

Characterised control valves, 2-way, with PN 16 flange

- For closed cold and hot water systems
- For modulating water-side control of air purification and heating systems
- Air bubble-tight


Type overview

Type	kvs [m ³ /h]	DN []	DN ["]	ps [kPa]	Sv min. []
R6065W63-S8	63	65	2 1/2	1600	100
R6080W100-S8	100	80	3	1600	100
R6100W160-S8	160	100	4	1600	100
R6125W250-S8	250	125	5	1600	100
R6150W320-S8	320	150	6	1600	100

Technical data

Functional data	Media	
		Cold and hot water, water with glycol up to max. 50% vol.
	Medium temperature	-10°C...120°C
	Closing pressure Δps	690 kPa
	Differential pressure Δp_{max}	400 kPa
	Flow characteristic	Equal percentage (VDI/VDE 2178), optimised in the opening range
	Leakage rate	Air bubble-tight (Leakage rate A, EN12266-1)
	Pipe connections	Flange PN 16 in accordance with EN 1092/1
	Angle of rotation	90° (operating range 15...90°)
	Installation position	Upright to horizontal (in relation to the stem)
	Maintenance	Maintenance-free
Materials	Valve	EN-JL1040 (GG25 with protective paint)
	Valve cone	Stainless steel AISI 316
	Stem	Stainless steel AISI 304
	Stem seal	EPDM Perox
	Valve seat	PTFE
	Characterising disk	Stainless steel

Safety notes


- The ball 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 not 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 ball valve does not contain any parts that can be replaced or repaired by the user.
- The ball 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.

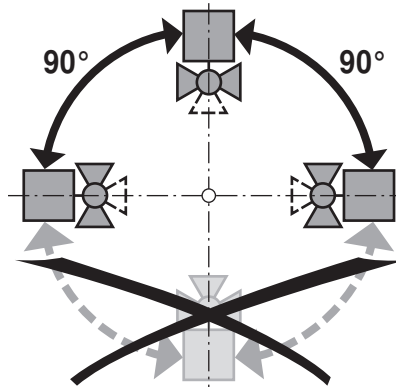
Product features

Principle of operation The characterised control valve is adjusted by a rotary actuator. The rotary actuator is controlled by a commercially available modulating or 3-point control system and moves the ball of the valve – the throttling device – to the position dictated by the positioning signal. Open the characterised control valve counterclockwise and close it clockwise.

Flow characteristic Equal percentage flow control is ensured by the integrated characterising disk.

Installation notes

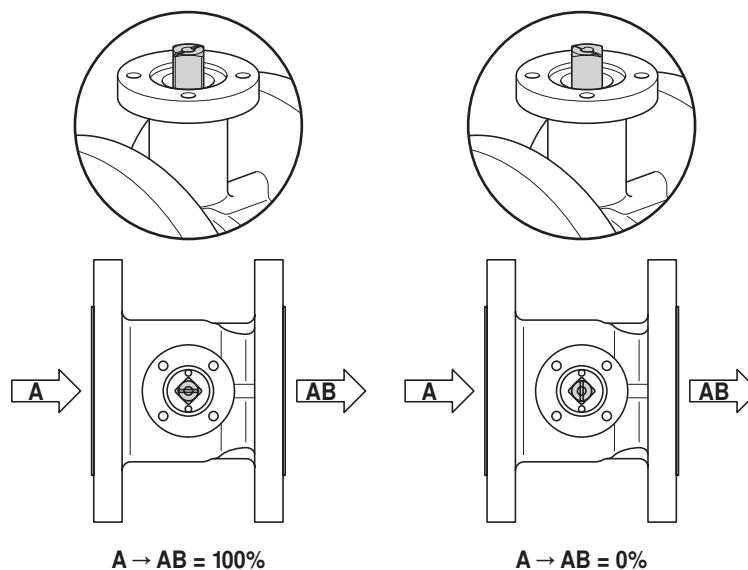
Recommended installation positions The ball valve can be installed upright to horizontal. The ball valve may not be installed in a hanging position, i.e. with the stem pointing downwards.

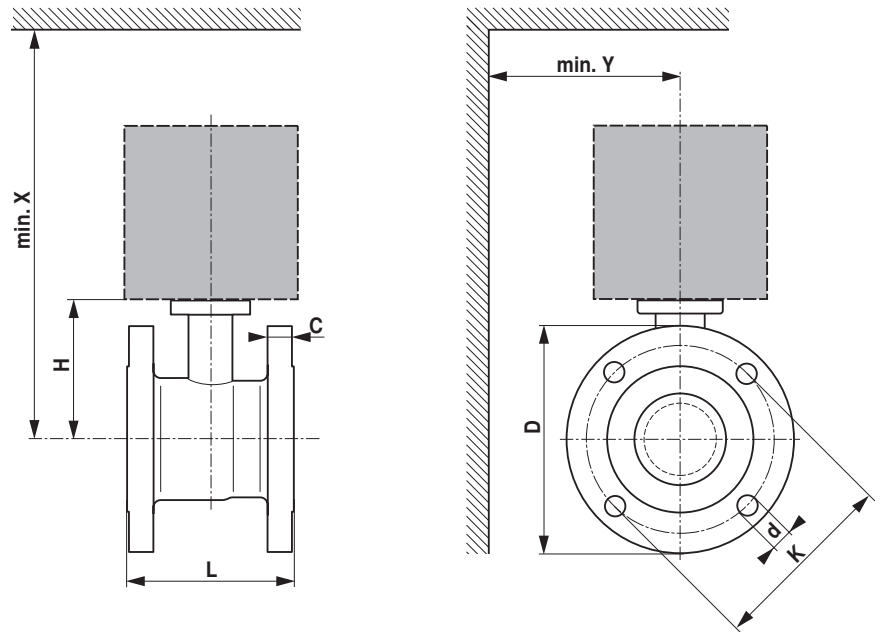


Water quality requirements The water quality requirements specified in VDI 2035 must be adhered to. Ball valves are regulating devices. The use of dirt filters is recommended in order to prolong their service life for performing control tasks.

Maintenance Ball valves and rotary actuators are maintenance-free. Before any kind of service work is carried out on the actuator, it is essential to isolate the rotary actuator from the power supply (by disconnecting the electrical cable). Any pumps in the part of the piping system concerned must also be switched off and the appropriate slide valves closed (allow everything to cool down first if necessary and reduce the system pressure to ambient pressure level). The system must not be commissioned again until the ball valve and the rotary actuator have been properly reassembled in accordance with the instructions and the pipelines have 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 ball valve could become damaged. Please ensure that the ball is in the correct position (marking on the stem).



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.

Type	DN []	L [mm]	H [mm]	C [mm]	D [mm]	d [mm]	K [mm]	X [mm]	Y [mm]	Weight approx. [kg]
R6065W63-S8	65	136.5	113	18.5	185	4 x 19	145	320	150	11
R6080W100-S8	80	168	113	20.5	200	8 x 19	160	320	160	14.5
R6100W160-S8	100	211	124	22	224	8 x 19	180	330	175	22
R6125W250-S8	125	262.5	143	22	252	8 x 19	210	350	190	32.8
R6150W320-S8	150	315	143	22	282	8 x 23	240	350	200	43

Further documentation

- Overview Valve-actuator combinations
- Data sheets for actuators
- Installation instructions for actuators or ball valves, respectively
- General Notes for project planning

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