

Rotary actuator for
2 and 3-way ball valves

- Torque 1.6 Nm
- Nominal voltage AC/DC 24 V
- Control: Open/close


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 0.5 VA
	Connection	Cable 1 m, 3 x 0.75 mm ²
	Parallel connection	Yes (Note performance data for supply!)
Funktionsdaten	Torque (nominal torque)	Min. 1.6 Nm at nominal voltage
	Manual override	Temporary disengagement of gearing latch
	Running time	100 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)
Dimensions / Weight	Maintenance	Maintenance-free
	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.

Product features

- 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).
- Combination valve actuators** Refer to the valve documentation for suitable valves, their permitted media temperatures and closing pressures.

Electrical installation

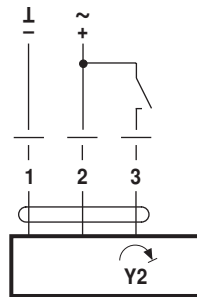
Wiring diagrams

Notes

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

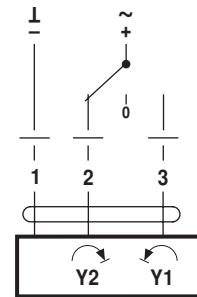


Open-close control



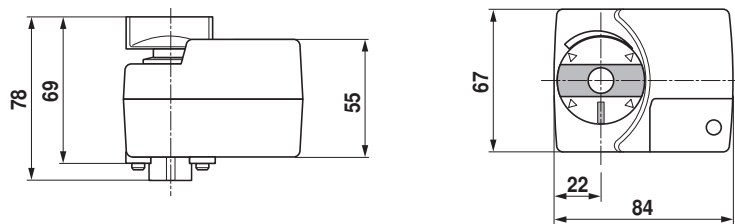
Rotary actuator	Rotary valve
Y2	A – AB = 0%

3-3-point control



Dimensions [mm]

Dimensional diagrams



General notes

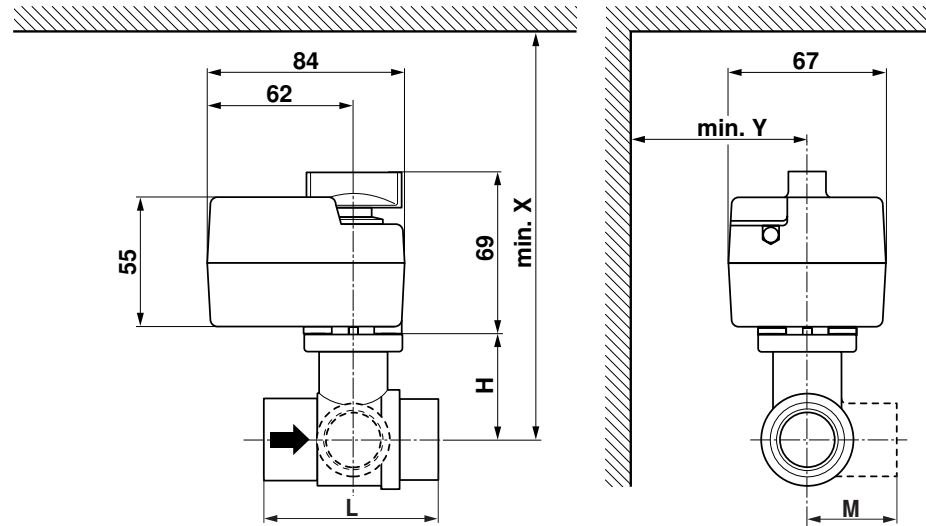
- Continuous pulsating into the end stop with pulsating 3-point control results in damage to the actuator. Steps must be taken to ensure that pulsating 3-point controllers stop in the end position.
- The actuator switches off for seven seconds in the case of blocking, then attempts to restart. If the blocked condition persists, the actuator attempts to restart once every two minutes a total of 15 times and subsequently once every two hours.
- Actuators for 3-point control in parallel operation must be synchronised once every week (by setting the controller signal to 0 or 100%) in order to guarantee uni-rotation.
- Pulse duration ≥ 0.5 s

Further documentations

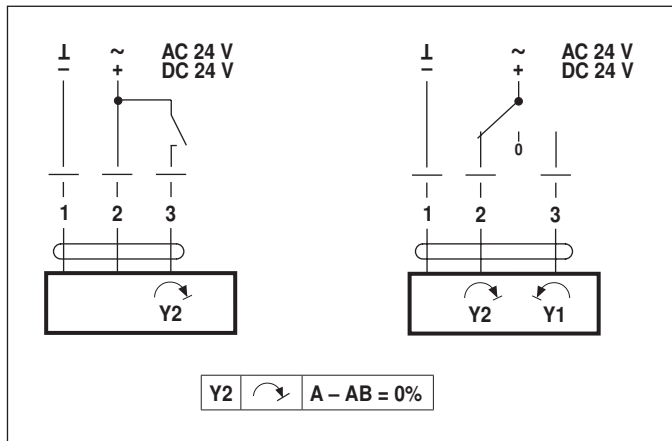
- Complete overview of actuators for water solutions
- Data sheets for ball valves
- Installation instructions for actuators and/or ball valves
- Notes for project planning (hydraulic characteristic curves and circuits, installation regulations, commissioning, maintenance etc.)



TRD24 (-T)
TR24 (-T)



70299-00001.B



Symbol	Symbol	DN		Rp	G	PN	mm			TRD24		TR24	
		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

