

Globe valves, 3-way, with internal thread

- For open and closed cold and hot water systems
- For modulating water-side control of air handling units and heating systems
- For converting and diverting application


Type overview

Type	K_{vs} [m ³ /h]	DN [mm]	Stroke [mm]	S_v	ΔP_s [kPa]
H3015X-S	1.9	15	10	>50	800
H3020X-S	4.4	20	10	>50	800
H3025X-S	8	25	15	>50	600
H3032X-S	10	32	20	>50	550
H3040X-S	20	40	20	>50	450 / 700
H3050X-S	32	50	20	>50	300 / 500

ΔP_s will be variant depends on actuator selection.

Technical data

Functional data	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 ... +130°C
	Rated pressure P_s	2500kPa (PN25)
	Flow characteristic	Control path A-AB, B-AB: equal percentage (to VDI/VDE 2173) $n(gl) = 3$, optimised in the opening range
	Rangeability S_v	See «Type overview»
	Leakage rate	Max. 0.02% of kvs value on all path (DIN EN 1349 and DIN EN 60534-4)
	Pipe connection	Internal thread to ISO 7/1
	Stroke	See «Type overview»
	Valve closing point	Up (▲)
	Installation position	Upright to horizontal (in relation to the stem)
Materials	Maintenance	Maintenance-free
	Body	Stainless steel SS304
	Valve cone	Stainless steel SS304
	Valve stem	Stainless steel SS304
	Valve seat	Stainless steel SS304
Dimensions / Weights	Stem gland seal	Teflon
	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.

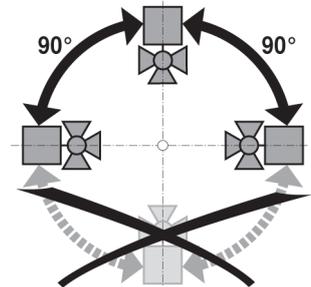
Product features

Mode of operation	The globe valve is operated by an NV or SV 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.
Flow characteristic	An equal-percentage flow characteristic is produced by profiling the valve cone. The bypass exhibits a linear characteristic curve.
Manual operation	On the NV or SV 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

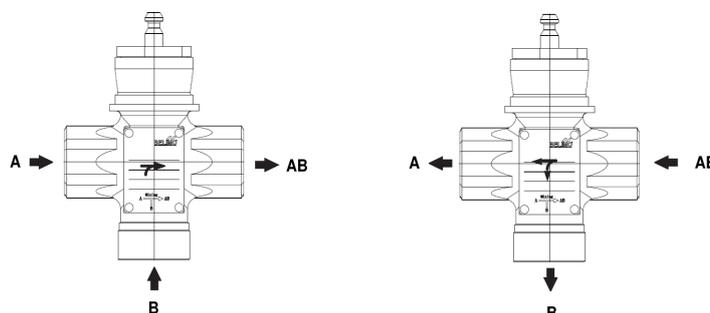
- The water quality requirements specified in VDI 2035 must be adhered to.
- Globe valves are relatively sensitive control devices. In order to ensure a long service life, it is advisable to fit **strainers**.

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.

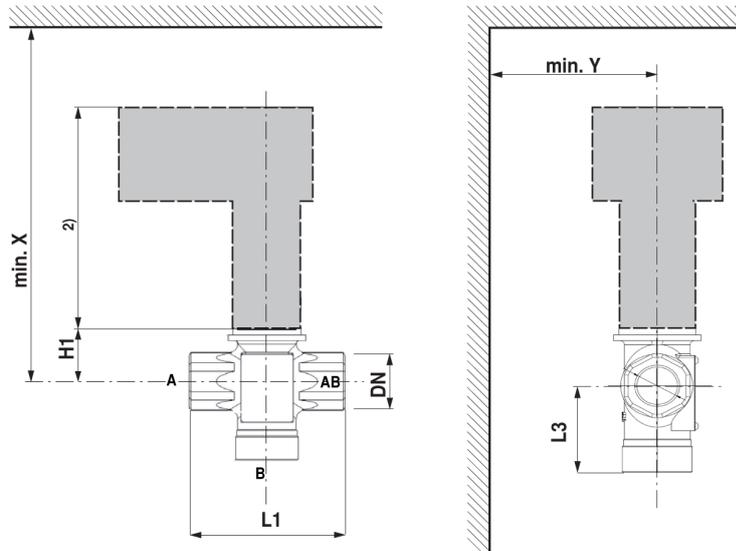
Direction of flow

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



Dimensions and weights

Dimensional drawings



DN [mm]	L1 [mm]	H1 [mm]	L3 [mm]	X ¹⁾ [mm]	Y ¹⁾ [mm]	Weight [kg]
15	80	25.5	49	296	100	0.8
20	80	28	51	299	100	1.1
25	100	32	55	303	100	1.6
32	103	35	62	306	100	1.8
40	122	40.5	71	311	100	2.3
50	138	47	85	318	100	3.3

1) Minimum distance with respect to the valve centre.
 2) The actuator dimensions can be found on the respective actuator data sheet.