

Globe valves, 3-way, with flange PN16

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



Type overview

K_{vs}	DN	Stroke	$\triangle P_s / \triangle P_{max}$
[m ³ /h]	[mm]	[mm]	[kPa]
63	65	20	280
100	80	30	200
160	100	40	200
250	125	40	110 / 150
350	150	40	60 / 100
520	200	40	80
700	250	40	50
	[m³/h] 63 100 160 250 350 520	[m³/h] [mm] 63 65 100 80 160 100 250 125 350 150 520 200	[m³/h] [mm] [mm] 63 65 20 100 80 30 160 100 40 250 125 40 350 150 40 520 200 40

 $\triangle P_{\text{S}}$ will be variant depends on actuator selection.

Dimensions and weights

Technical data

Functional	data
-------------------	------

Flow media	Cold and hot water, water with max. 50% volume of glycol
Temperature of medium	0°C +150°C
Rated pressure P _s	1600kPa (PN16)
Flow characteristic	Control path A–AB: equal percentage (to VDI/VDE 2173) n(gl) = 3, optimised in the opening range Bypass B-AB: linear (VDI/VDE 2173)
Rangeability S _v	100:1
Leakage rate	Max. 0.02% of kvs value on all path (DIN EN 1349 and DIN EN 60534-4)
Medium velocity	Max. 2 m/s
Pipe connection	Flange to ISO 7005-2 (PN16)
Stroke	See «Type overview»
Valve stem extends	Flow of A decrease, B increase
Installation position	Upright to horizontal (in relation to the stem)
Maintenance	Maintenance-free
Body	Ductile iron GGG40
Valve cone	Stainless steel SS304
Valve stem	Stainless steel SS630
Valve seat	Stainless steel SS304
Stem seal	PTFE & FFKM

See «Dimensions and weights»

Materials

Dimensions / 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 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.

Flow characteristic

An equal-percentage flow characteristic is produced by profiling the valve cone. The bypass exhibits a linear characteristic curve.

Manual operation

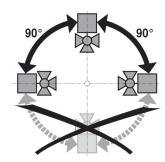
On the SV, EV or RV linear actuator, the valve stem can be actuated manually using a hexagonal kev.

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

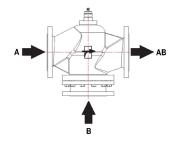
- The water quality requirements specified in VDI 2035 must be adhered to.
- Globe valves are relatively sensitive control devices. In order to ensure a long service life, it is advisable to fit strainers.

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

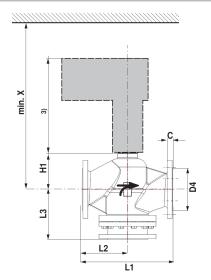
• The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the globe valve can be damaged.

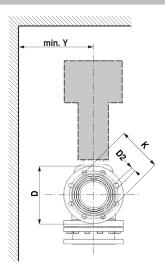




Dimensions and weights

Dimensional drawings





DN [mm]	C [mm]	D [mm]	D2 [mm]	D4 [mm]	K [mm]	L1 [mm]	L2 [mm]	L3 [mm]	H1 [mm]	X [mm]	Y [mm]	Weight [kg]
65	20	185	4-19	118	145	290	145	156	104.5	315	145	24
80	22	200	8-19	132	160	310	155	185	120	445	150	34
100	23	220	8-19	156	180	350	175	202	137	465	160	49
125	24	250	8-19	184	210	400	200	240	157	485	175	63
150	25	285	8-23	211	240	480	240	270	171	500	195	82
200	26	340	12-23	266	295	500	250	318	185	510	220	129
250	31	405	12-28	319	355	600	300	370	205	530	255	195

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