

2-way globe valve, 2-way, Flange, PN 16

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



Type overview

Type	DN	Rp ["]	Kvs [m³/h]	Stroke	PN	n(gl)	Sv min.
H665SP-Q	65	2 1/2	63	20 mm	16	3	100
H680SP-R	80	3	100	30 mm	16	3	100
H6100SP-S	100	4	160	40 mm	16	3	100
H6125SP-T	125	5	250	40 mm	16	3	100
H6150SP-T	150	4	350	40 mm	16	3	100
H6200SP-U	200	8	520	40 mm	16	3	100
H6250SP-V	250	10	700	40 mm	16	3	100

Technical data

Functional data	Fluid	Cold, warm and hot water, water with glycol up to max. 50% vol.
	Fluid temperature	0...150°C [32...302°F]
	Flow characteristic	equal percentage (VDI/VDE 2173), optimised in the opening range
	Leakage rate	max. 0.02% of the Kvs value
	Closing point	Top (▲)
	Pipe connection	Flange according to ISO 7005-2
	Installation orientation	upright to horizontal (in relation to the stem)
	Servicing	maintenance-free
	Materials	Valve body
Closing element		Stainless steel AISI 304
Spindle		Stainless steel AISI 304 (DN 65, 100, 150, 250) Stainless steel (DN 80, 125, 200)
Spindle seal		PTFE
Seat		Stainless steel AISI 304 (DN 65, 100, 150, 250) Stainless steel (DN 80, 125, 200)

Safety notes



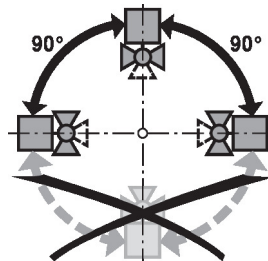
- The valve has been designed for use in stationary heating, ventilation and air-conditioning systems and must not be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with 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

- Operating mode** The globe valve is adjusted by a globe valve actuator. The actuators are controlled by a commercially available modulating or 3-point control system and move the valve cone, which acts as a mixing device, to the opening position dictated by the control signal. High close-off pressures are permitted as a result of both the partial pressure relief stem and the overflow channels in the valve.
- Flow characteristic** An equal percentage flow characteristic is produced by the profile of the valve cone.
- Fluid velocity** Standard values for low-noise operation in HVAC systems are fluid velocities of 1...2 m/s. At fluid velocities above 2 m/s, further flow effects like noise as well as cavitation can occur. This can reduce the service life of a valve depending on the situation.

Installation notes

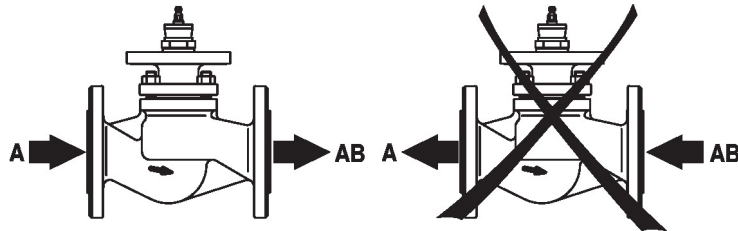
- Permissible installation orientation** The globe valve may be mounted upright to horizontal. It is not permissible to mount the globe valves with the stem pointing downwards.



- 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 a suitable strainer is recommended.
- Servicing** Globe valves and globe valve actuators are maintenance-free. Before any service work on the control element is carried out, it is essential to isolate the globe valve actuator from the power supply (by unplugging the electrical cables if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow all components to cool down first if necessary and always 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 reassembled correctly in accordance with the instructions and the pipeline has been refilled by professionally trained personnel.

Installation notes

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.



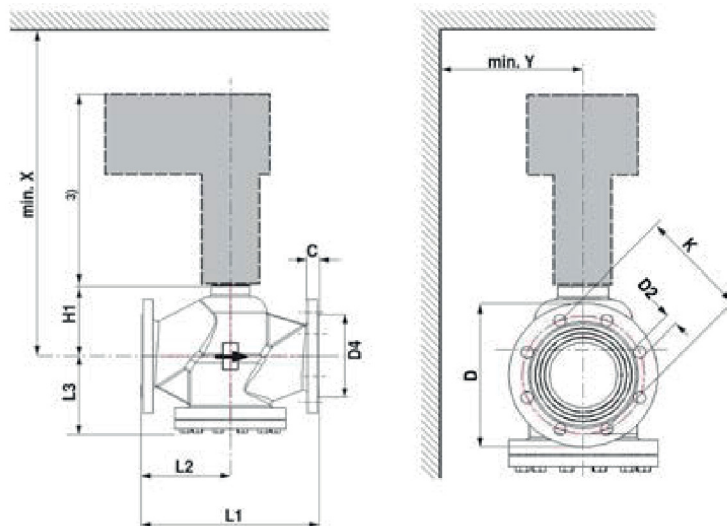
Differential and close-off pressure

The maximum differential and close-off pressure of globe valves depends on the mounted globe valve actuator. To ensure optimum operation and maximum service life, the maximum differential and close-off pressure in the table below must not be exceeded.

Ps < 1600 kPA (PN16) t = 0...150°C		SV...A... 1500N		EV...A... 2500N		RV...A... 4500N	
	DN	Δps [kPA]	$\Delta pmax$ [kPA]	Δps [kPA]	$\Delta pmax$ [kPA]	Δps [kPA]	$\Delta pmax$ [kPA]
H665SP-Q	65	1600	1000				
H680SP-R	80			1600	1000	1600	1000
H6100SP-S	100			1600	1000	1600	1000
H6125SP-T	125			1600	1000	1600	1000
H6150SP-T	150			1600	1000	1600	1000
H6200SP-U	200					1600	1000
H6250SP-V	250					1600	1000

Dimensions


Dimensional drawings



X/Y: Minimum distance with respect to the valve centre.

The actuator dimensions can be found on the respective actuator data sheet.

Dimensions

Type	DN	C [mm]	D [mm]	D2 [mm]	D4 [mm]	K [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H1 [mm]	X [mm]	Y [mm]	
H665SP-Q	65	20	185	4 x 19	118	145	290	145	112	104.5	315	145	20
H680SP-R	80	22	200	8 x 19	132	160	310	155	132	120	445	150	31
H6100SP-S	100	23	220	8 x 19	156	180	350	175	150	137	465	160	46
H6125SP-T	125	24	250	8 x 19	184	210	400	200	175	157	485	175	59
H6150SP-T	150	25	285	8 x 23	211	240	480	240	198	171	500	195	77
H6200SP-U	200	26	340	12 x 23	266	295	500	250	234	185	510	220	122
H6250SP-V	250	31	405	12 x 28	319	355	600	300	265	205	530	255	185

Further documentation

- The complete product range for water applications
- 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