

EMUWE Series

Proportional NC Valve Actuator - 0-10V - IP54

Technical Data Sheet



Description

EMUWE Series electronic actuators are modulating devices used for the automatic actuation of thermostat-adaptable valves, fan-coil valves and manifolds.



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The proportional **EMUWE Series** Valve Actuator NC 0-10V IP54 works for opening and closing valves in a direct proportion to the applied control voltage. If a control voltage is applied, the actuator opens the valve proportionally to the detected actuator travel with:

- High precision regulation (step by step motor)
- Visualization of the motor position by the status LED

Self-extinguishing polymer cap. M30x1.5 nickel-plated threaded brass ring-nut.
Stroke: 3.2mm, 3.9mm or 4.8mm.

Disc thrust: 100N. Room temperature: 0-50°C. Protection rating IP54.

Compliant with: LVD 2014/35/EU, EMC 2014/30/EU.

Type	Part no.	Power	Weight [g]
EMUWE	P07623	12Vdc, 24Vdc, 24Vac	180

Technical features	
Action	Modulating
Type of movement	Linear
Power supply	12Vdc, 24Vdc, 24Vac
Frequency power supply	50/60 Hz
Power consumption (continuous service)	3 W
Opening time 24V	3,4 sec velocity for moving from 0 to 3,2mm 4,2 sec velocity for moving from 0 to 3,9mm 5,2 sec velocity for moving from 0 to 4,8mm
Actuator stroke	3.2mm, 3.9mm or 4.8mm
Protection rating	IP54 according to EN60529
Electric protection class	Class I
Nominal thrust (power supply OFF)	100 N (±10%)
Temperature exercise	0÷50°C
Storage temperature	-5÷60°C
Maximum valves fluid temperature	80°C
Cover	PC- ABS, RAL 9016 Self-extinguishing UL94 V0
Electric cable	Type: PVC, 80°C, 300V - Length 2m - Section 4 x 0,50mm ² - Dissipated power: 1,2mW - Cable 4 wires
Connection	Threaded seal M30x1,5

Application

EMUWE Series electronic actuators are used for modulating control of the thermal output of terminal units in heating and air conditioning systems.

Operation

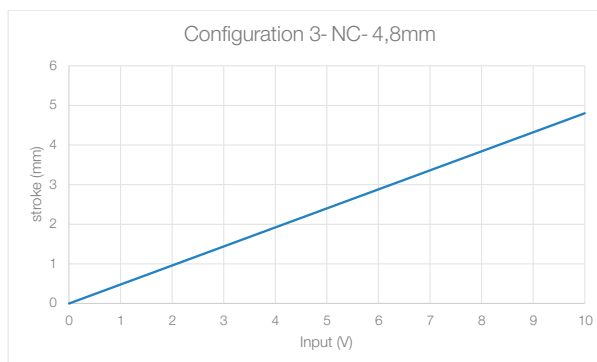
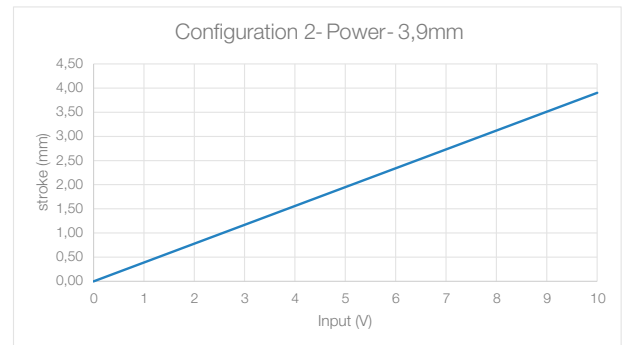
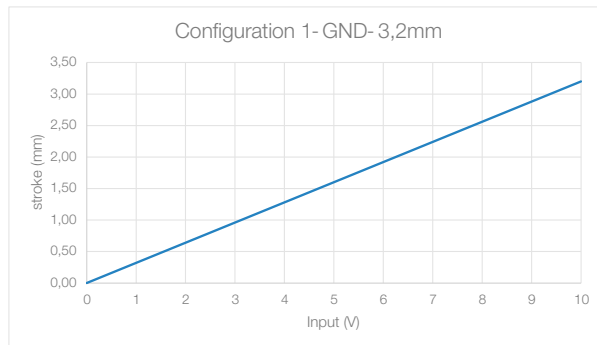
EMUWE Series actuators are operated by a bi-directional synchronous motor. The actuator is fixed to the valve body by an M30x1.5 threaded ring-nut. Actuator movement is transmitted to the valve stem by axial contact, and is kept constant by a spring in the valve body.

STATUS LED

The status LED could be green or red and fix or flashing.

- Fast **red** blinking = actuator is moving for **closing**
- Fast **green** blinking = actuator is moving for **opening**
- Red fix = actuator completely closed or actuator is less than 10% opened
- Green fix = actuator is completely opened
- Slow green flashing = actuator opening according to the following table:

Number of slow green flash	Actuator is opened between
1	10 to 20%
2	20 to 30%
3	30 to 40%
4	40 to 50%
5	50 to 60%
6	60 to 70%
7	70 to 80%
8	80 to 90%
9	90 to 100%



Installation

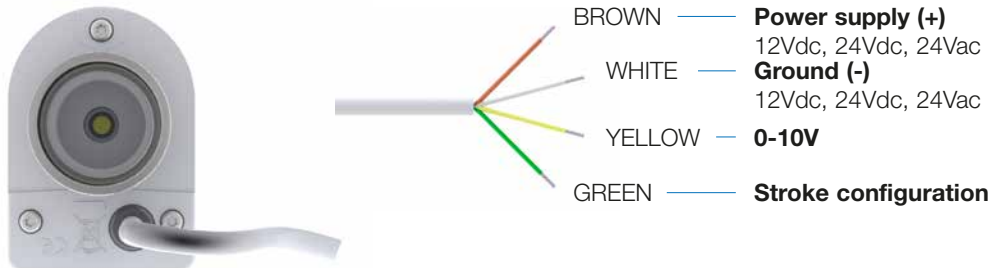
To install the actuators, proceed as follows:

1. Remove the cap or handwheel (if present) from the valve body (or manifold).
2. Install the actuator by fully tightening the ring-nut on the valve body thread by hand (no multigrip plier tool).
3. Connect the wires to the electrical system.

Electrical connection

Stroke configuration

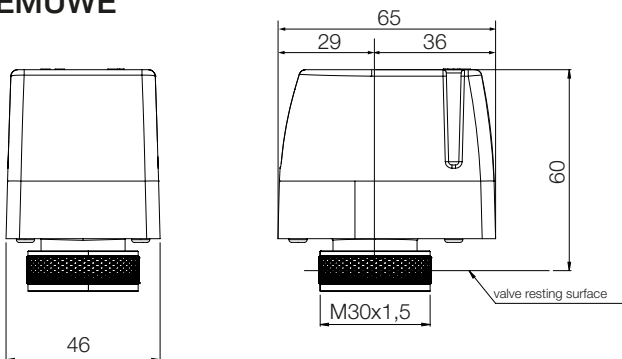
To configure the actuator stroke, the green wire must be selected. The configuration is read and automatically set up after the learning phase when the actuator is powered. Then it cannot be modified during operation. To change settings, the actuator must be restarted with the selected green cable wiring in order to change the stroke configuration.



Stroke configuration with GREEN cable connection to the:	Max stroke
GND - WHITE	3,2 mm
Power supply - BROWN	3,9 mm
Not connected	4,8 mm

Overall dimensions (mm)

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Specification text

EMUWE Series

Compact electronic actuator with modulating action **EMUWE Series** – WATTS brand. M30x1.5 nickel-plated threaded brass ring-nut. Stroke: 3.2mm, 3.9mm or 4.8mm. Disc thrust: 100N. Room temperature: 0-50°C. Protection rating IP54. Power consumption: 3 W. Power supply: 12Vdc, 24Vdc, 24Vac.

The descriptions and photographs contained in this product specification sheet are supplied by way of information only and are not binding.

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