

Globe valve, 2-way, Flange, PN 16

- For closed (high temperature) hot water and steam systems in the noncritical range
- For water-side modulating control of air-handling and heating systems



## Type overview

Туре	<b>DN</b> []	<b>kvs</b> [ m³/h]	Stroke [ mm]	<b>PN</b> []	Sv min.
H610S	15	0.4	15	16	50
H611S	15	0.63	15	16	50
H612S	15	1	15	16	50
H613S	15	1.6	15	16	50
H614S	15	2.5	15	16	50
H615S	15	4	15	16	50
H619S	20	4	15	16	100
H620S	20	6.3	15	16	100
H624S	25	6.3	15	16	100
H625S	25	10	15	16	100
H632S	32	16	15	16	100
H640S	40	25	15	16	100
H650S	50	40	15	16	100
H664S	65	58	18	16	100
H665S	65	63	30	16	100
H680S	80	100	30	16	100
H6100S	100	145	30	16	100
H6125S	125	220	40	16	100
H6150S	150	320	40	16	100

## **Technical data**

#### **Functional data**

Media	Hot water and steam ( $\Delta p/P1 < 0.4$ ), water with max. 50% volume of glycol
Medium temperature	5150°C
Medium temperature note	120°C up to 1600 kPa
	150°C up to 1400 kPa
Permissible pressure ps	1600 kPa
Flow characteristic	equal percentage (VDI/VDE 2173) n(gl) = 3,
	optimised in the opening range
Leakage rate	max. 0.05% of the kvs value
Pipe connectors	Flange according to ISO 7005-2 (PN 16)
Closing point	Bottom (▼)
Installation position	Upright to horizontal (in relation to the stem)
Maintenance	Maintenance-free
Housing	EN-JL1040 (GG25), with protective paint
Closing element	Stainless steel
Stem	Stainless steel
Stem seal	PFTE V-ring
Seat	Stainless steel

## Safety notes



**Materials** 

 The valve has been designed for use in stationary heating, ventilation and airconditioning 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.



#### Safety notes

- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The valve does not contain any parts that can be replaced or repaired by the user.
- The valve may not be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- When determining the flow rate characteristic of controlled devices, the recognised directives must be observed.

#### **Product features**

Mode of operation

The globe valve is adjusted by a globe valve actuator. The actuators are connected by a commercially available modulating or 3-point control system and move the valve cone, which acts as a throttling device, into the opening position dictated by the positioning signal.

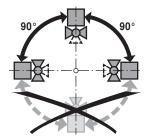
Flow characteristic

An equal percentage flow characteristic is produced by the profile of the valve cone.

#### **Installation notes**

Recommended installation positions

The globe valve may be mounted upright to horizontal. It is not permissible to mount the globe valves with the spindle pointing downwards.



#### Water quality requirements

The water quality requirements specified in VDI 2035 must be adhered to. Belimo valves are regulating devices. For the valves to function correctly in the long term, they must be kept free from particle debris (e.g. welding beads during installation work).

The installation of suitable strainer is recommended.

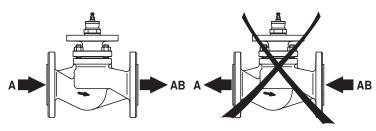
#### Maintenance

Globe valves and globe valve actuators are maintenance-free.

Before any kind of service work is carried out on the actuator, it is essential to isolate the globe valve actuator from the power supply (by disconnecting the electrical cables if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate shut-off valves closed (allow everything to cool down first if necessary and reduce the system pressure to ambient pressure level). The system must not be returned to service until the globe valve and the globe valve actuator have been mounted properly in accordance with the instructions and the pipes have been refilled in the proper manner.

#### Flow direction

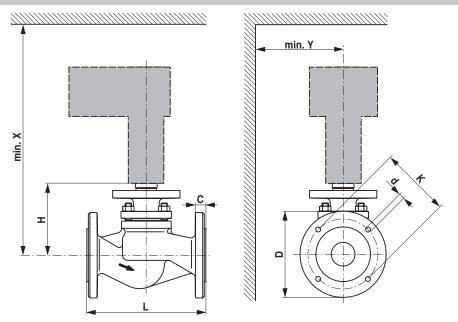
The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the valve could become damaged.





# **Dimensions / Weight**

## **Dimensional drawings**



 $\mbox{\ensuremath{X/Y}}\mbox{:}$  Minimum distance with respect to the valve centre. The actuator dimensions can be found on the respective actuator data sheet.

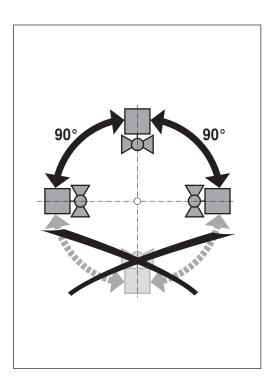
Туре	<b>DN</b> []	<b>L</b> [ mm]	<b>H</b> [ mm]	<b>C</b> [ mm]	<b>D</b> [ mm]	<b>d</b> [ mm]	<b>K</b> [ mm]	<b>X</b> [ mm]	<b>Y</b> [ mm]	Weight approx. [ kg]
H610S	15	130	118	14	95	4 x 14	65	370	100	4.1
H611S	15	130	118	14	95	4 x 14	65	370	100	4.1
H612S	15	130	118	14	95	4 x 14	65	370	100	4.1
H613S	15	130	118	14	95	4 x 14	65	370	100	4.1
H614S	15	130	118	14	95	4 x 14	65	370	100	4.1
H615S	15	130	118	14	95	4 x 14	65	370	100	4.1
H619S	20	150	118	16	105	4 x 14	75	370	100	4.7
H620S	20	150	118	16	105	4 x 14	75	370	100	4.7
H624S	25	160	126	16	115	4 x 14	85	380	100	5.8
H625S	25	160	126	16	115	4 x 14	85	380	100	5.8
H632S	32	180	126	18	140	4 x 18	100	380	100	7.6
H640S	40	200	133	18	150	4 x 18	110	390	100	9.3
H650S	50	230	139	20	165	4 x 18	125	390	100	12
H664S	65	290	152	20	185	4 x 18	145	400	100	16.4
H665S	65	290	155	20	185	4 x 18	145	500	150	16.5
H680S	80	310	170	22	200	8 x 18	160	520	150	22
H6100S	100	350	190	24	220	8 x 18	180	540	150	34
H6125S	125	400	228	26	250	8 x 18	210	580	150	52
H6150S	150	480	288	26	285	8 x 22	240	640	150	87

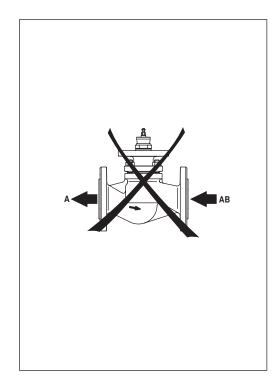
# **Further documentation**

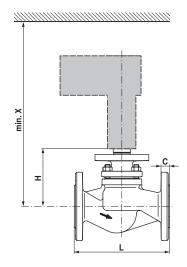
- Overview Valve-actuator combinations
- Data sheets for globe valve actuators
- Installation instructions for valves and/or globe valve actuators
- Notes for project planning 2-way and 3-way globe valves

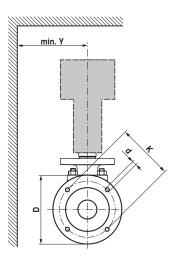












# H6..S(P)

t= ps <1	600 kPa (PN16) +5 +120°C 400 kPa (PN16) -121 +150°C	H6S	H6SP	1	<b>7A</b> DON	l .	<b>7A</b> 00N					<b>/A</b> 00N									
DN	Hub / Stroke [mm]	A ▶ AB	A ▶ AB	∆ <b>ps</b> [kPa]	∆ <b>pmax</b> [kPa]	L [mm]	H [mm]	<b>D</b> [mm]	K [mm]	<b>d</b> [mm]	C [mm]										
15	15	H610S 11S		1600	1000	1600	1000	1600	1000							130	118	95	65	4 x 14	14
15	15	H612S 15S		800	800	1600	1000	1600	1000							130	118	95	65	4 x 14	14
20	15	H619S 20S		800	800	1600	1000	1600	1600							150	118	105	75	4 x 14	16
25	15	H624S 25S		450	450	1300	1000	1600	1000							160	126	115	85	4 x 14	16
32	15	H632S		300	300	950	950	1550	1000							180	126	140	100	4 x 18	18
40	15	H640S		140	140	500	500	850	850							200	133	150	110	4 x 18	18
40	15		H640SP			1600	1000	1600	1000							200	136	150	110	4 x 18	18
50	15	H650S		60	60	300	300	500	500							230	139	165	125	4 x 18	20
50	15		H650SP			1600	1000	1600	1000							230	142	165	125	4 x 18	20
65	18	H664S				130	130	250	250							290	152	185	145	4 x 18	20
65	18		H664SP			1600	1000	1600	1000							290	155	185	145	4 x 18	20
65	30	H665S								400	400	550	550	1100	1000	290	155	185	145	4 x 18	20
80	18		H679SP			1600	1000	1600	1000							310	173	200	160	8 x 18	22
80	30	H680S								250	250	350	350	700	700	310	170	200	160	8 x 18	22
100	30	H6100S								150	150	200	200	450	450	350	190	220	180	8 x 18	24
100	30		H6100SP							600	600	600	600	600	600	350	193	220	180	8 x 18	24
125	40	H6125S										110	110	250	250	400	228	250	210	8 x 18	26
125	40		H6125SP									600	600	600	600	400	245	250	210	8 x 18	26
150	40	H6150S										70	70	180	180	480	288	285	240	8 x 22	26
150	40		H6150SP									600	600	600	600	480	306	285	240	8 x 22	26