

Technical data sheet

LRF24-S

Rotary actuator with emergency control function for ball valves

- Nominal torque 4 Nm
- Nominal voltage AC/DC 24 V
- Control Open-close
- Deenergised closed (NC)
- with 2 integrated auxiliary switches



Technical data

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	5 W
	Power consumption in rest position	2.5 W
	Power consumption for wire sizing	7 VA
	Auxiliary switch	2 x SPDT, 1 x 10° / 1 x 85°
	Switching capacity auxiliary switch	1 mA3 (0.5 inductive) A, AC 250 V
	Connection supply / control	Cable 1 m, 2 x 0.75 mm ²
	Connection auxiliary switch	Cable 1 m, 6 x 0.75 mm ²
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	Min. 4 Nm
	Torque spring return	Min. 4 Nm
	Direction of rotation spring-return	Deenergised NC, valve closed (A - AB = 0%)
	Manual override	with hand crank, can be fixed in any position
	Angle of rotation	95°
	Running time motor	75 s / 90°
	Running time emergency control position	<20 s / 90°
	Sound power level motor	50 dB(A)
	Position indication	Mechanical
	Service life	Min. 60,000 emergency positions
Safety	Protection class IEC/EN	III Safety extra-low voltage
	Protection class auxiliary switch IEC/EN	II Protective insulated
	Degree of protection IEC/EN	IP54
	EMC	CE according to 2014/30/EU
	Low voltage directive	CE according to 2014/35/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
	Rated impulse voltage auxiliary switch	2.5 kV
	Control pollution degree	3
	Ambient temperature	-3050°C
	Non-operating temperature	-4080°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Weight	Weight	1.5 kg

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.

- 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.



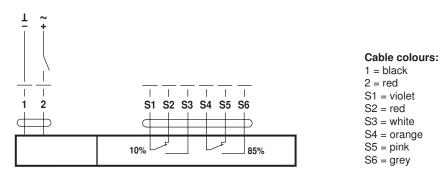
Safety notes	
	 The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.
Product features	
Mode of operation	The actuator moves the valve to the operating position at the same time as tensioning the return spring. The valve is turned back to the emergency 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.
Manual override	The valve can be manually operated and fixed in any position using a hand crank. Unlocking is carried out manually or automatically by applying the operating voltage.
High functional reliability	The actuator is overload protected, requires no limit switches and automatically stops when the end stop is reached.
Signalling	The actuator has two auxiliary switches with fixed settings. They permit a 10 $^\circ$ or 85 $^\circ$ angle of rotation to be signaled.

Electrical installation

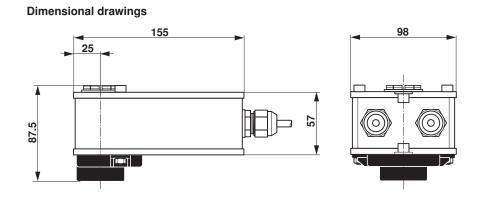
 Notes Connection via safety isolating transformer. Parallel connection of other actuators possible. O 	Observe the performance data.
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Wiring diagrams

AC/DC 24 V, open-close



Dimensions [mm]



Further documentation

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