

- Mechanical Fail-Safe Rotary Actuators for:
- Torque:
- Modulating control:
- 3-point control:
- Open/Close control:

2-way DN15...20 CCV
 3-way DN15...20 CCV
 2Nm
 TRF24-SR (AC/DC 24V)
 TRF24-2 (AC/DC 24V)
 TRF24(-S) (AC/DC 24V)
 TRF230(-S) (AC 100...240V)


Technical data
Basic technical data

	Torque	Min. 2Nm @ 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. 50dB(A), spring return: max. 62dB(A)	
	Position indicator	Mechanical	
	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	IP42	
	EMC	CE according to 89/336/EEC	
	Maintenance	Maintenance-free	
TRF24-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	4VA	
	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)	
	running time -motor	90s	
	-spring return	< 25s (-5...+50°C) / max. 60s (-30°C)	
	Weight	0.6kg	
TRF24-2	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	4VA	
	Connecting cable	Cable 1m, 4x0.75mm ²	
	Protection class	III (Extra-low voltage)	
	Running time -motor	90s	
	-spring return	< 25s (-5...+50°C) / max. 60s (-30°C)	
		Weight	0.6kg
	TRF24(-S)	Nominal voltage range	AC 19.2...28.8V, 50/60Hz / DC 21.6...28.8V
Power consumption -running		2.5W @ nominal torque	
-holding		1.5W	
For transformer sizing		5VA	
Connecting cable -motor		Cable 1m, 2x0.75mm ²	
-S		Cable 1m, 3x0.75mm ²	
Protection class		III (Extra-low voltage)	
Auxiliary switch (TRF24-S)		1XSPDT, 1mA...3(0.5)A, AC 250V, 0...100% adjustable	
Running time		Motor: 40...75s; spring return: <75s	
		Weight	0.6kg
TRF230(-S)	Nominal voltage range	AC 85...265V, 50/60Hz	
	Power consumption -running	2.5W @ nominal torque	
	-holding	1.5W	
	For transformer sizing	5VA	
	Connecting cable -motor	Cable 1m, 2x0.75mm ²	
	-S	Cable 1m, 3x0.75mm ²	
	Protection class	II (Totally insulated)	
	Auxiliary switch (TRF24-S)	1XSPDT, 1mA...3(0.5)A, AC 250V, 0...100% adjustable	
	Running time	Motor: 40...75s; spring return: <75s	
	Low voltage directive	CE according to 73/23/EEC	
	Weight	0.6kg	

Product features

Simple direct mounting

Simple direct mounting on the Ball Valve using only one screw.

Manual operation

No manual operation.

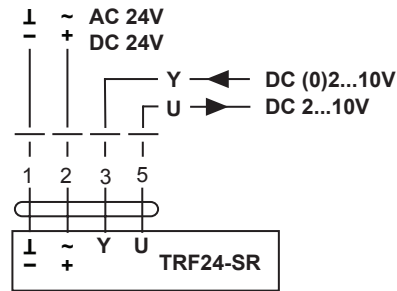
High function reliability

The actuator is overload-proof, needs no limit switches and stops automatically at the end stops.

Wiring diagrams

TRF24-SR

Modulating control



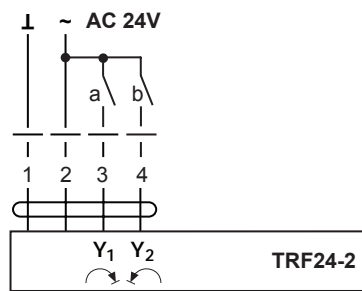
Notes:

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

Please note the performance data.

TRF24-2

3-point control



Direction of rotation

		TRF24-2		
		Reversing switch		
a (Y1)	b (Y2)			
			1	A - AB = 100%
			stop	
			0	A - AB = 0%
			0	

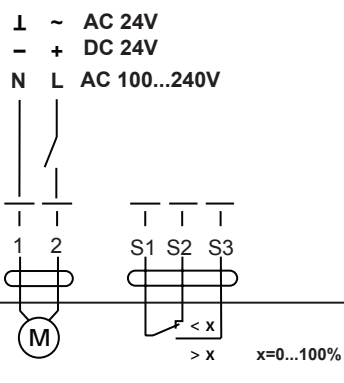
Notes:

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

Please note the performance data.

TRF24(-S) TRF230(-S)

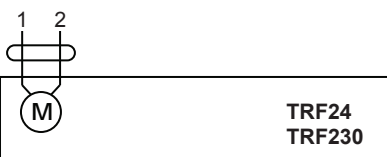
Open/Close control



Notes:

- Caution: Power supply voltage!
- Connection via safety isolating transformer.
- Other actuators can be connected in parallel.

Please note the performance data.



Dimensions [mm]

TRF..

