

Product features

Simple direct mounting

Straightforward direct mounting on the Ball Valve with only one screw. The assembly tool is integrated in the plug-on position indicator. The mounting position in relation to the fitting can be selected in 90° steps.

Manual override

Manual override with push button possible (the gear is disengaged for as long as the button is pressed or remains locked).

Adjustable angle of rotation

Adjustable angle of rotation with mechanical end stops.

High functional reliability

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Home position

When the supply voltage is switched on for the first time, i.e. at commissioning or after pressing the gear disengagement switch, the actuator moves to the home position. Factory setting: Y2 (counter-clockwise rotation)

Rotary actuator	Rotary valves
↻ Y2	Close
↻ Y1	Open

The actuator then moves into the position defined by the control signal.

Mode of operation

The actuator is controlled with a standard modulating signal of DC 2(0)...10V and moves to the position defined by the control signal. The measuring voltage U serves for the electrical display of the damper position 0...100% and as slave control signal for other actuators.

Adaption

Automatic adjustment of operating range and measuring signal U to match the mechanical angle of rotation. Manual triggering of the adaption by pressing the Adaption button.

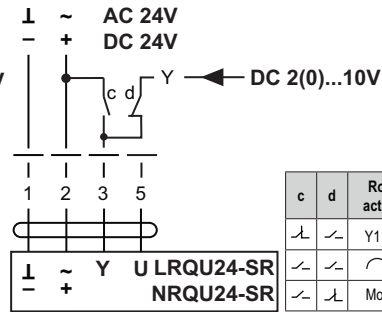
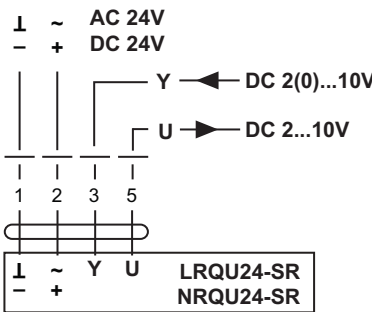
Wiring diagrams

LRQU24-SR / NRQU24-SR

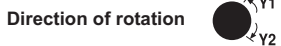
Modulating control

Override control (frost protection circuit)

- Notes:**
- Connection via safety isolating transformer.
 - Parallel connection of other actuators possible. Please note the performance data.
 - Direction of rotation switch is covered.
 - Factory setting: Direction of rotation Y2



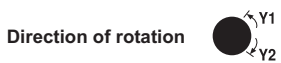
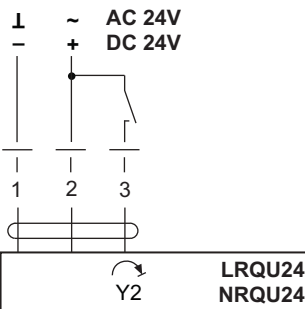
c	d	Rotary actuator	Rotary valves
↘	↙	Y1 ↻	Open
↙	↘	↻ Y2	Close
↘	↘	Modulating operation	



LRQU24 / NRQU24

Open/Close control

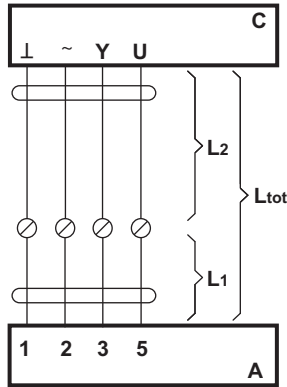
- Notes:**
- Connection via safety isolating transformer.
 - Other actuators can be connected in parallel. Please note the performance data.



Rotary actuator	Rotary valve
Y2 ↻	Close

Electrical installation

Cable lengths



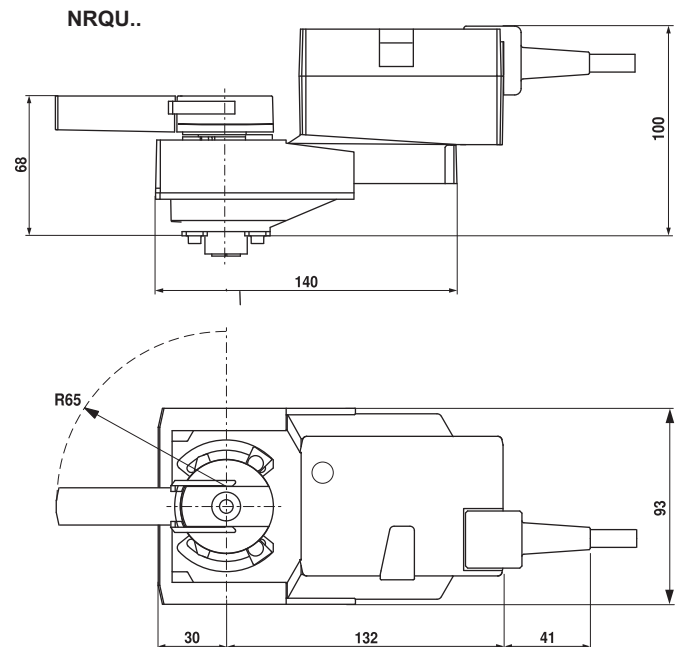
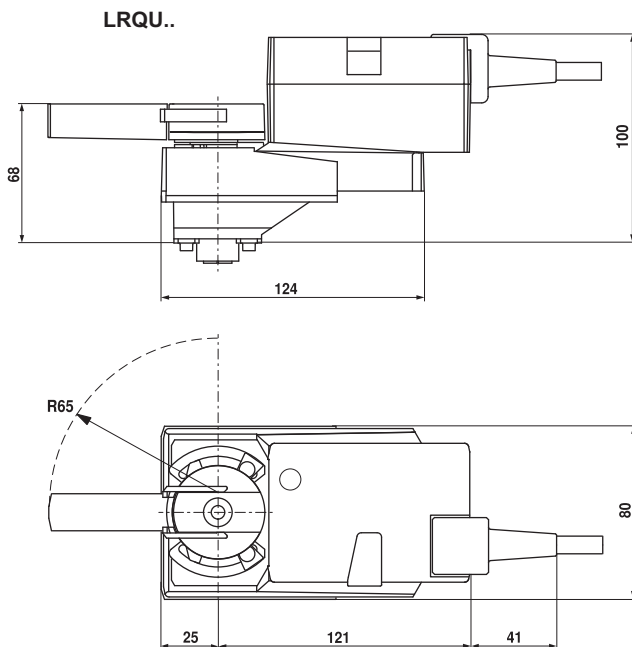
A = Actuator
 C = Control unit
 L1 = Belimo connecting cable, 1m (4x 0.75mm²)
 L2 = Customer cable
 Ltot = Maximum cable length

Note:

When several actuators are connected in parallel, the maximum cable length must be divided by the number of actuators.

Cross section L2 ∅ / ~	Max. cable length L _{tot} = L1 + L2		Example for DC
	AC	DC	
0.75mm ²	≤30m	≤5m	1m (L1) + 4m (L2)
1.00mm ²	≤40m	≤8m	1m (L1) + 7m (L2)
1.50mm ²	≤70m	≤12m	1m (L1) + 11m (L2)
2.50mm ²	≤100m	≤20m	1m (L1) + 19m (L2)

Dimensions [mm]



Operating controls and indicators



① **Direction of rotation switch**

Switching over: Direction of rotation changes

② **Push button and green LED display**

Off: No voltage supply or fault

On: In operation

Press button: Switches on angle of rotation adaptation followed by standard operation

③ **Push button and yellow LED display**

Off: Standard operation

On: Adaptation or synchronising process active

Press button: No function

④ **Gear disengagement switch**

Press button: Gear disengaged, motor stops, manual override possible

Release button: Gear engaged, synchronisation starts, followed by standard operation

Mounting instructions: LRQU.. + DN15...40 CCV/ NRQU.. + DN50 CCV

