

**Globe valves, 3-way, with flange PN25**

- For closed cold or hot water and steam systems
- For modulating water-side control of air handling units and heating systems


**Type overview**

Type	K <sub>vs</sub> [m³/h]	DN [mm]	Stroke [mm]	S <sub>v</sub>	ΔP <sub>s</sub> [kPa]
EXT-TI-H7015X-S	2	15	20	>50	800
EXT-TI-H7020X-S	3	20	20	>50	800
EXT-TI-H7025X-S	5	25	20	>50	600
EXT-TI-H7032X-S	8	32	20	>50	600 / 800
EXT-TI-H7040X-S	20	40	20	>50	450 / 700
EXT-TI-H7050X-S	31	50	20	>50	300 / 500
EXT-TI-H7065X-S*	50	65	20	>50	280
EXT-TI-H7080X-S	80	80	30	>50	250 / 300
EXT-TI-H7100X-S	125	100	40	>50	200 / 450
EXT-TI-H7125X-S	200	125	40	>50	110 / 250
EXT-TI-H7150X-S	300	150	40	>50	60 / 150
EXT-TI-H7200X-S	520	200	40	>50	130
EXT-TI-H7250X-S	750	250	40	>50	50

ΔP<sub>s</sub> will be variant depends on actuator selection.

**Technical data**

<b>Functional data</b>	Flow media	Cold and hot water, Refrigerant (R12, R22, R134a, R202), water with max. 50% volume of glycol, Hydrazine, Phosphate
	Temperature of medium	0°C...+180°C
	Rated pressure P <sub>s</sub>	2500kPa (PN25)
	Flow characteristic	Control path A – AB: equal percentage (to VDI/VDE 2173) n(gl) = 3, optimised in the opening range
	Rangeability S <sub>v</sub>	See «Type overview»
	Leakage rate	Max. 0.02% of kvs value (DIN EN 1349 and DIN EN 60534-4)
	Pipe connection	Flange to ISO 7005-2 (PN16)
	Stroke	See «Type overview»
	Valve closing point	Up (▲)
	Installation position	Upright to horizontal (in relation to the stem)
	Maintenance	Maintenance-free
<b>Materials</b>	Body	Ductile iron GGG40
	Valve cone	Stainless steel SS304
	Valve stem	Stainless steel SS630
	Valve seat	Stainless steel SS304
	Stem gland seal	Teflon
<b>Dimensions / Weights</b>	Dimensions and weights	See «Dimensions and weights»

## Safety notes



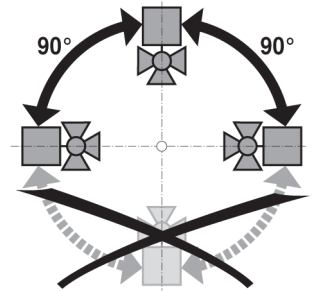
- This globe valve has been designed for use in stationary heating, ventilation and air-conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- It may only be installed by suitably trained personnel. All applicable legal or institutional installation regulations must be complied with.
- The valve does not contain any parts that can be replaced or repaired by the user.
- The valve is not allowed to be disposed of as household refuse. All locally valid regulations and requirements must be observed.
- The recognised rules should be applied when determining the flow characteristic of final controlling elements.

## Product features

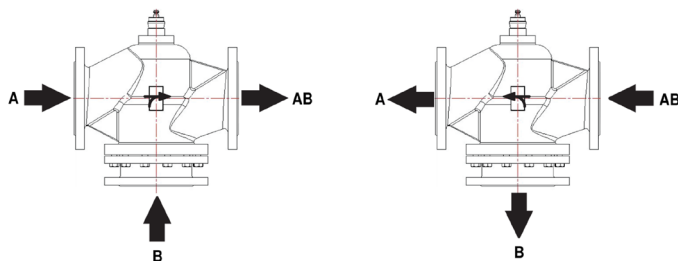
<b>Mode of operation</b>	The globe valve is operated by an SV, EV or RV series linear actuator. The linear actuators are controlled by a standard modulating or 3-point control system and move the cone of the valve, the throttling device, to the opening position dictated by the control signal.
<b>Flow characteristic</b>	An equal-percentage flow characteristic is produced by profiling the valve cone. The bypass exhibits a linear characteristic curve.
<b>Manual operation</b>	On the SV, EV or RV linear actuator, the valve stem can be actuated manually using a hexagonal key.

## Installation notes

- Recommended mounting positions** The globe valve may be mounted either **vertically** or **horizontally**. It is not permissible to mount the globe valve with the stem pointing downwards.



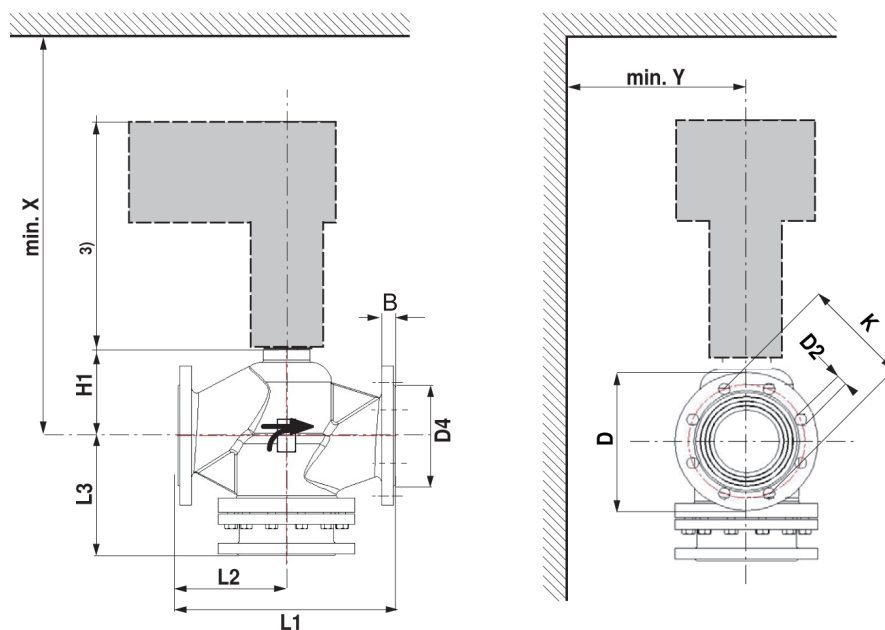
- Water quality requirements**
- The water quality requirements specified in VDI 2035 must be adhered to.
  - Globe valves are relatively sensitive control devices. In order to ensure a long service life, it is advisable to fit **strainers**.
- Maintenance**
- The globe valves and linear actuators are maintenance-free.
  - Before any kind of service work is carried out on actuator sets of this type, it is essential to isolate the linear actuator from the power supply (by unplugging the power lead). Any pumps in the part of the piping system 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 atmospheric).
  - The system must not be returned to service until the globe valve and the linear actuator have been properly reassembled in accordance with the instructions and the pipework has been refilled in the proper manner.
- Direction of flow**
- The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the globe valve can be damaged.



H7015X-S to H7065X-S only

## Dimensions and weights

### Dimensional drawings



DN [mm]	B [mm]	D [mm]	D2 [mm]	D4 [mm]	K [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H1 [mm]	X [mm]	Y [mm]	Weight [kg]
15	14	95	4-14	46	65	130	65	106	31	416	150	3.9
20	16	105	4-14	56	75	150	75	106	31	416	150	4.9
25	16	115	4-14	65	85	160	80	111	36	421	150	6.5
32	18	140	4-18	76	100	180	90	121	45	430	150	9.7
40	18	150	4-18	84	110	200	100	121	50	435	150	12.3
50	20	165	4-18	99	125	230	115	135	60	445	150	16.4
65	22	185	8-18	118	145	290	130	155	90	475	150	22.5
80	24	200	8-18	132	160	310	150	182	101	486	150	28.5
100	24	235	8-22	156	190	350	175	200	162	547	150	40.6
125	22	270	8-26	184	220	400	200	240	146	535	150	55.4
150	25	300	8-26	211	250	480	240	268	161	550	150	76.3
200	26	360	12-26	274	310	500	250	320	263	648	150	125.6
250	31	425	12-30	330	370	600	300	400	315	700	150	230

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