation to the ball valve can be selected in 90° steps.
- Manual operation** Manual operation possible by lever (the gearing latch remains disengaged as long as the self-resetting lever is pressed).
- High functional reliability** The actuator is overload-proof and automatically stops when the end stop is reached. In the case of blocking the actuator switches off for seven seconds, 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 once every two hours.
- Combination valve actuators** Refer to the valve documentation for suitable valves, their permitted media temperatures and closing pressures.

Electrical installation

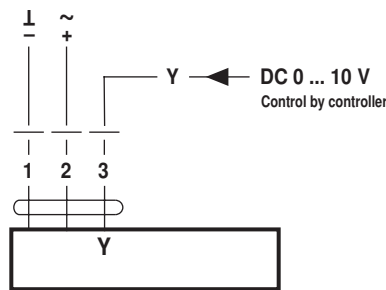
Wiring diagrams

Notes

- Connect via safety isolation transformer.
- Parallel connection of other actuators possible. Note performance data for supply.

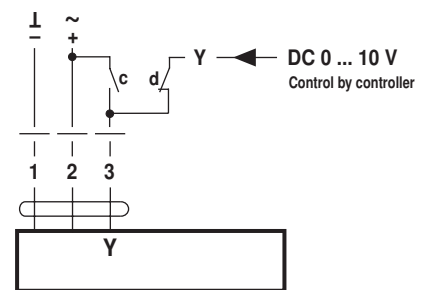


Standard



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

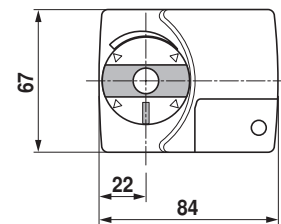
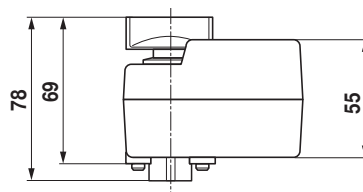
Override control (frost protection circuit)



c	d	Rotary actuator	Rotary valve
			A – AB = 100%
			A – AB = 0%

Dimensions [mm]

Dimensional diagrams



General note

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 once every two hours.

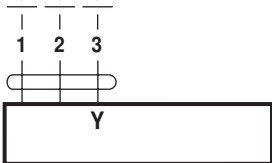
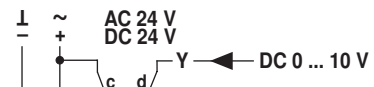
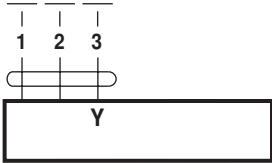
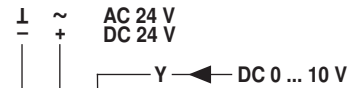
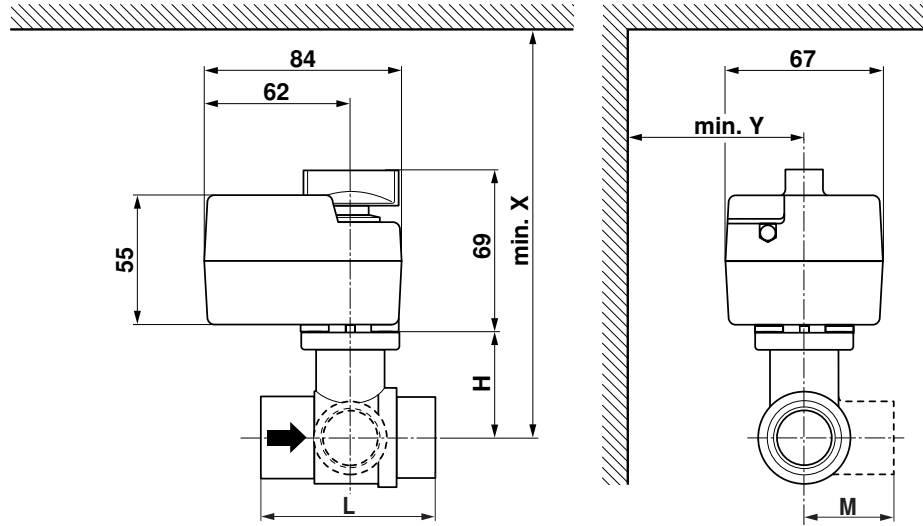
Further documentations

- Complete overview of actuators for water solutions
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- Notes for project planning (hydraulic characteristic curves and circuits, installation regulations, commissioning, maintenance etc.)



TRD24-SR (-T)
TR24-SR (-T)

70632-00001.A



c	d		
			A - AB = 100%
			A - AB = 0%

		DN		Rp	G	PN	mm			TRD24-SR(-T)		TR24-SR(-T)		
		mm	"				L	H	M	X	Y	X	Y	
		R2..K	R3..K	10	3/8	3/8		52	35	28	174	75		
		R4..K	R5..K	10	3/8	3/4		69	31.5	34	171	75		
		R2..	R3..	15	1/2	1/2		67	45	39			184	75
		R4..	R5..	15	1/2	1		74	44	38			183	75
		R6..R	R7..R	15	1/2		6	101.5	45	73			184	80

