

Globe valves, 2-way, with PN 16 flange

- For closed cold and warm water systems
- For modulating water-side control of air purification and heating systems



| Type overview | | | | | |
|---------------|-----------------------|-----|----------------|---------------------|---------|
| Туре | kvs [m³/h] | DN | Stroke [mm] | ps [kPa] | Sv min. |
| H611N | 0.63 | 15 | 15 | 1600 | 50 |
| H612N | 1 | 15 | 15 | 1600 | 50 |
| H613N | 1.6 | 15 | 15 | 1600 | 50 |
| H614N | 2.5 | 15 | 15 | 1600 | 50 |
| H615N | 4 | 15 | 15 | 1600 | 50 |
| H620N | 6.3 | 20 | 15 | 1600 | 100 |
| H625N | 10 | 25 | 15 | 1600 | 100 |
| H632N | 16 | 32 | 15 | 1600 | 100 |
| H640N | 25 | 40 | 15 | 1600 | 100 |
| H650N | 40 | 50 | 15 | 1600 | 100 |
| H664N | 58 | 65 | 18 | 1600 | 100 |
| H665N | 63 | 65 | 30 | 1600 | 100 |
| H679N | 90 | 80 | 18 | 1600 | 100 |
| H680N | 100 | 80 | 30 | 1600 | 100 |
| H6100N | 145 | 100 | 30 | 1600 | 100 |

Technical data

| Fun | ctional | data | N |
|-----|---------|------|---|
| | | | |

| Media | Cold and hot water, water with glycol up to max. 50% vol. |
|-------------------------|---|
| Medium temperature | 5°C120°C |
| Medium temperature note | -10°C with spindle heating |
| Flow characteristic | Equal percentage (VDI/VDE 2173) n(gl) = 3, optimised in the opening range |
| Leakage rate | Leakage Class III (DIN EN 1349 and DIN EN 60534-4) |
| Pipe connections | Flange according to ISO 7005-2 (PN 16) |
| Closing point | Top (A) |
| Installation position | Upright to horizontal (in relation to the stem) |
| Maintenance | Maintenance-free |
| Valve | GG25 |
| Valve cone | stainless steel |
| Stem | stainless steel |
| Stem seal | EPDM O-ring |
| Seat | GG25 / Niro (Bypass) |

Safety notes



Materials

- 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.
- 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

Principle of operation

The globe valve is adjusted by a globe valve actuator. The actuators are connected by a commercially available modulating or 3-point control system and move the valve cone, which acts as a throttling device, into the opening position dictated by the positioning signal.

Flow characteristic

An equal percentage flow characteristic is produced by the profile of the valve cone.

Accessories

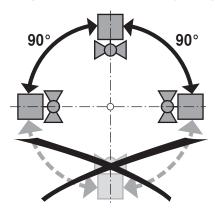
Electrical accessories

| Description | Туре |
|----------------------------------|----------|
| Spindle heating DN 15-50 (45 W) | ZH24-1 |
| Spindle heating DN 65-100 (60 W) | ZH24-1-C |

Installation notes

Recommended installation positions

The globe valves may be mounted upright to horizontal. It is not permissible to mount the globe valves with the stem pointing downwards.



pipelines have been refilled in the proper manner.

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.

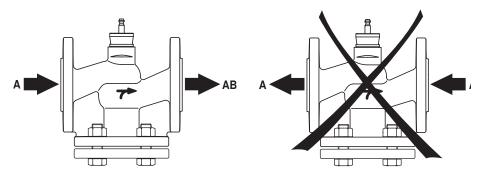
Maintenance

Globe valves and globe valve actuators are maintenance-free.

Before any kind of service work is carried out on the actuator, it is essential to isolate the globe valve actuator from the power supply (by disconnecting the electrical cables if necessary). Any pumps in the part of the piping system concerned must also be switched off and the appropriate isolating valves closed (allow everything to cool down first if necessary and 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 mounted properly in accordance with the instructions and the

Flow direction

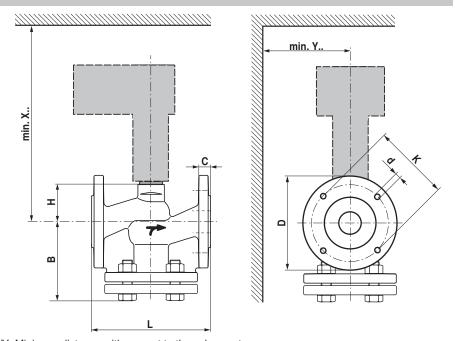
The direction of flow, specified by an arrow on the housing, is to be complied with, since otherwise the valve could become damaged.





Dimensions [mm] / weight

Dimensional drawings



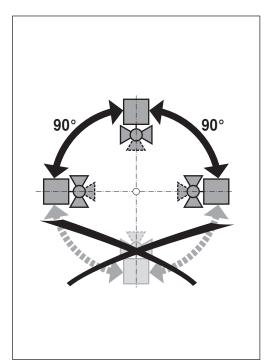
X/Y: Minimum distance with respect to the valve centre. The actuator dimensions can be found on the respective actuator data sheet.

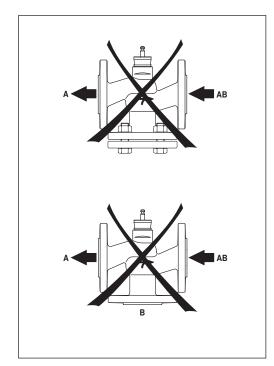
| Туре | DN | L [mm] | B [mm] | H [mm] | C [mm] | D [mm] | d [mm] | K [mm] | X [mm] | Y [mm] | Weight approx. |
|--------|-----|-------------------|-------------------|-------------------|-----------|-------------------|------------------|-------------------|-------------------|-------------------|----------------|
| | | | | | | | | | | | [kg] |
| H611N | 15 | 130 | 89 | 46 | 14 | 95 | 4 x 14 | 65 | 290 | 100 | 4.8 |
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| H613N | 15 | 130 | 89 | 46 | 14 | 95 | 4 x 14 | 65 | 290 | 100 | 4.8 |
| H614N | 15 | 130 | 89 | 46 | 14 | 95 | 4 x 14 | 65 | 290 | 100 | 4.8 |
| H615N | 15 | 130 | 89 | 46 | 14 | 95 | 4 x 14 | 65 | 290 | 100 | 4.8 |
| H620N | 20 | 150 | 96 | 46 | 16 | 105 | 4 x 14 | 75 | 290 | 100 | 5 |
| H625N | 25 | 160 | 101 | 52 | 16 | 115 | 4 x 14 | 85 | 300 | 100 | 6.3 |
| H632N | 32 | 180 | 123 | 56 | 18 | 140 | 4 x 18 | 100 | 300 | 100 | 9.6 |
| H640N | 40 | 200 | 128 | 64 | 18 | 150 | 4 x 18 | 110 | 310 | 100 | 11.9 |
| H650N | 50 | 230 | 130 | 64 | 20 | 165 | 4 x 18 | 125 | 310 | 100 | 15.9 |
| H664N | 65 | 290 | 150 | 100 | 20 | 185 | 4 x 18 | 145 | 350 | 100 | 23.8 |
| H665N | 65 | 290 | 150 | 100 | 20 | 185 | 4 x 18 | 145 | 450 | 150 | 23.8 |
| H679N | 80 | 310 | 162 | 110 | 22 | 200 | 8 x 18 | 160 | 360 | 150 | 30.2 |
| H680N | 80 | 310 | 162 | 110 | 22 | 200 | 8 x 18 | 160 | 460 | 150 | 30.2 |
| H6100N | 100 | 350 | 182 | 125 | 24 | 220 | 8 x 18 | 180 | 480 | 150 | 41.3 |

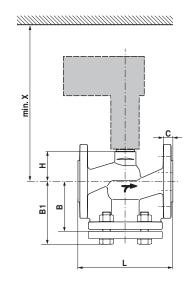
Further documentation

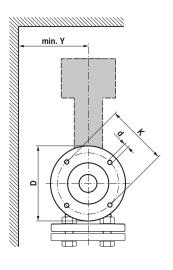
- · Overview Valve-actuator combinations
- Data sheets for globe valve actuators Installation instructions for valves and/or globe valve actuators
- Notes for project planning, 2-way and 3-way globe valves











H6..N / H7..N

| | 600 kPa (PN16) +5 +120°C H6N | | | H7N | | LVA 500N | | NVA 1000N | | SVA 1500N | | AVKA 2000N | | EVA 2500N | | RVA 4500N | | | | | | | | | |
|-----|--|-----------|------------|-----------|-----------|----------------------|------------------------|----------------------|------------------------|----------------------|------------------------|----------------------|------------------------|----------------------|------------------------|----------------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN | Hub / Stroke [mm] | A AB | B1 [mm] | A AB | B [mm] | ∆ ps [kPa] | ∆ pmax [kPa] | L [mm] | H [mm] | D [mm] | K [mm] | d [mm] | C [mm] | X [mm] | Y [mm] |
| 15 | 15 | H611N 15N | 89 | H711N 15N | 65 | 1300 | 400 | 1600 | 400 | 1600 | 400 | | | | | | | 130 | 46 | 95 | 65 | 4 x 14 | 14 | 290 | 100 |
| 20 | 15 | H620N | 96 | H720N | 70 | 900 | 400 | 1600 | 400 | 1600 | 400 | | | | | | | 150 | 46 | 105 | 75 | 4 x 14 | 16 | 290 | 100 |
| 25 | 15 | H625N | 101 | H725N | 75 | 500 | 400 | 1300 | 400 | 1600 | 400 | | | | | | | 160 | 52 | 115 | 85 | 4 x 14 | 16 | 300 | 100 |
| 32 | 15 | H632N | 123 | H732N | 95 | 350 | 350 | 1000 | 400 | 1600 | 400 | | | | | | | 180 | 56 | 140 | 100 | 4 x 18 | 18 | 300 | 100 |
| 40 | 15 | H640N | 128 | H740N | 100 | 150 | 150 | 500 | 400 | 900 | 400 | | | | | | | 200 | 64 | 150 | 110 | 4 x 18 | 18 | 310 | 100 |
| 50 | 15 | H650N | 130 | H750N | 100 | 70 | 70 | 300 | 300 | 550 | 400 | | | | | | | 230 | 64 | 165 | 125 | 4 x 18 | 20 | 310 | 100 |
| 65 | 18 | H664N | 150 | H764N | 120 | | | 140 | 140 | 280 | 280 | | | | | | | 290 | 100 | 185 | 145 | 4 x 18 | 20 | 350 | 100 |
| 65 | 30 | H665N | 150 | H765N | 120 | | | | | | | 400 | 400 | 550 | 400 | 1100 | 400 | 290 | 100 | 185 | 145 | 4 x 18 | 20 | 450 | 150 |
| 80 | 18 | H679N | 162 | H779N | 130 | | | 80 | 80 | 160 | 160 | | | | | | | 310 | 110 | 200 | 160 | 8 x 18 | 22 | 360 | 150 |
| 80 | 30 | H680N | 162 | H780N | 130 | | | | | | | 250 | 250 | 350 | 350 | 700 | 400 | 310 | 110 | 200 | 160 | 8 x 18 | 22 | 460 | 150 |
| 100 | 30 | H6100N | 182 | H7100N | 150 | | | | | | | 150 | 150 | 200 | 200 | 450 | 400 | 350 | 125 | 220 | 180 | 8 x 18 | 24 | 480 | 150 |
| 125 | 40 | | | H7125N | 200 | | | | | | | | | 130 | 130 | 290 | 290 | 400 | 281 | 250 | 210 | 8 x 18 | 26 | 640 | 150 |
| 150 | 40 | | | H7150N | 210 | | | | | | | | | 80 | 80 | 190 | 190 | 480 | 343 | 285 | 240 | 8 x 22 | 26 | 710 | 150 |