

- General Rotary Actuators for:
- Torque:
- Multifunction control:
- Open/Close or 3-point control:

DN15...25 PICCV
5Nm
LRU24-MF (AC/DC 24V)
LRU24(-S) (AC/DC 24V)
LRU230(-S) (AC 100...240V)



Technical data

Basic technical data

Torque	5Nm
Angle of rotation	90°
Direction of rotation	CCW (setting ↘ close position)
Sound power level	~35dB(A) (without the valve)
Position indicator	Mechanical
Manual override	Gearing disengaged by pressing the push button, manual operate while the button is held depressed

Running time	90s
Mode of operation	Type 1 (EN60730)
Ambient temp.	0...+50°C
Non-operation temp.	-40...+80°C
Humidity	5...95% RH, non-condensing
Degree of protection	IP54
EMC	CE according to 89/336/EEC
Low voltage directive	CE according to 73/23/EWG

Maintenance	Maintenance-free
-------------	------------------

LRU24-MF

Nominal voltage	AC 24V 50/60Hz, DC 24V
Nominal voltage range	AC 19.2...28.8V / DC 21.6...28.8V
Power consumption - running	2W
- holding	1.2W
For transformer sizing	3.5VA

Connecting cable	Cable 1m, 4x0.75mm ²
------------------	---------------------------------

Control signal Y	DC (0)2...10V @ input impedance 100kΩ
------------------	---------------------------------------

Working range	DC 0...10V
---------------	------------

Position feedback signal U	DC 2...10V max. 0.5mA
----------------------------	-----------------------

Position accuracy	±5%
-------------------	-----

Protection class	III (safety extra-low voltage)
------------------	--------------------------------

Weight	Approx 0.5kg
--------	--------------

LRU24(-S)

Nominal voltage	AC 24V 50/60Hz, DC 24V
Nominal voltage range	AC/DC 19.2...28.8V
Power consumption - running	1W
- holding	0.2W
For transformer sizing	2VA

Connecting cable - motor	Cable 1m, 3x0.75mm ²
- auxiliary switch	Cable 1m, 3x0.75mm ²

Protection class	III (safety extra-low voltage)
------------------	--------------------------------

Auxiliary switch (LRU24-S)	1XSPDT, 1mA...3(0.5)A, AC 250V 0...100% adjustable
----------------------------	---

Weight	Approx 0.6kg
--------	--------------

LRU230(-S)

Nominal voltage	AC 100...240V 50/60Hz
Nominal voltage range	AC 85...265V
Power consumption - running	1.5W
- holding	0.4W
For transformer sizing	4VA
Connecting cable - motor	Cable 1m, 3x0.75mm ²
- auxiliary switch	Cable 1m, 3x0.75mm ²
Protection class	II (totally insulated)
Auxiliary switch (LRU230-S)	1XSPDT, 1mA...3(0.5)A, AC 250V 0...100% adjustable
Weight	Approx 0.6kg

Product features

Mode of operation

LRU24-MF, NRU24-MF, SRU24-MF is controlled by means of a standard control signal DC (0)2...10V and travels to the position defined by this signal. The measuring voltage U allows the valve position (0...100%) to be electrically indicated and serves as a follow-up control signal for other actuators.

Simple direct mounting

Simple direct mounting on the PICCV with the actuator integrated bracket.

Adjustable angle of rotation

Adjustable angle of rotation with mechanical end stops.
- MF with ZTH & PC-tool

High functional reliability

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

Flexible Signalisation

Flexible Signalisation of the LRU..-S, NRU..-S, SRU..-S with adjustable auxiliary switch (0...100%).

MP-Bus Communication

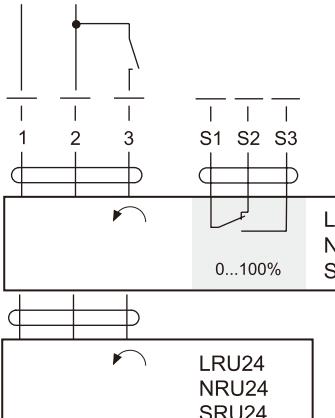
LR24A-MP, NR24A-MP, SR24A-MP support on MP-Bus Communication

Wiring diagrams

**LRU24(-S)
NRU24(-S)
SRU24(-S)**

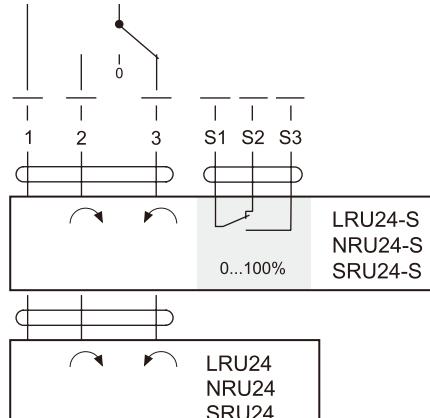
Open/Close control

AC 24V
DC 24V



3-point control

AC 24V
DC 24V



Direction of rotation
(factory setting, switch hidden)



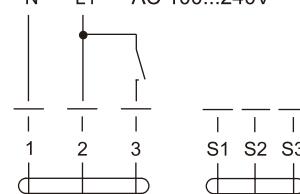
Auxiliary switch (-S)



**LRU230(-S)
NRU230(-S)
SRU230(-S)**

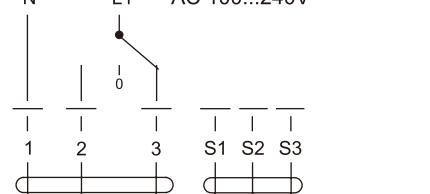
Open/Close control

AC 100...240V



3-point control

AC 100...240V



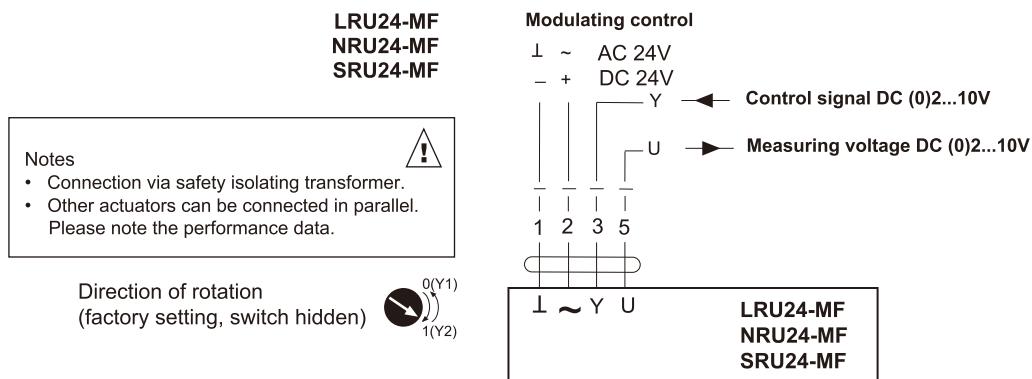
Direction of rotation
(factory setting, switch hidden)



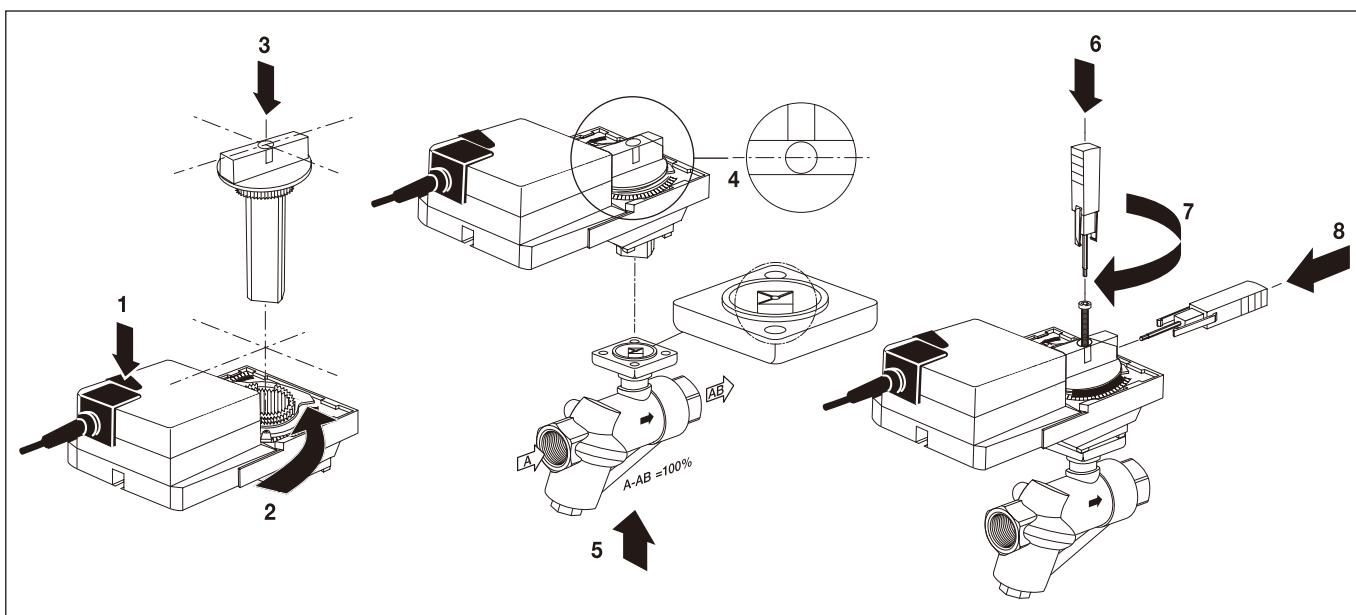
Auxiliary switch (-S)



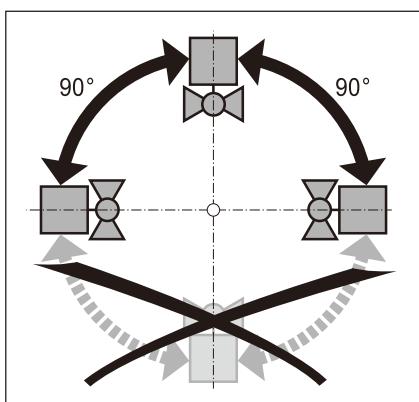
Wiring diagrams (continued)



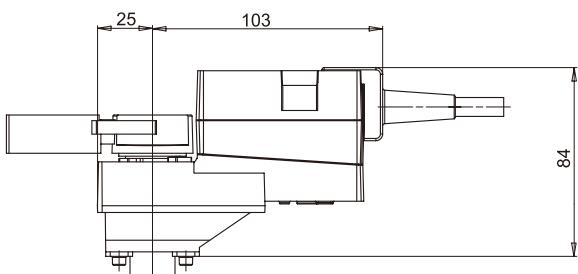
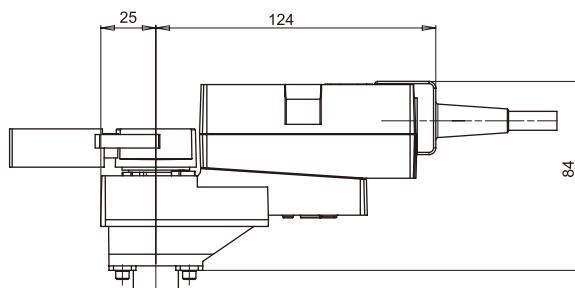
Mounting instructions

**Notes:**

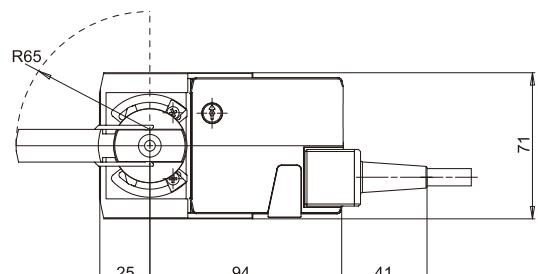
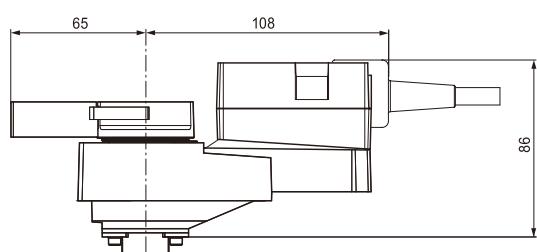
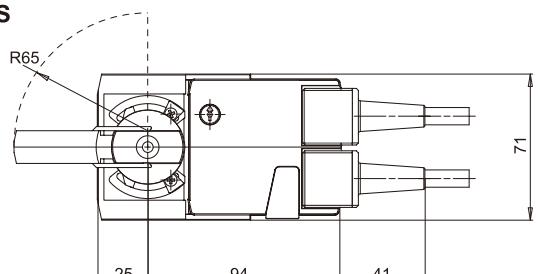
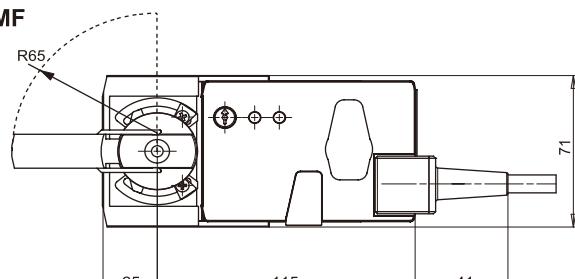
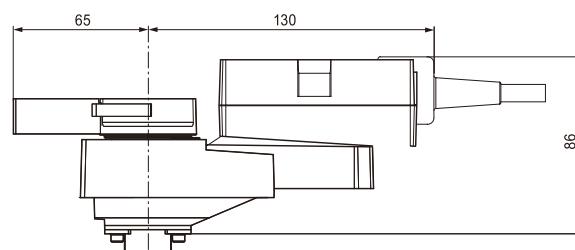
1. The valve assembly can be installed in a vertical or horizontal arrangement, as long as the actuator is positioned to avoid condensation from dripping on the actuator.
2. PICCV shall be installed, with flow in the direction of the arrow on the valve body. If installed backwards, there could be damage to either the diaphragm or the regulator top.



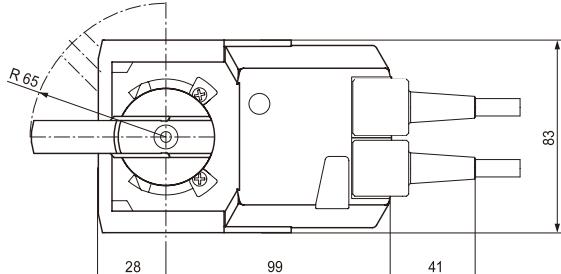
Dimensions [mm]

LRU24
LRU230

LRU24-MF

LRU24-S
LRU230-SNRU24
NRU230

NRU24-MF

NRU24-S
NRU230-S