

- Mechanical Fail-Safe Rotary Actuators for:
- 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 89/336/EEC
		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 <sup>2</sup>
		Control signal Y	DC (0)2...10V @ input impedance 100kΩ
		Position feedback signal U	DC 2...10V
		Protection class	III (Extra-low voltage)
LF24-3	Weight	1.4kg	
	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 <sup>2</sup>
		Protection class	III (Extra-low voltage)
LRF24(-S)	Weight	1.4kg	
	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 <sup>2</sup>
		-S	Cable 1m, 6x0.75mm <sup>2</sup>
		Protection class	III (Extra-low voltage)
		Auxiliary switch (LRF24-S)	2XSPDT, 1mA...3(0.5)A, AC 250V, fixed at 10°↙, 85°↘
LRF230(-S)	Weight	1.4kg	
	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 <sup>2</sup>
		-S	Cable 1m, 6x0.75mm <sup>2</sup>
		Protection class	II (Totally insulated)
		Auxiliary switch (LRF230-S)	2XSPDT, 1mA...3(0.5)A, AC 250V, fixed at 10°↙, 85°↘
		Low voltage directive	CE according to 73/23/EEC
		Weight	1.4kg

**Product features**

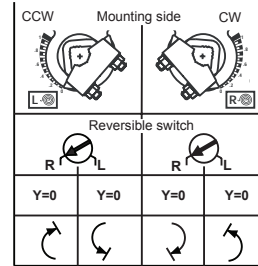
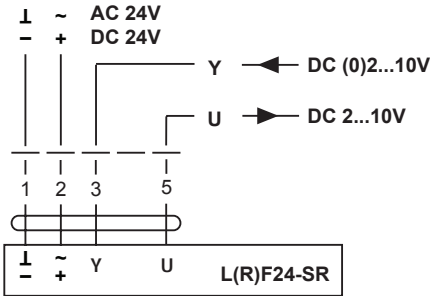
- Simple direct mounting**
- Manual operation**
- High function reliability**

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 diagrams**

**L(R)F24-SR**

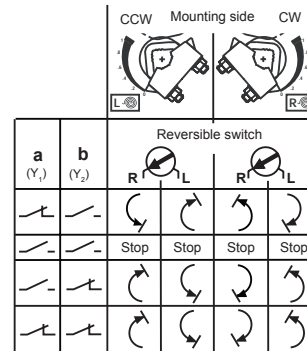
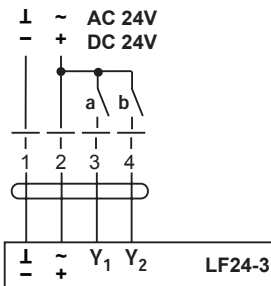
**Modulating control**



**Notes:**  
 •Connection via safety isolating transformer.

**LF24-3**

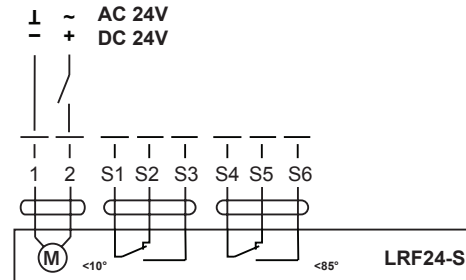
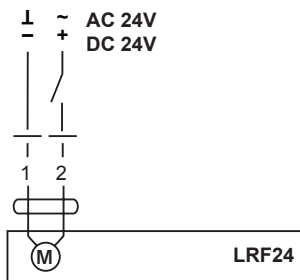
**3-point control**



**Notes:**  
 •Connection via safety isolating transformer.

**LRF24(-S)**

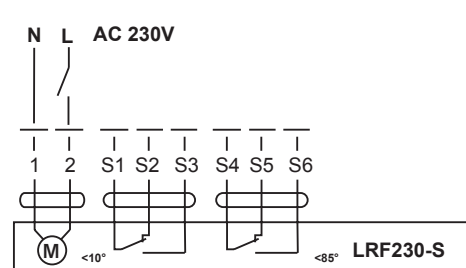
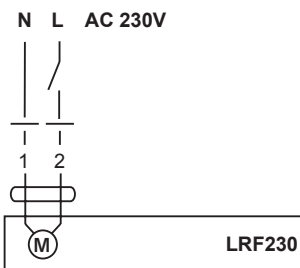
**Open/Close control**



**Notes:**  
 •Connection via safety isolating transformer.

**LRF230(-S)**

**Open/Close control**



**Notes:**  
 •Caution: Power supply voltage!

**Dimensions [mm]**

L(R)F..

