

- **Mechanical Fail-Safe Rotary Actuators for:** 2-way DN25
3-way DN25...32 CCV
- **Torque:** 4Nm
- **Modulating control:** L(R)F24-SR (AC/DC 24V)
- **3-point control:** LF24-3 (AC/DC 24V)
- **Open/Close control:** LRF24(-S) (AC/DC 24V)
LRF230(-S) (AC 230V)



Technical data

Basic technical data		Torque	Min. 4Nm @ nominal voltage
		Angle of rotation	90°
		Direction of rotation-motor	Selected by mounting side of L/R
		-spring return	Selected by mounting side of L/R or reversing
		Sound power level	Motor: max. 45dB(A), spring return: max. 62dB(A)
		Position indicator	Mechanical
		Running time -motor	~150s (L(R)F24-SR) ; 40...75s (LF24-3, LRF24(-S), LRF230(-S))
		-spring return	~20s (-5...+50°C) / ~ 60s (-30°C)
		Ambient temp.	-30...+50°C
		Non-operation temp.	-40...+80°C
		Temp. of medium	+5...+100°C (in control ball valve)
		Humidity	5...95% RH, non-condensing
		Degree of protection	IP54
		EMC	CE according to 2004/108/EC
		Maintenance	Maintenance-free
		Linkage	Linkage included in LRF..
L(R)F24-SR	Nominal voltage range	AC 19.2...28.8V, 50/60Hz / DC 21.6...28.8V	
	Power consumption -running	2.5W @ nominal torque	
	-holding	1W	
	For transformer sizing	5VA	
	Connecting cable	Cable 1m, 4x0.75mm ²	
	Control signal Y	DC (0)2...10V @ input impedance 100kΩ	
	Position feedback signal U	DC 2...10V	
	Protection class	III (Extra-low voltage)	
	Weight	1.4kg	
	LF24-3	Nominal voltage range	AC 19.2...28.8V, 50/60Hz / DC 21.6...28.8V
Power consumption -running		2.5W @ nominal torque	
-holding		1W	
For transformer sizing		5VA	
Connecting cable		Cable 4m, 3x0.75mm ²	
Protection class	III (Extra-low voltage)		
Weight	1.4kg		
LRF24(-S)	Nominal voltage range	AC 19.2...28.8V, 50/60Hz / DC 21.6...28.8V	
	Power consumption -running	5W @ nominal torque	
	-holding	2.5W	
	For transformer sizing	7VA	
	Connecting cable -motor	Cable 1m, 2x0.75mm ²	
-S	Cable 1m, 6x0.75mm ²		
Protection class	III (Extra-low voltage)		
Auxiliary switch (LRF24-S)	2XSPDT, 1mA...3(0.5)A, AC 250V, fixed at 10°\sphericalangle, 85°\sphericalangle		
Weight	1.4kg		
LRF230(-S)	Nominal voltage range	AC 198...264V, 50/60Hz	
	Power consumption -running	5W @ nominal torque	
	-holding	3W	
	For transformer sizing	7VA	
	Connecting cable -motor	Cable 1m, 2x0.75mm ²	
	-S	Cable 1m, 6x0.75mm ²	
	Protection class	II (Totally insulated)	
	Auxiliary switch (LRF230-S)	2XSPDT, 1mA...3(0.5)A, AC 250V, fixed at 10°\sphericalangle, 85°\sphericalangle	
	Low voltage directive	CE according to 2006/95/EC	
	Weight	Approx. 1.4kg	

Product features

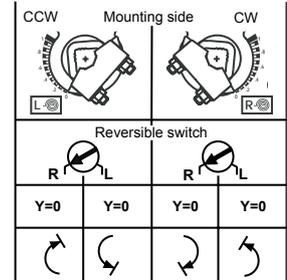
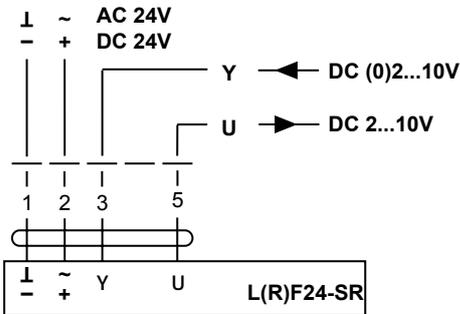
- Simple direct mounting**
- Manual operation**
- High function reliability**

Simple direct mounting on the Ball Valve using only one screw.
 LRF.. have manual operation with integral position stop.
 The actuator is overload-proof, needs no limit switches and stops automatically at the end stops.

Wiring diagram

L(R)F24-SR

Modulating control



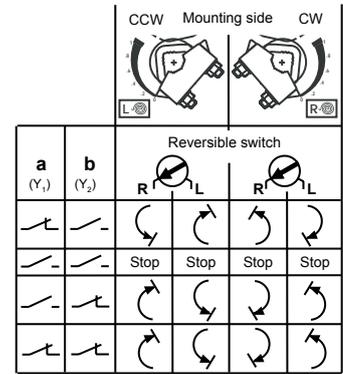
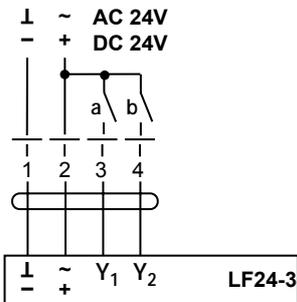
Notes:

- Connection via safety isolating transformer.
- Other actuators can be connected in parallel.

Please note the performance data.

LF24-3

3-point control



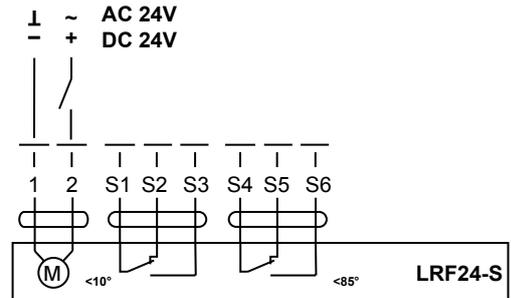
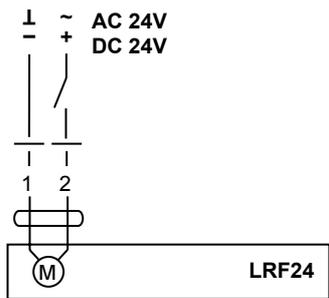
Notes:

- Connection via safety isolating transformer.
- Other actuators can be connected in parallel.

Please note the performance data.

LRF24(-S)

Open/Close control



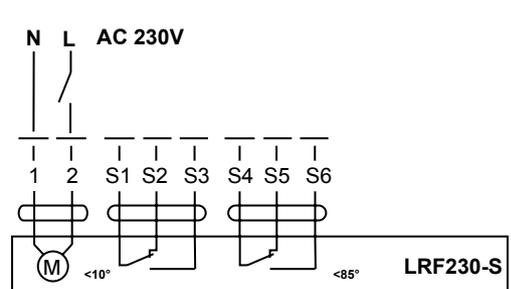
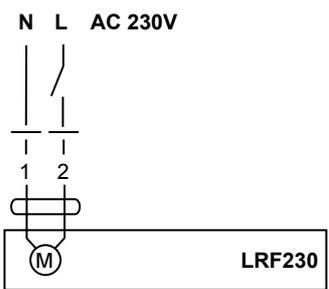
Notes:

- Connection via safety isolating transformer.
- Other actuators can be connected in parallel.

Please note the performance data.

LRF230(-S)

Open/Close control



Notes:

- Caution: Power supply voltage!
- Other actuators can be connected in parallel.

Please note the performance data.