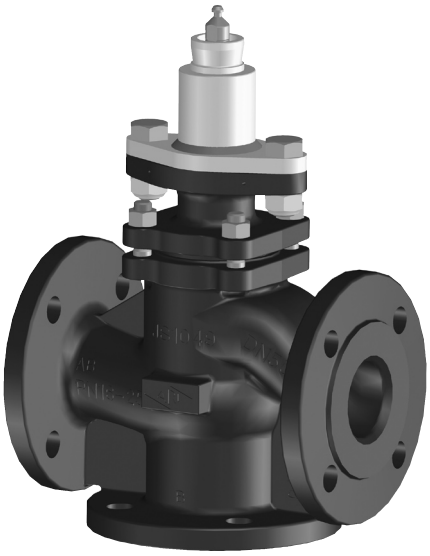
Globe valves, 3-way, with PN 25 flange
- **For closed cold water, low-temperature hot water and hot water systems**
- **For modulating water-flow control**



Type listing

Type	k_{vs} [m³/h]	DN [mm]	Stroke [mm]	S_v
H7015X4-S2	4	15	20	>30
H7020X6P3-S2	6.3	20	20	>50
H7025X10-S2	10	25	20	>50
H7032X16-S2	16	32	20	>50
H7040X25-S2	25	40	20	>50
H7050X40-S2	40	50	20	>50
H7065X63-S4	63	65	30	>50
H7080X100-S4	100	80	30	>50
H7100X160-S4	160	100	30	>50

Technical data

Functional data	Media	Cold and low temperature hot water Water with max 50% volume of glycol
	Medium temperature	(–10°C) +5°C ... +200°C (–10°C on request)
	Authorised pressure p_s	2500 kPa up to 120°C medium temperature 2300 kPa up to 200°C medium temperature
	Flow characteristic	Control path B – AB: linear (VDI/VDE 2173) Bypass B – AB: linear (VDI/VDE 2173)
	Rangeability S_v	see «Type listing»
	Leakage rate	Control path A – AB: Leakage Class **III** (DIN EN 1349 and DIN EN 60534-4) Bypass B – AB: max. 1% of the k_{vs} value
	Pipe connectors	Flange in accordance with ISO 7005-2 (PN 25)
	Stroke	see «Type listing»
	Closing point	Top (▲)
	Installation position	Standing to lying (in relation to the stem)
	Maintenance	Maintenance-free
Materials	Fitting	GGG 40.3
	Valve cone	Stainless steel
	Valve stem	Stainless steel
	Seat	Stainless steel
	Stem seal	PTFE-Roof seal
Dimensions / weights	Dimensions and weights	See «Dimensions and weights» on page 3
Motorising	see general overview «The complete product range of water solutions»	

Safety notes

- **The valve 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 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 operated by an NV or AV series 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.

Flow characteristic

A linear flow characteristic is produced in the direction of flow by the profile of the valve cone. The bypass exhibits a linear characteristic curve.

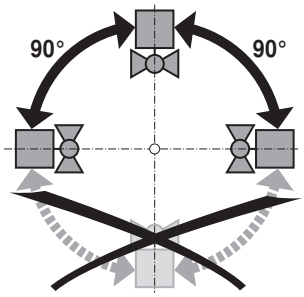
Manual operation

The valve stem can be manually operated by means of an Allen key (I-6-kt) on the NV.. or AV.. globe valve actuator.

Installation notes

Recommended installation positions

The globe valves may be mounted in any position from **standing** to **lying**.
It is not permissible to mount the globe valves with the stem pointing downwards.



Water quality requirements

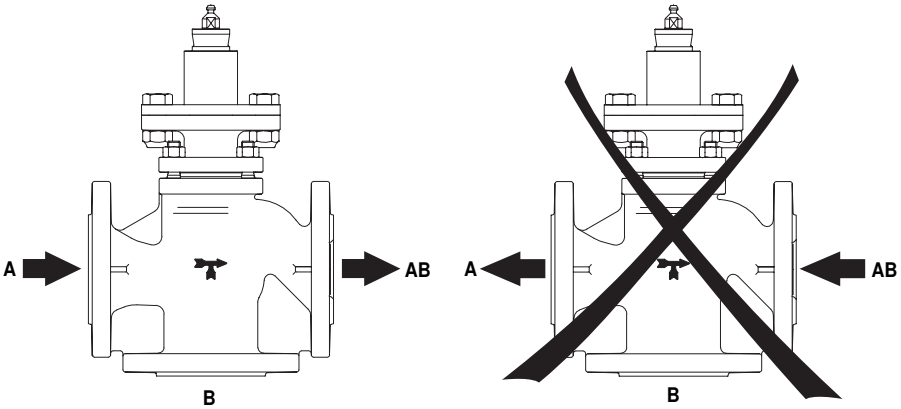
- The water quality requirements specified in VDI 2035 must be adhered to.
- Globe valves are regulating devices. The use of **dirt filters** is recommended in order to prolong their service life as modulating instruments.

Maintenance

- The globe valves and globe valve actuators are maintenance-free.
- Before any kind of service work is carried out on actuator sets of this type, it is essential to isolate the globe valve actuator from the power supply (by unplugging the power lead if necessary). Any pumps in the part of the pipeline concerned must also be switched off and the appropriate isolating fittings closed (allow everything to cool down first if necessary and reduce the pressure in the system to ambient pressure).
- The system must not be returned to service until the globe valve and the actuator have been properly reinstalled in accordance with the instructions and the pipeline has been refilled in the proper manner.

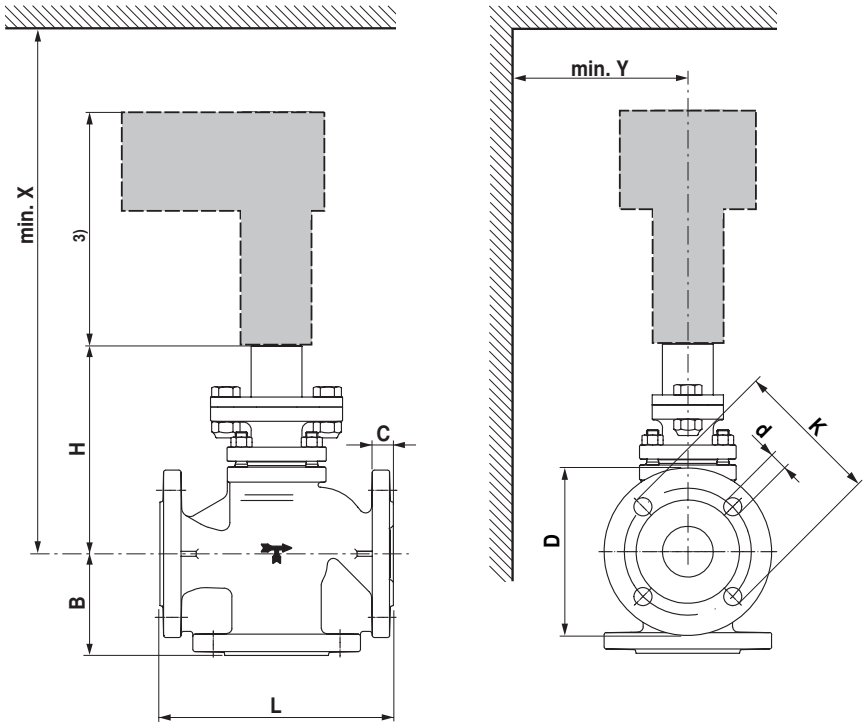
Flow direction

The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the noise level could exceed 80 dB(A).



Dimensions and weights

Dimensional drawings



DN [mm]	L [mm]	H [mm]	B [mm]	D [mm]	C [mm]	K [mm]	d [mm]	X 1) [mm]	Y 1) [mm]	X 2) [mm]	Y 2) [mm]	Weight [kg]
15	130	172	65	95	16	65	4x14	570	100			6.5
20	150	172	70	105	18	75	4x14	570	100			7.6
25	160	176	75	115	18	85	4x14	570	100			8.6
32	180	202	80	140	18	100	4x18	570	100			11.5
40	200	207	90	150	18	110	4x18	570	100			15.1
50	230	205	100	165	20	125	4x18	570	100			17.2
65	290	230	120	185	22	145	8x18			750	150	24.5
80	310	246	130	200	24	160	8x18			750	150	33.5
100	350	265	150	235	24	190	8x22			750	150	51.5

1) Minimum distance with respect to the valve centre with actuator NV.. with valve types H7..X..S2
2) Minimum distance with respect to the valve centre with actuator AV.. with valve types H7..X..S4
3) The actuator dimensions can be found on the respective actuator data sheet.

Further documentation

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