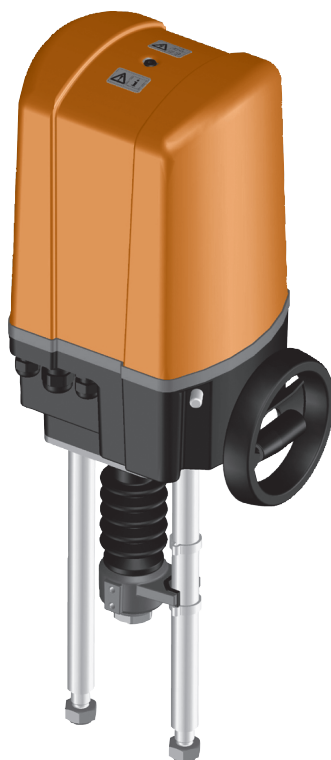


Large stroke actuator for 2-way and 3-way large globe valves DN 200 / DN 250

- Actuating force 12 kN
- Nominal voltage AC 230 V
- Control: 3-point


**Type listing**

Type	Suitable for Belimo large globe valve
GV12-230-3-T	H6..W..-S7 H7..W..-S7

**Technical data**

<b>Electrical data</b>	Nominal voltage	AC 230 V, 50 Hz
	Nominal voltage range	AC 207 ... 253 V
	Power consumption (Dimensioning)	109 VA
	Connection	Terminals, 1.5 mm <sup>2</sup>
<b>Functional data</b>	Actuating force (Closing force)	12 kN
	Control	3-point
	Minimum pulse duration	>0.5 s
	Manual override	Handwheel, temporary
	Nominal stroke	65 mm
	Actuating time	0.79 mm/s
	Sound power level	67 dB(A)
	Position indication	mechanical (30 ... )65 mm stroke
	Operating mode	EN60034-1/A11 S3-50% ED 1200 c/h
	Lubricant for gearbox	Molyduval Valenzia H2
Auxiliary switch	2 (switching capacity 16 A, AC 250 V)	
<b>Safety</b>	Protection class	<b>II</b>
	Protection mode	IP65
	EMC	CE according to 2004/108/EC
	Low-voltage directive	CE according to 2006/95/EC
	Mode of operation	Type 1 (EN 60730-1)
	Rated impulse voltage	2 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature	-20 ... +70 °C
	Ambient humidity	95% r.h., non-condensating (EN 60730-1)
	Maintenance	Maintenance-free
<b>Dimensions / weight</b>	Dimensions	See «Dimensions» on page 3
	Weight	Approx. 10.5 kg

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. Any legal regulations or regulations issued by government agency authorities must be observed during assembly.
- The device does not contain any parts that can be replaced or repaired by the user.
- 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 activated with a 3-point signal. If the actuator reaches the end position, then the motor will be switched off via (two) load-dependent switches. These switches protect the motor when there are foreign objects between the fitting seat and the cone.

Installation actuator – valve

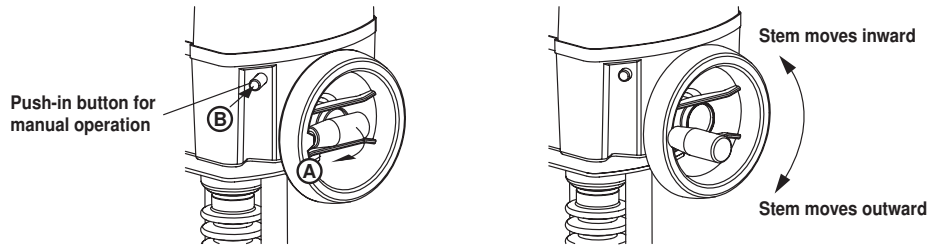
The actuator is mounted ex-works to the corresponding valve. The power connection is accomplished with form closure. The power transmission is accomplished by means of the coupling that is secured against torsion.

Actuator replacement

If an actuator must be replaced in an emergency situation, then the installation instructions for replacement actuators must be followed.

Manual override

In deenergised state and/or when the motor is shut off, upward and downward movement can be accomplished when the handwheel is pressed in.



Caution

- Manual operation may be initiated only when the motor is shut off. Switching while the motor is running can cause damage to the stroke actuator!
- When in manual operation, do not fail to note that, when in end position, the handwheel is rotated only to the point that the torque switches are actuated (audible clicking), because otherwise the stroke actuator will be damaged.



To accomplish this, proceed as follows:

- Unfold rotary handle from the handwheel (A)
- Press in the engagement button for manual operation while rotating the handwheel slightly (B) → Button engages
- Rotate handwheel in clockwise direction → Stem moves outward ↓
- Rotate handwheel anticlockwise → Stem moves inward ↑

The motor is no longer coupled when the handwheel is pressed in. The handwheel is pushed out automatically when the motor starts and the motor is once again coupled.

High operational reliability

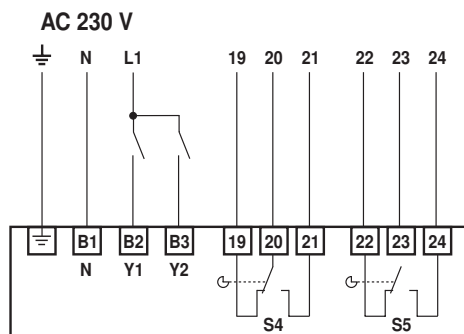
The actuator is protected against short circuits, polarity reversal and overloading.

Function indication

The stroke is indicated mechanically on the bracket. The indicator adjusts itself automatically.

Electrical installation

Wiring diagram



Caution

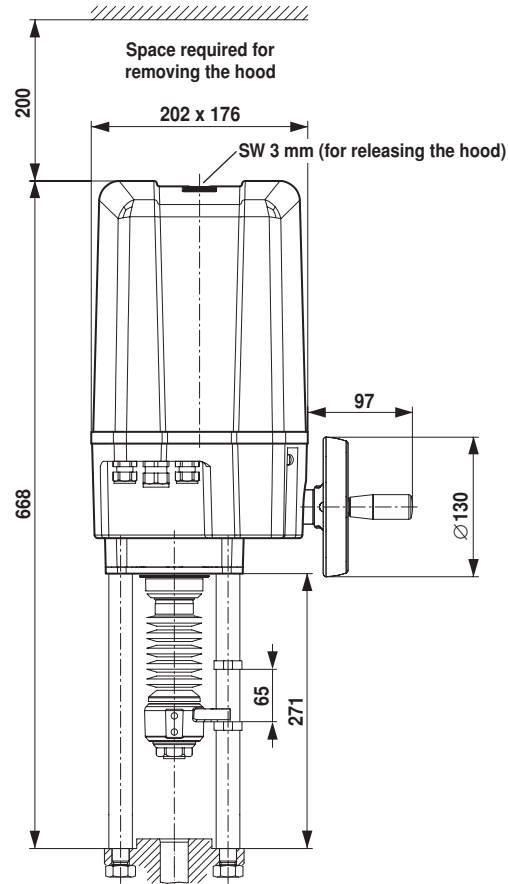
Electronic relays such as Solid State Relay and Triacs must be shielded in conjunction with inductive loads (800 V, surges 100 A @ 16.7 ms).



	(M)	A – AB	A – AB
Y1	↓	0%	100%
Y2	↑	100%	0%

## Dimensions [mm]

Dimensional drawing

**Further documentation**

- Complete overview «The complete product range of water solutions»
- Data sheets large globe valves
- Installation instructions for actuators and large globe valves, respectively
- Notes for project planning (hydraulic characteristic curves and circuits, installation regulations, commissioning, maintenance, etc.)