

Modulating rotary actuator in connection with a mounting kit for the motorisation of the most common mixing valves in HVAC systems

- Torque 10 Nm
- Nominal voltage AC/DC 24 V
- Control: Modulating


**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 24 V, 50/60 Hz / DC 24 V
	Power supply range	AC 19.2 ... 28.8 V / DC 21.6 ... 28.8 V
	Power consumption	In operation 1.5 W at nominal torque For wire sizing 2.5 VA
	Connection	Terminals 4 mm <sup>2</sup> (cable Ø 6 ... 8 mm, three-core)
	Parallel connection	Yes (Note performance data for supply!)
<b>Functional data</b>	Torque (nominal torque)	Min. 10 Nm at nominal voltage
	Control	control signal Y DC 0 ... 10 V, Input resistance 100 kΩ operating range DC 2 ... 10 V for 0 ... 90°↔ (can be switched to DC 0 ... 10 V)
	Position response (measuring voltage U)	DC 2 ... 10 V, max. 1 mA, for 0 ... 90°↔ (can be switched to DC 0 ... 10 V)
	Position accuracy	±5%
	Manual override	Temporary and permanent disengagement of the gearing latch by means of the rotary knob on the housing
	Running time	140 s / 90°↔
	Sound power level	Max. 35 dB (A)
	Position indication	Reversible scale plate 0 ... 1
<b>Safety</b>	Protection class	III Extra low voltage
	Degree of protection	IP40
	EMC	CE according to 89/336/EEC
	Mode of operation	Type 1 (to EN 60730-1)
	Rated impulse voltage	0.8 kV (to EN 60730-1)
	Control pollution degree	3 (to EN 60730-1)
	Ambient temperature range	0 ... +50 °C
	Media temperature	+5 ... +120 °C (in mixing body)
	Non-operating temperature	-30 ... +80 °C
	Ambient humidity range	95% r.H., non-condensating (to EN 60730-1)
Maintenance	Maintenance-free	
<b>Dimensions / Weight</b>	Dimensions	See «Dimensions» on page 2
	Weight	Approx. 500 g

**Safety notes**


- The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel.  
All applicable legal or institutional installation regulations must be complied with.
- The device does not contain any parts that can be replaced or repaired by the user.
- To calculate the torque required, the specifications supplied by the mixing valve manufacturer must be observed.
- The device contains electrical and electronic components and is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

**Product features**

- Mode of operation** The actuator is controlled with a standard signal of DC 0 ... 10 V and moves into the position defined by the control signal.
- Simple direct mounting** Straightforward direct mounting with only one screw. The mounting position in relation to the mixing valve can be selected in 90° steps.
- Manual operation** Manual operation possible by lever (temporary disengagement of the gearing latch by pressing, permanent disengagement by means of the rotary knob on the housing).
- Functional reliability** The actuator switches off automatically when the end stops are reached. The actuator switches off for seven seconds in the case of blocking, then attempts to restart. If the blocked condition persists, the actuator attempts to restart once every two minutes a total of 15 times and subsequently once every two hours.

**Accessories**

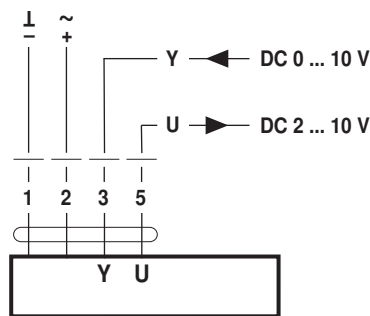
	Description
<b>Mechanical accessories</b>	Mounting kits for ESBE, Termomix, Pommerening, Dumserwerk, Lovato, Landis & Staefa, Lazzari, Oventrop, Meibes, Wita, Holter, Satchwell and Centra mixing valves.

**Electrical installation**

**Wiring diagram**

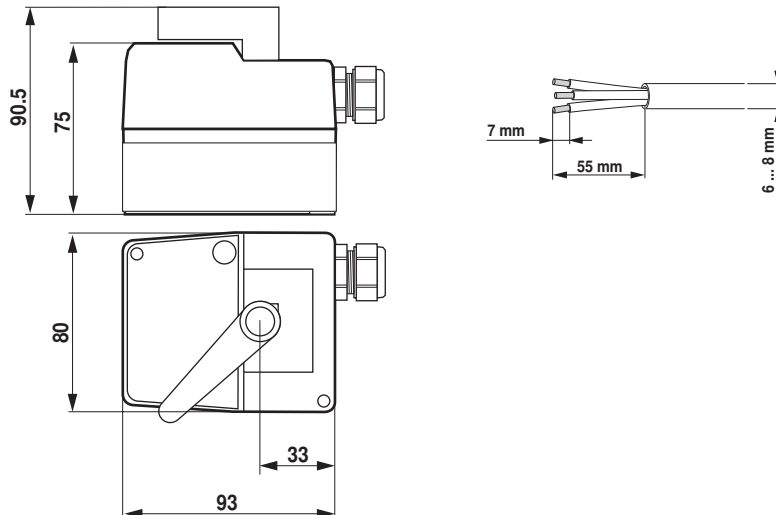
**Notes**

- Connect via safety isolation transformer.
- Parallel connection of several actuators possible. Power consumption must be observed!
- Factory setting: Operating range/Position feedback DC 2 ... 10 V (can be switched to DC 0 ... 10 V)



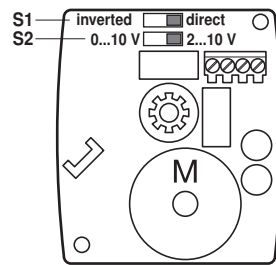
**Dimensions [mm]**


**Dimensional diagrams**

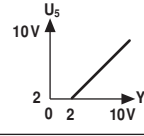
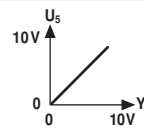


### Adjusting switch S1 and S2

The S1 and S2 switches for setting the direction of rotation and the operating range/position feedback are located underneath the housing cover.



Switch S1	Direction of rotation	
Signal direct *	 0	Y = 0%
Signal inverted	 1	Y = 0%

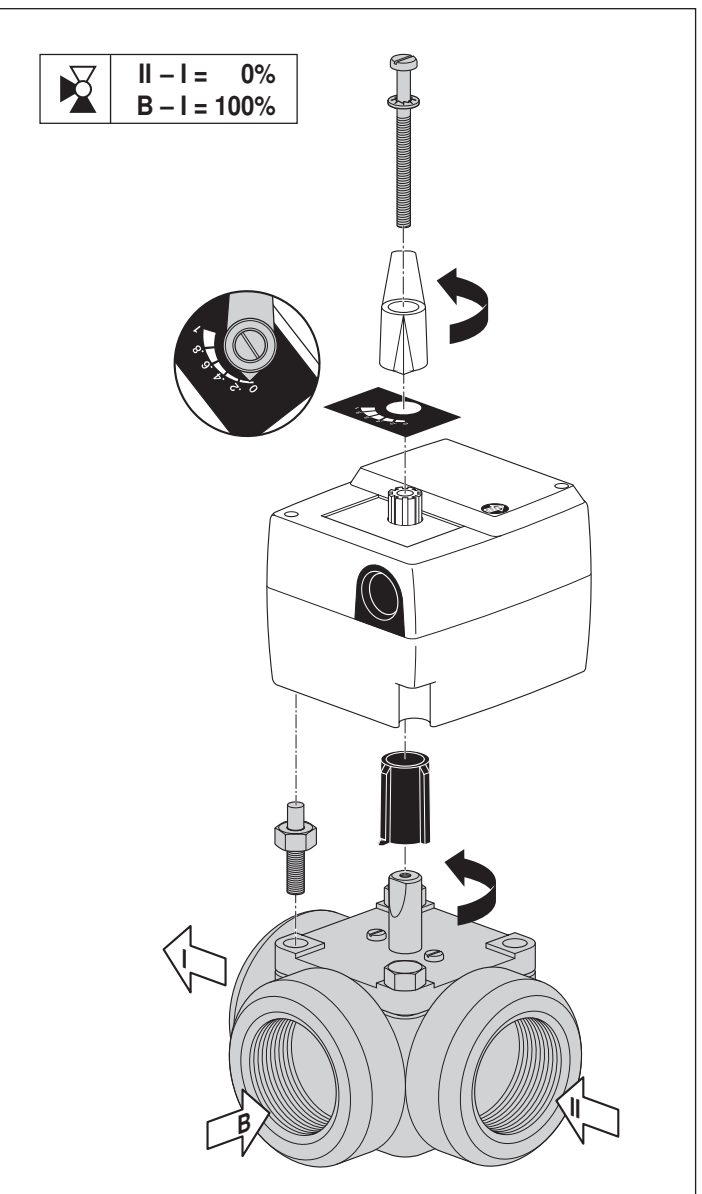
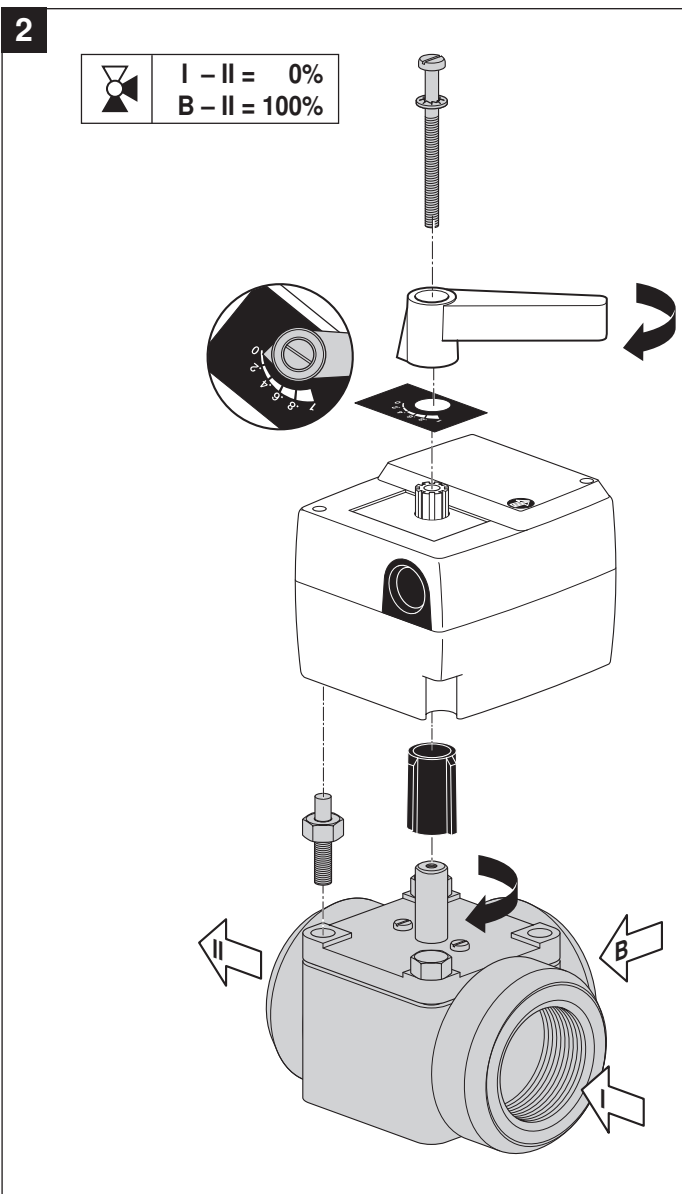
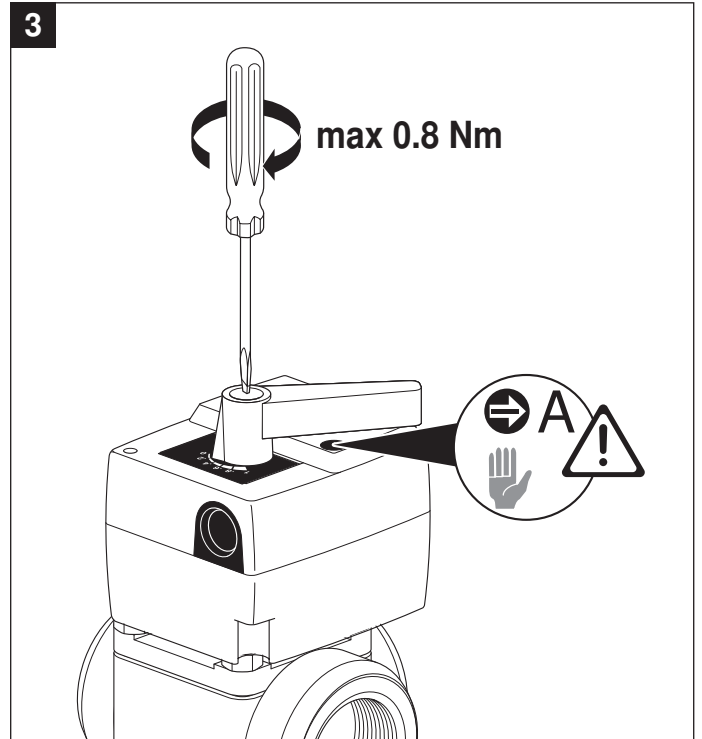
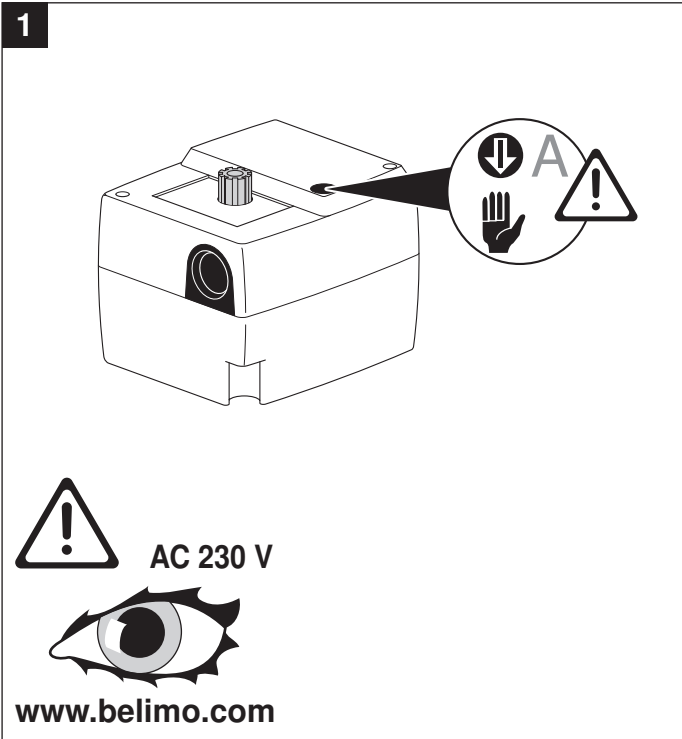
Switch S2	Operating range/Position feedback
2 ... 10 V *	
0 ... 10 V	

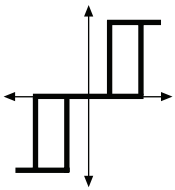
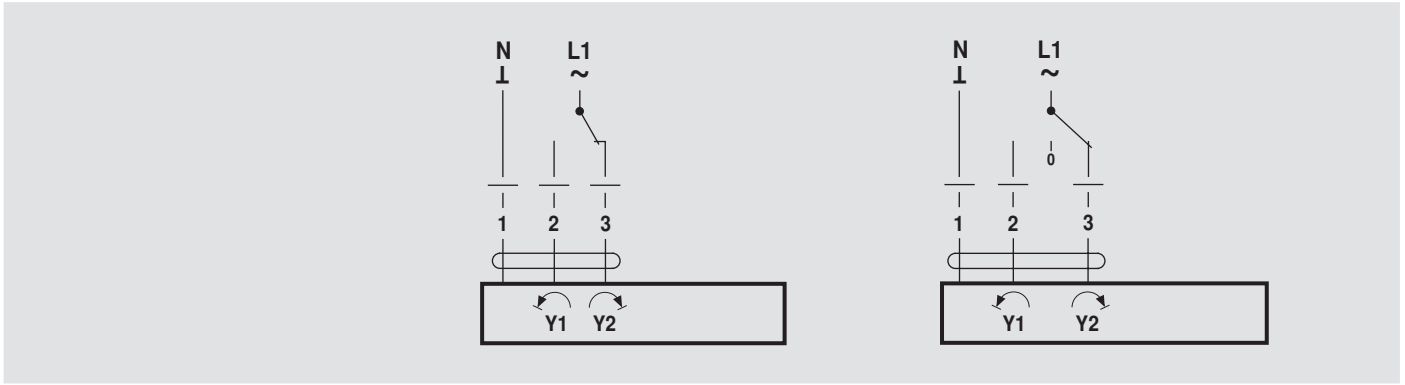
\* Factory setting

### Dismounting the housing cover

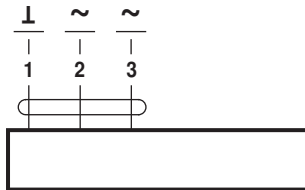
Loosen the central screw at the black lever and remove the two Phillips screws of the housing cover.

70722-00001.B

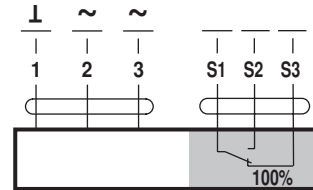




AC 24 V

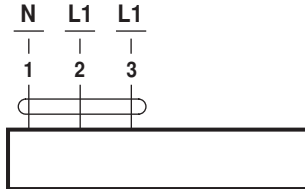


HT..24-3-T

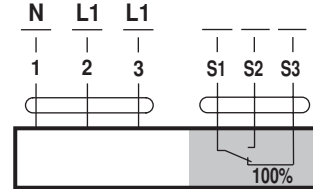


HT..24-3-S

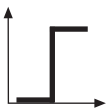
AC 230 V



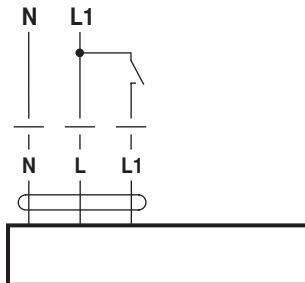
HT..230-3-T



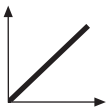
HT..230-3-S



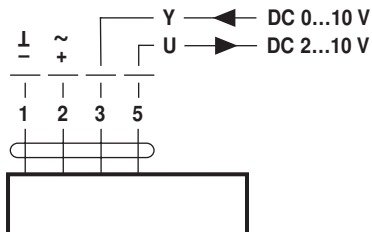
AC 230 V



HT..230-1-T



AC 24 V / DC 24 V



HT..24-SR-T



AC 230 V



[www.belimo.com](http://www.belimo.com)