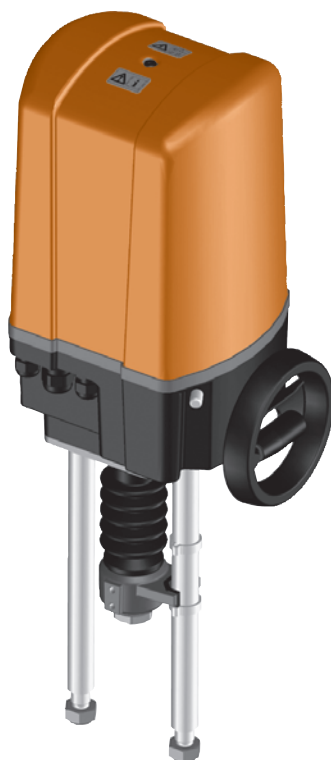


Large stroke actuator for 2-way and 3-way large globe valves DN 200 / DN 250

- Actuating force 12 kN
- Nominal voltage AC 24 V
- Control: modulating DC 0 ... 10 V



Type listing

Type	Suitable for Belimo large globe valve
GV12-24-SR-T	H6..W..-S7 H7..W..-S7

Technical data

Electrical data	Nominal voltage	AC 24 V, 50 Hz
	Power supply range	AC 19.2 ... 28.8 V
	Power consumption Dimensioning	91 VA
	Connection	Terminals, 1.5 mm ²
Functional data	Actuating force Closing force	12 kN
	Control Control signal Y	DC 0 ... 10 V, input impedance 100 kΩ
	Operating range	DC 2 ... 10 V
	Position feedback (measuring voltage U)	DC 2 ... 10 V, max. 0.5 mA
	Uni-rotation	±5%
	Manual override	Handwheel, temporary
	Nominal stroke	65 mm
	Actuating time	0.79 mm/s
	Position indication	mechanical (30 ...)65 mm stroke
	Operating mode	EN60034-1/A11 S3-50% ED 1200 c/h
Safety	Protection class	III Safety extra-low voltage
	Protection mode	IP65
	EMC	CE according to 2004/108/EC
	Mode of operation	Type 1 (EN 60730-1)
	Rated impulse voltage	1.5 kV (EN 60730-1)
	Control pollution degree	3 (EN 60730-1)
	Ambient temperature	-20 ... +70 °C
	Non-operating temperature	-40 ... +80 °C
	Ambient humidity	95% r.h., non-condensating (EN 60730-1)
	Maintenance	Maintenance-free
Dimensions / Weight	Dimensions	See «Dimensions» on page 3
	Weight	Approx. 10.5 kg

Safety notes



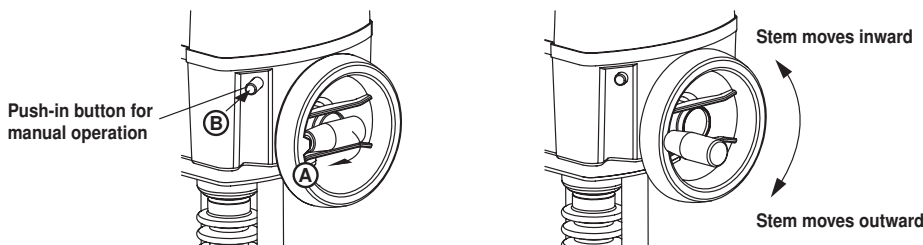
- The actuator has been designed for use in stationary heating, ventilation and air conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel. 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 standard DC 0 ... 10 V 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 – fitting The actuator is mounted ex-works to the corresponding valve and is adjusted and compensated to the stroke of the valve. The power connection is accomplished with form closure. The power transmission is accomplished by means of the coupling that is secured against torsion.

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 propulsion drive!
- 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 propulsion drive 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 ↑

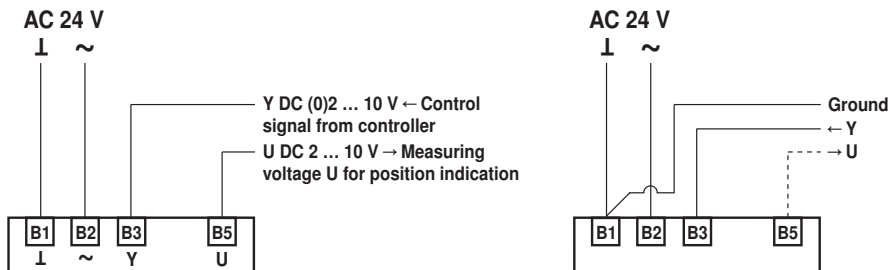
The motor is no longer coupled when the handwheel is pressed in. The handwheel is pushed out automatically when the motor starts and the motor is once again coupled.

High functional 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



Notes

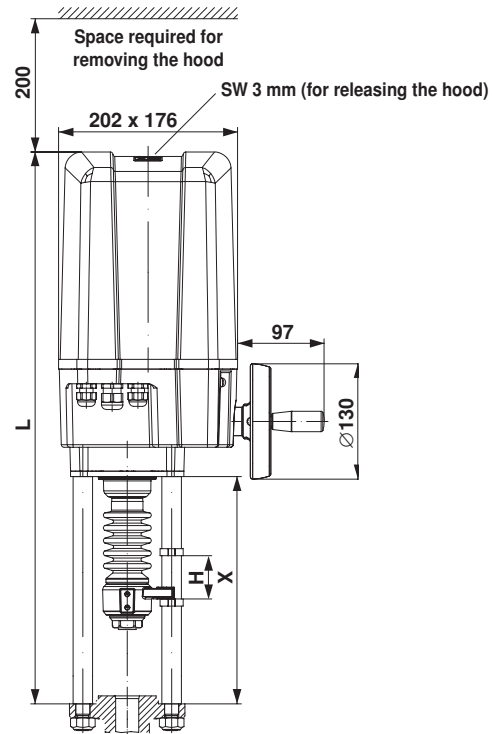


- Connect via safety isolation transformer.
- Shared ground for feed and signal with max. signal conductor lengths of 25 m with 1.5 mm² conductor cross-section or 10 m with 0.75 mm² conductor cross-section. Guide feed and signal separately with longer signal conductor lengths (Ground Signal).
- Use drilled cables.

			A – AB
Y = 2 V	↓	↑	0%
Y = 10 V	↑	↓	100%

Dimensions [mm]

Dimensional drawing



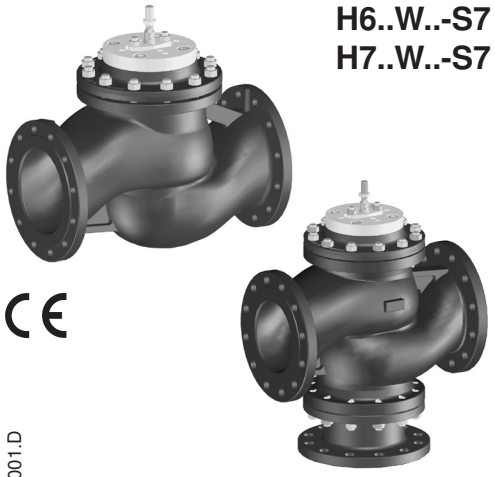
X [mm]	L [mm]	H [mm]
271	668	65

Further documentation

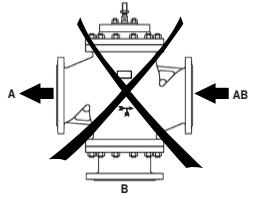
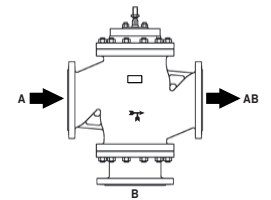
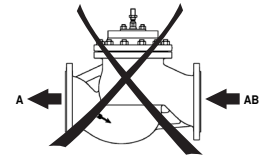
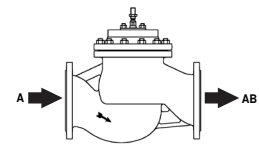
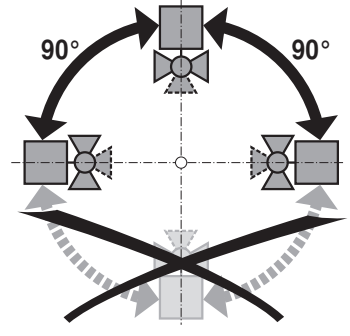
- Complete overview «The complete product range for water solutions»
- Data sheets large globe valves
- Installation instructions for actuators and large globe valves, respectively
- Notes for project planning (hydraulic characteristic curves and circuits, installation regulations, commissioning, maintenance,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

BELIMO

H6..W..-S7
H7..W..-S7



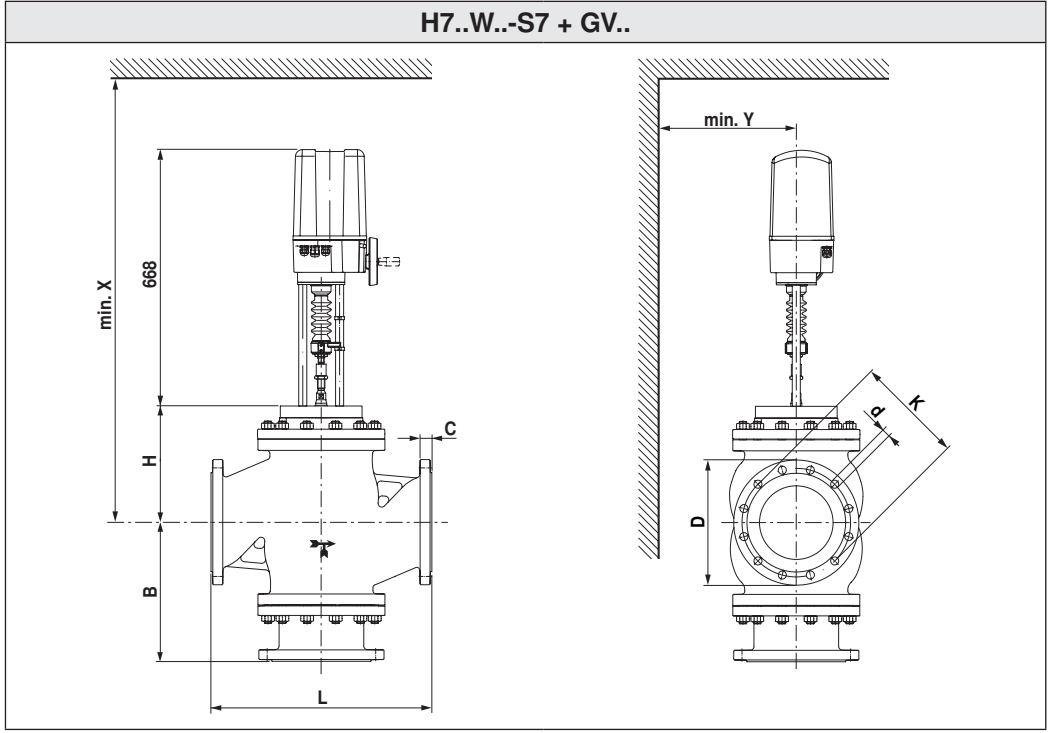
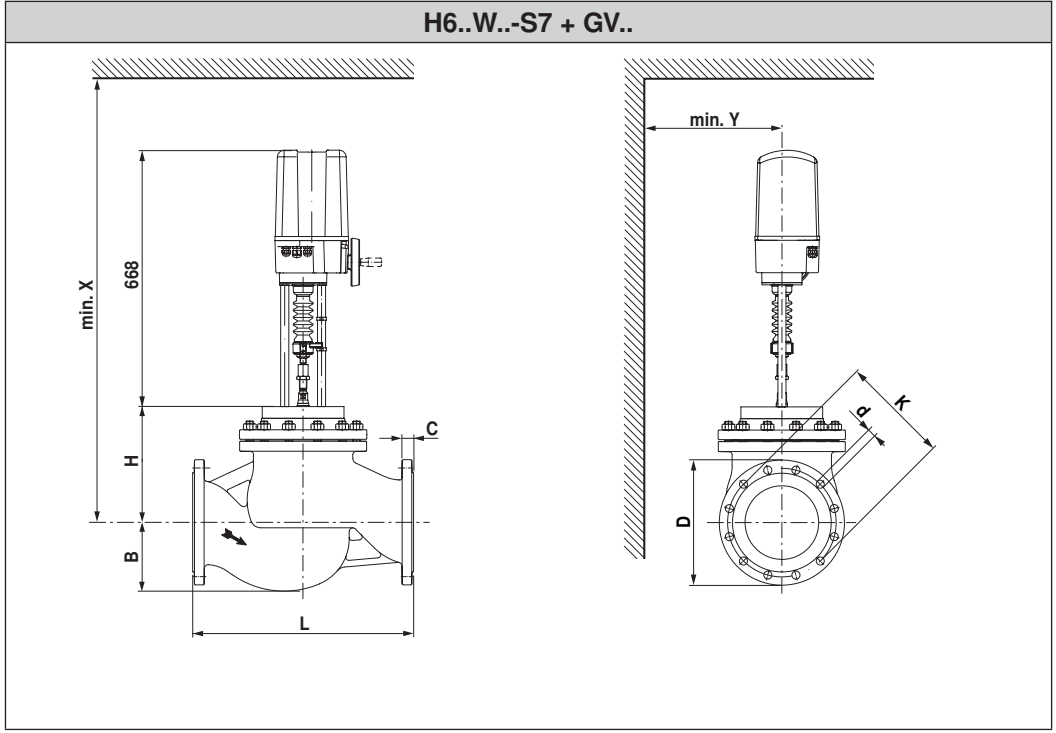
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H6..N, H7..N

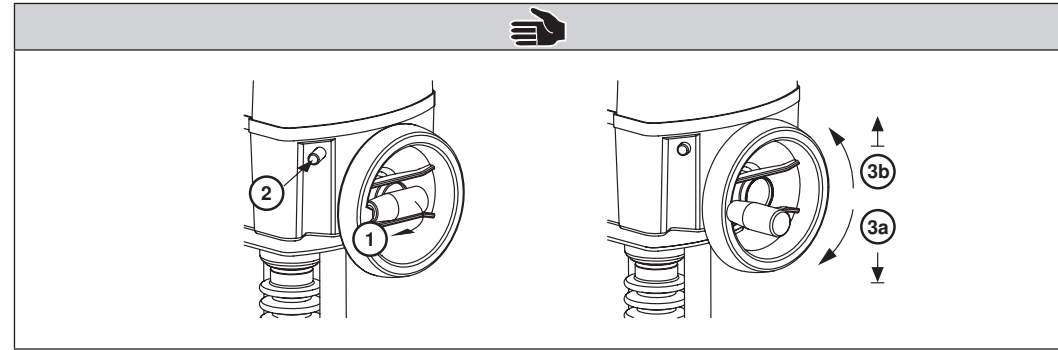
$p_s < 1600 \text{ kPa}$ (PN 16) $t = +5^\circ\text{C} \dots +120^\circ\text{C}$	H6..W..-S7		H7..W..-S7	

Ⓜ	DN		B	W		B	W	Δp_s	Δp_{max}	L	D	K	d	C	H	X	Y
	[mm]		[mm]	[kg]		[mm]	[kg]	[kPa]	[kPa]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
GV..	200	H6200W630-S7	187	156	H7200W630-S7	380	208	310	310	600	340	295	12 x 22	30	315	1210	200
	250	H6250W1000-S7	255	239	H7250W1000-S7	440	354	190	190	730	405	355	12 x 26	32	375	1270	250

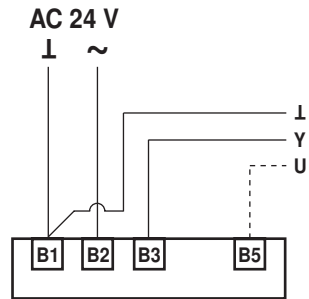
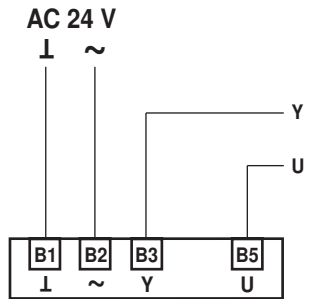




GV12-24-SR-T
GV12-230-3-T

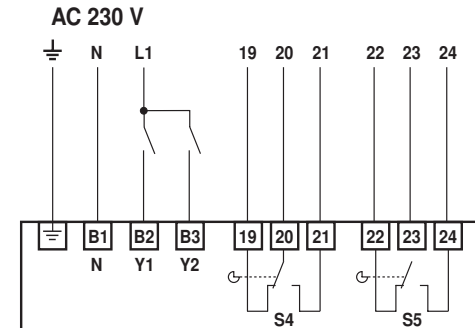


GV12-24-SR-T



			A - AB
Y = 2 V	↓	↑	0%
Y = 10 V	↑	↓	100%

GV12-230-3-T



		A - AB	A - AB
Y1	↓	0%	100%
Y2	↑	100%	0%