

Rotary actuator for ball valves



Technical data

Electrical data	Nominal voltage	AC/DC 24 V	
	Nominal voltage frequency	50/60 Hz	
	Nominal voltage range	AC 19.2...28.8 V / DC 19.2...28.8 V	
	Power consumption in operation	2.5 W	
	Power consumption for wire sizing	4 VA	
	Connection supply / control	Cable 1 m, 4x 0.75 mm ²	
	Parallel operation	Yes (note the performance data)	
	Functional data	Torque motor	10 Nm
Operating range Y		0...10 V	
Operating range Y note		Operating range selectable 0...10 V or 2...10 V	
Position feedback U		0...10 V	
Position accuracy		±5%	
Manual override		temporary and permanent gear train disengagement with rotary knob on the housing	
Running time motor		35 s / 90°	
Sound power level, motor		54 dB(A)	
Duty cycle value		75% (= active time 35 s / operating time 47 s)	
Position indication		Reversible scale plate	
Service life		Full cycles: 60'000	
Safety data		Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
		Degree of protection IEC/EN	IP40
	EMC	CE according to 2014/30/EU	
	Type of action	Type 1	
	Rated impulse voltage supply / control	0.8 kV	
	Pollution degree	3	
	Ambient humidity	Max. 95% RH, non-condensing	
	Ambient temperature	0...50°C [32...122°F]	
	Storage temperature	-30...80°C [-22...176°F]	
	Servicing	maintenance-free	
	Weight	Weight	0.53 kg
Housing colours	Housing cover	orange	

Safety notes



- This device has been designed for use in stationary heating, ventilation and air-conditioning 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 device and that it is ensured that the ambient conditions remain within the thresholds according to the data sheet at any time.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The actuator is to be protected against moisture. It is not suitable for outdoor applications.
- The installer must check for correct principle of operation after installation.
- The switch for changing the direction of rotation and operating range may only be adjusted by authorised specialists. The direction of rotation may not be changed when frost protection control is applied.
- The device does not contain any parts that can be replaced or repaired by the user.
- 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

Operating mode	The actuator is connected with a standard control signal of 0...10 V and drives to the position defined by the control signal.
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.
Manual override	Manual override with lever possible. Temporary gear train disengagement by pushing the rotary knob. Permanent disengagement by pushing and simultaneous rotating the rotary knob clockwise 90°.
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.

Electrical installation

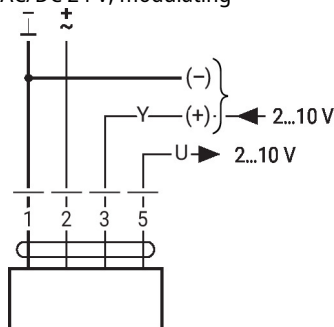


Supply from isolating transformer.

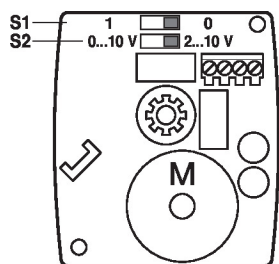
Wire colours:

- 1 = black
- 2 = red
- 3 = white
- 5 = white

AC/DC 24 V, modulating



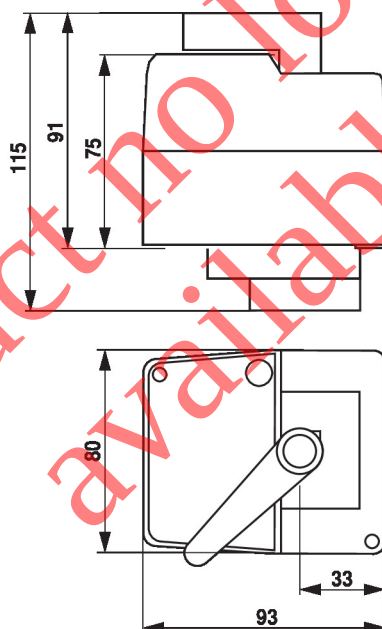
Operating controls and indicators



S1		
0 *		Y = 0%
1		Y = 0%

S2	
2 ... 10 V *	
0 ... 10 V	

Dimensions



Further documentation

- Installation instructions for actuators and/or ball valves
- General notes for project planning