

FIVC Globe Valve

Grey Cast Iron – PN 16



FGL series

Technical data

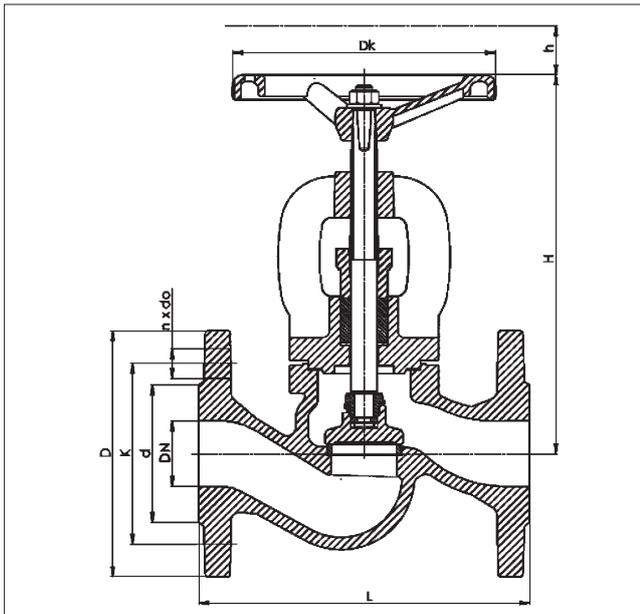
Main features and materials

- High tightness (leakproofness class - A acc. EN -12266 - 1)
- Compact settlement
- Environment-friendly
- Tests acc. EN - 12266 - 1
- Flanges drilled according to EN 1092-2
- Face-to-face dimension according to EN 558 series 1

Field of applications

- Max. working pressure (PN): 16 bar
- Temperature range: -10 to +300 °C
- Hot and cold water plants
- Steam plants
- Industrial Technologies
- Heat and refrigerating, engineering and air-conditioning

Dimensions

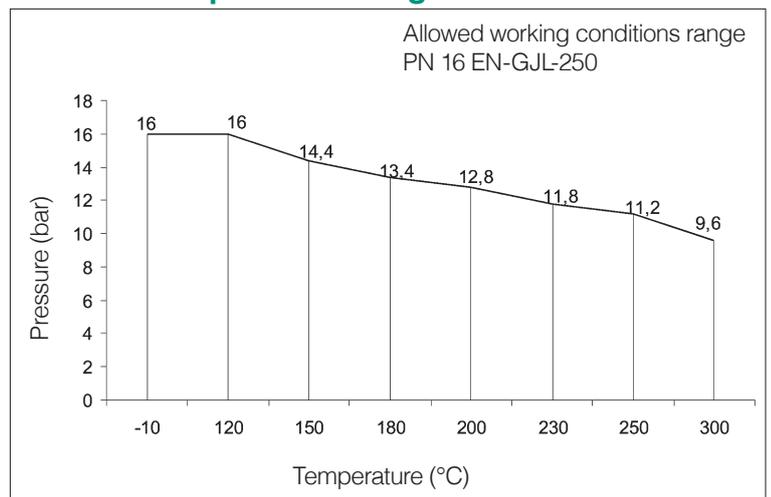


Size	D [mm]	d [mm]	K [mm]	nxdo [mm]	Dk [mm]	h [mm]	L [mm]	H [mm]
65	185	118	145	4x19	180	35	290	260
80	200	132	160	8x19	200	41	310	291
100	220	156	180	8x19	250	31	350	338
125	250	184	210	8x19	250	48	400	373
150	285	211	240	8x23	320	54	480	429
200	340	266	295	12x23	360	77	600	529

Product codes with Kv values and weight

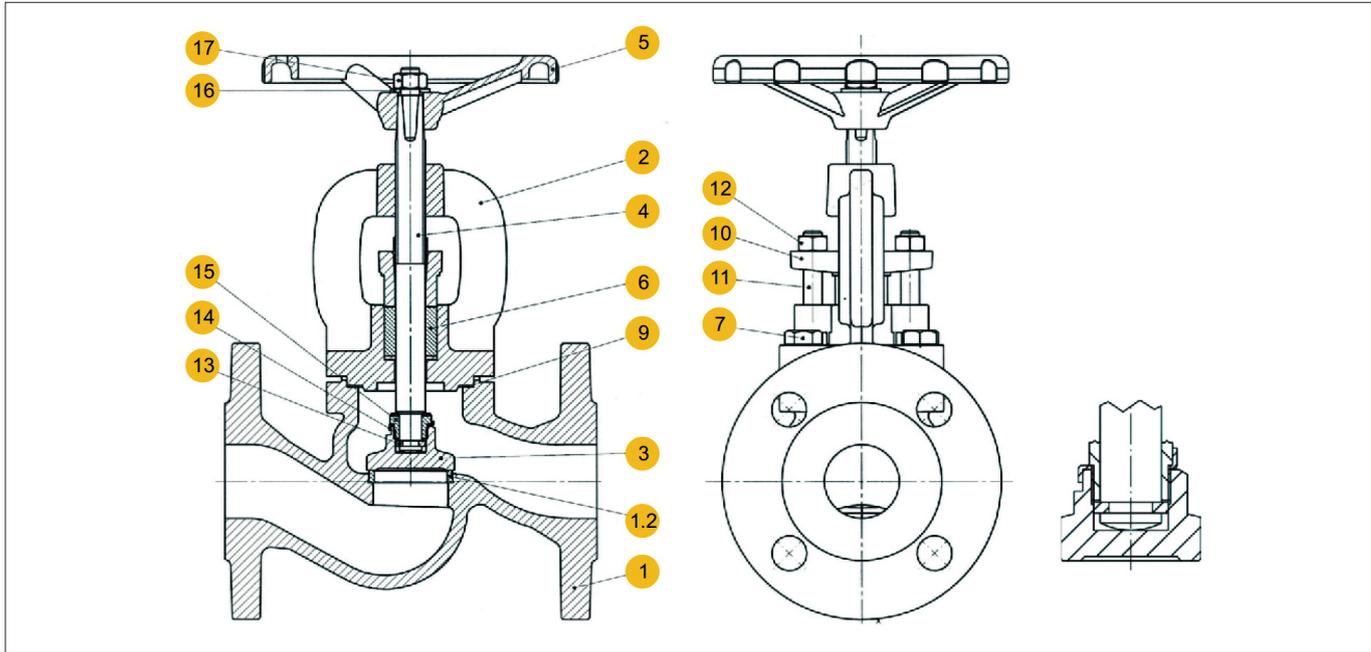
Product code	Size	Kv (M ³ /h)	Weight (kg)
FGL065C16	65	79	17,3
FGL080C16	80	115	22,7
FGL100C16	100	181	35,8
FGL125C16	125	225	52,8
FGL150C16	150	364	74,2
FGL200C16	200	690	126

Pressure-temperature ratings



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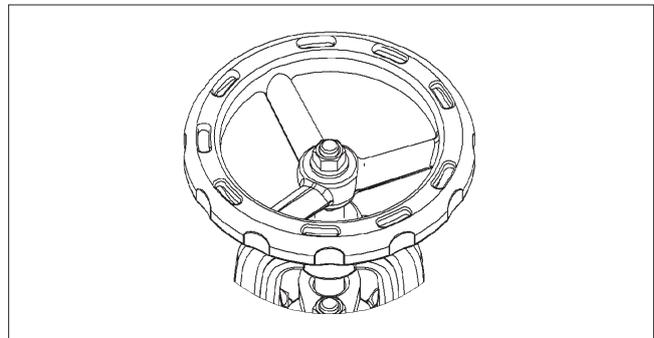
1	Body	EN - GJL-250 5.1301 (ex. JL1040)	10	Gland	EN GJL-250 5.1301 (ex. JL1040)
1.2	Seat ring	X12Cr13 1.4006	11	T-bolt	5.8 + zinc galvanized
2	Bonnet	EN - GJL-250 5.1301 (ex. JL1040)	12	Nut	8 + zinc galvanized
3	Disc	X20Cr13 1.4021	13	Ring	X20Cr13 1.4021
4	Stem	X20Cr13 1.4021	14	Washer	X6CrNiTi18-10 1.4541
5	Hand wheel	EN-GJS500-7 5.3200 (ex. JS1050)	15	Screw	X20Cr13 1.4021
6	Gland packing	Graphite	16	Washer	Carbon steel + zinc galvanized
7	Hexagon bolt	8.8	17	Nut	8 + zinc galvanized
9	Gasket	NiCr + graphite			

Product description

FIVC Globe valves are designed only for shut off and open the flow.

FIVC Globe valves are provided with casted marking according to requirements of PN-EN19 standard. The marking facilitates technical identification and contains:

- diameter nominal DN (mm)
- pressure nominal PN (bar)
- body and bonnet material marking
- arrow indicating medium flow direction
- heat number
- CE marking, for valves subjected 97/23/EC directive. CE marking starts from DN 32



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According to EN 1092-2 - working temperature

Material	PN	-10 to 120 °C	150 °C	200 °C	250 °C	300 °C
EN-GJL-250	16	16 bar	14,4 bar	12,8 bar	11,2 bar	9,6 bar

Installation

During the assembly of balancing valves following rules should be observed:

- evaluate before an assembly if the valves were damaged during the transport or storage
- make sure that applied valves are suitable for working conditions and medium used in the plant
- take off dust caps if the valves are provided with them
- during pipeline painting valve stem should be protected
- FIVC Globe valves can be assembled in any position, however it is recommended to install the valve with hand wheel upwards
- protect the valves during welding jobs against splinters and used plastics against excessive temperature
- steam pipelines should be fitted in such a way to avoid condensate collection; in order to avoid water hammer steam trap should be applied
- FIVC Globe valve should be assembled only on the horizontal pipelines with hand wheel upwards



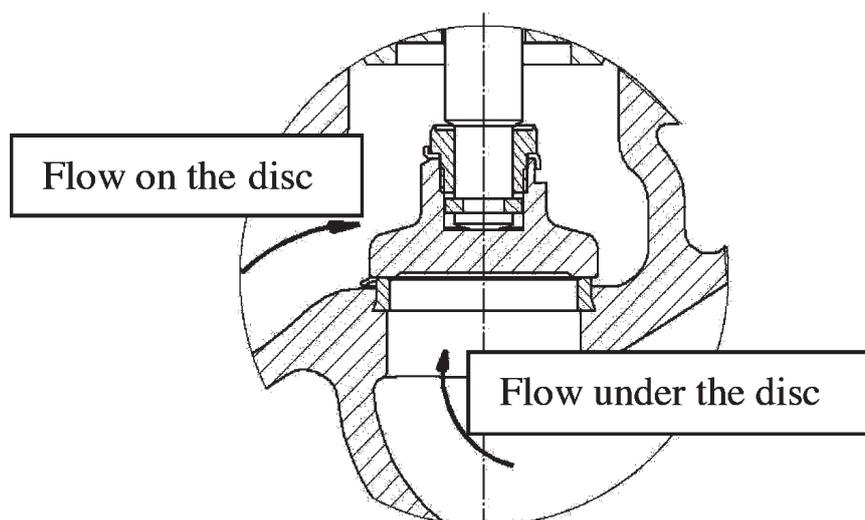
Pipeline where the valves are fitted should be conducted and assembled in such a way that the valve body is not subjected to bending moment and stretching forces. Bolted joints on

the pipeline must not cause additional stress resulted from excessive tightening, and fastener materials must comply with working conditions of the plant.



It should be take note of medium flow direction, marked with an arrow on the body. Flow direction is established according to the rules in the schedule:

Globe valve - PN 16	
Under the disc	up to DN 150
On the disc	From DN 200



Reasons of operating disturbances and remedy

- When seeking of valve malfunction reasons, safety rules should be strictly obeyed

Error	Possible reason	Remedy
No flow	Valve closed	Open the valve
	Flange dust caps were not removed	Remove dust caps on the flanges
Poor flow	Valve is not open enough	Open the valve
	Dirty filter	Clean or replace the screen
	Clogged pipeline	Check the pipeline
Control difficulties	Dry stem	Grease the stem
	Gland packing tighten too much	Slightly slacken gland nuts. Put attention to keep stuffing box tightness
Stem leakage	Too much loose on the gland packing	Tighten the gland nut until tightness will be reached
		If necessary add packing rings in stuffing box. Keep special caution.
Seat leakage	Shut off not correct	Tighten the hand wheel without any auxiliary tools
	Seat or disc damage	Replace the valve and contact supplier or manufacturer
	Pressure difference too much	Apply the valve with balancing disc. Check if the valve was assembled according to arrow direction marked on the valve.
	Medium polluted with solid particles	Clean the valve. Fit strainer before the valve.
Broken connecting flange	Bolts tighten unevenly	Replace the valve with new one