

Stop Globe Valve GLV 300

Linear flow curves,
high reproducibility



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Size:

Operating pressure:

Flow volume:

Design advantage:

- DN 10 up to DN 50
- Up to 10 bar
- Up to 25.000 l/h
- Non rising handwheel
- Lift limit by valve shaft
- Optional with gauge at primary or secondary side

Application:

The stop globe valve can be used as control valve for regulating the flow in a process with a defined control characteristic by a linear valve characteristic curve.

Fluids:

Neutral, aggressive or gaseous liquids provided that the selected materials are resistant at operating temperature. Refer to the ASV resistance guide.

Examinations:

Requirements and examinations acc. to DIN 3230, 3441, 3442, 8063, 16 962.

Materials:

Housing:	uPVC, PP, PVDF
Bonnet:	PPGFR1)
Handwheel:	PA
Shaft nut:	PA
Threaded shaft:	Stainless steel 1.4301
Screws:	Stainless steel 1.4301
Sealings:	EPDM or FPM

Nominal pressure²⁾ :

PN 10

Media temperature:

Depends on the operating conditions (system pressure, load etc.). Taking creep strength into account, the following approximate temperatures apply:

uPVC:	- 10 up to + 50 °C
PP:	+ 10 up to + 70 °C
PVDF:	- 30 up to +100 °C
EPDM:	- 30 up to +140 °C
FPM:	- 30 up to +140 °C

Operating pressure:

See pressure/temperature diagram.

Operation:

Non rising handwheel.

Settings:

- Flow increase:
Turn handwheel counter-clockwise.
- Flow decrease:
Turn handwheel clockwise.

Connection:

- Injection moulded threaded necks acc. to DIN 8063 with union nut and inserts in uPVC (union socket ends for solvent welding) or in PP, PVDF (union socket ends for fusion welding). Dimensions acc. to ISO/DIN.
- Injection moulded spigot ends for solvent or fusion welding acc. to ISO/DIN.

Installation:

In direction of arrow, always in direction of flow.

Fastening:

With self-tapping inserts in the valve body for simple mounting on any carrier.

Colour:

Housing:	
• uPVC:	grey, RAL 7011
• PP:	grey, RAL 7032
• PVDF:	opaque, yellowish-white
Bonnet:	orange, RAL 2004

Option:

On request the valve can be equipped with a gauge.

¹⁾ PP, glassfiber reinforced

²⁾ for H₂O at 20 °C

Operating pressure:

See pressure/temperature diagram.

The pressure/temperature limits are applicable for a computed operating life factor of 25 years at PN 10.

The values are a guide for harmless fluids (DIN 2403) against which the material of the valve is resistant.

Other media see the ASV resistance guide.

Durability of wear and tear parts is depending on the working conditions of the application.

Values < 0° C (PP < +10 °C) on request with exact data of operation.

k_v100-value:

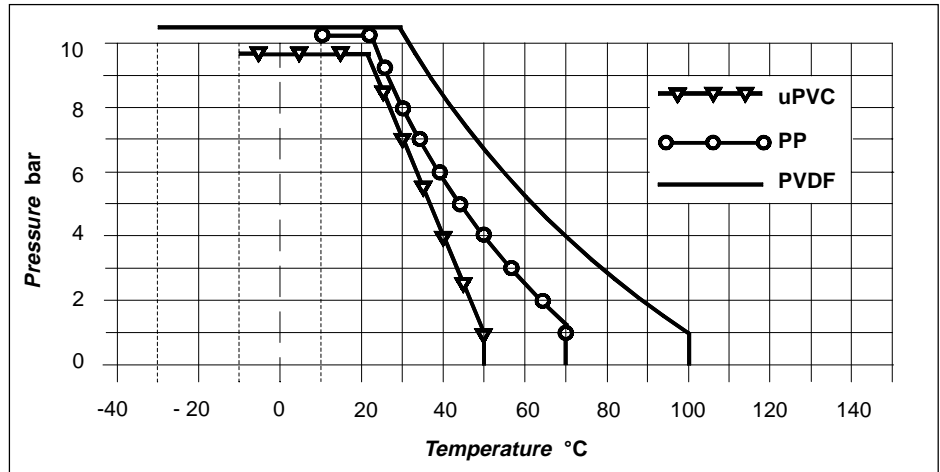
The chart shows the flow volume in dependence to the seat lift.

For calculation:

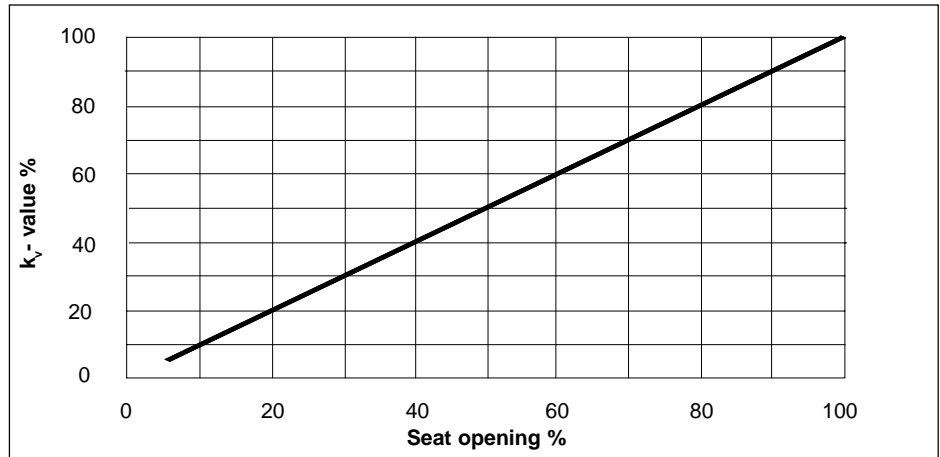
$$k_v = 14,28 \times C_v = 17,09 \times f_v$$

Size			Lift	k _v 100
d	DN	DN	open/close	l/h
mm	mm	Inch		
16	10	3/8	11	2.600
20	15	1/2	11	2.900
25	20	3/4	15	9.200
32	25	1	15	9.600
40	32	1 1/4	22	21.000
50	40	1 1/2	22	23.000
63	50	2	22	25.000

Pressure/Temperature Diagram

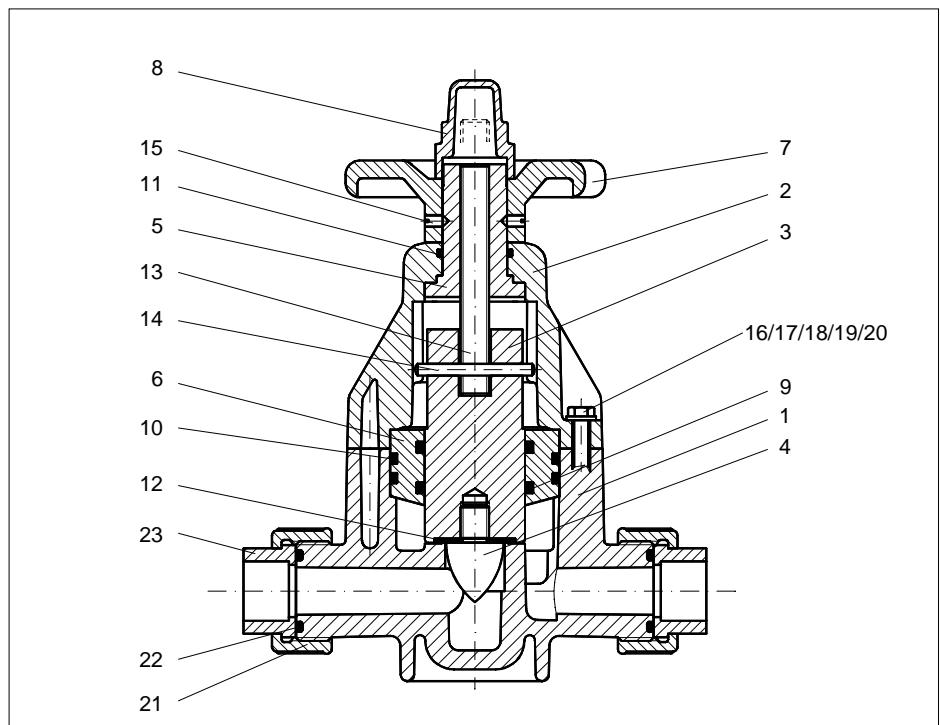


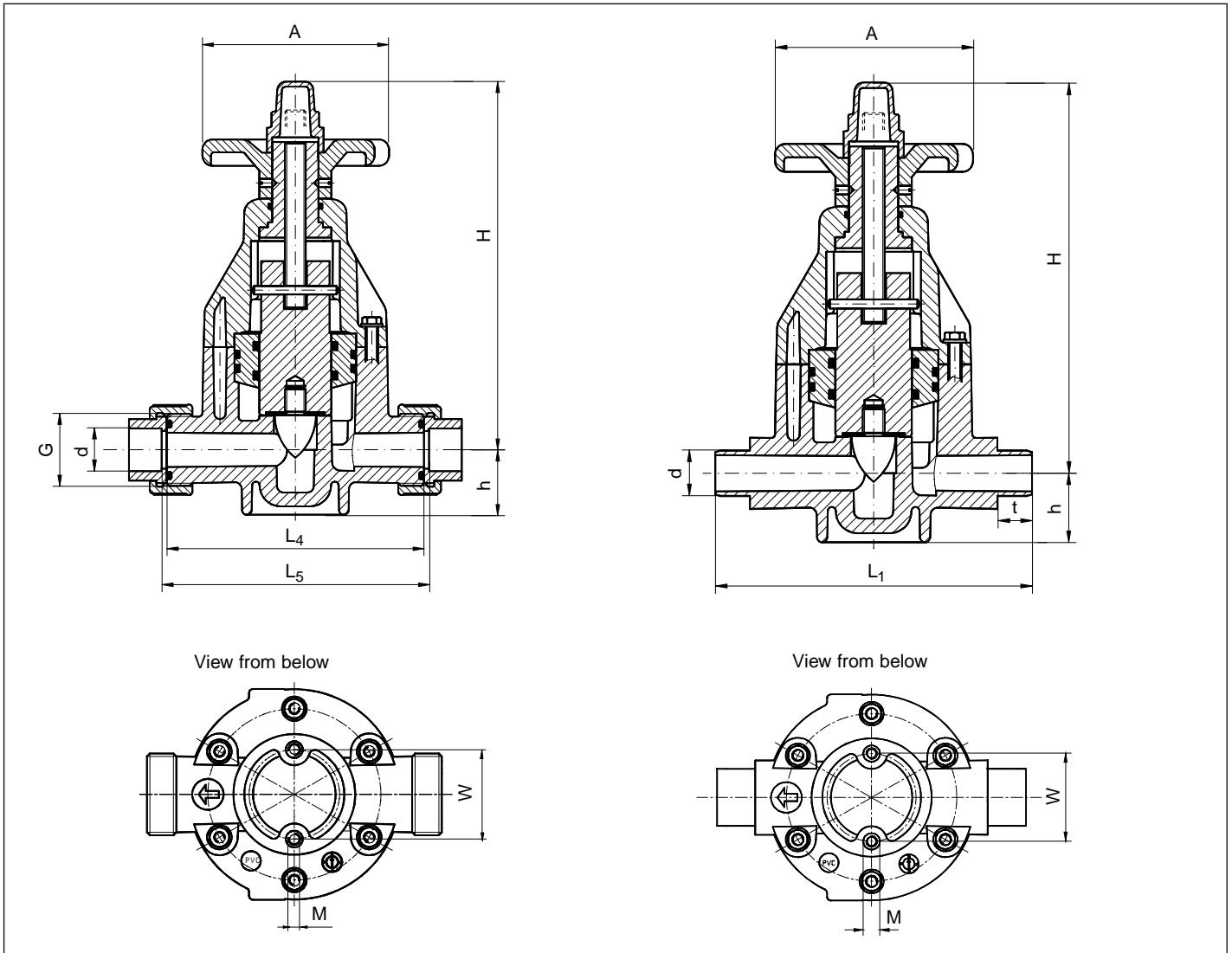
Flow and Control Characteristic



Spare Part List

Part	Pcs.	Description
1	1	Body
2	1	Bonnet
3	1	Piston
4	1	Piston Head
5	1	Shaft Nut
6	1	Piston Guide
7	1	Star Wheel
8	1	Indicator Cap
9	2	O-Ring Sealing
10	2	O-Ring Sealing
11	1	O-Ring Sealing
12	1	Flat Seal Ring
13	1	Shaft
14	2	Pin
15	2	Threaded Pin
16	4/6	Screws
17	4/6	Nut
18	4/6	Washer
19	4/6	Washer
20	8/16	Protection Cap
21	2	Union Nut
22	2	O-Ring Sealing
23	2	Sockets





Size			Dimensions mm											
d	DN	DN	A	G	H	h	PVC	L ₁	PVDF	PVC	L ₄	PVDF	PVC ¹⁾	PVDF
mm	mm	Inch						PP			PP			
16	10	3/8	90	3/4"	175	25±2	144±1,0	144±2,1	144±2,1	120	120	118	126±1,5	124±1,5
20	15	1/2	90	1"	175	25±2	144±1,0	144±2,1	144±2,1	120	120	118	126±1,5	124±1,5
25	20	3/4	100	1 1/4"	225	37±2	174±1,0	174±2,6	174±2,6	150	150	147	156±1,5	153±1,5
32	25	1	100	1 1/2"	225	37±2	174±1,0	174±2,6	174±2,6	150	150	147	156±1,5	153±1,5
40	32	1 1/4	130	2"	300	57±2	224±1,1	224±3,3	224±3,3	205	205	200	211±1,5	207±1,5
50	40	1 1/2	130	2 1/4"	300	57±2	224±1,1	224±3,3	224±3,3	205	205	200	211±1,5	207±1,5
63	50	2	130	2 3/4"	300	57±2	244±1,2	244±3,6	244±3,6	205	205	200	211±1,5	207±1,5

Size			Dimensions mm						Weight kg (standard value)					
d	DN	DN	M	t	W			uPVC		PP		PVDF		
mm	mm	Inch						Spigots	Unions	Spigots	Unions	Spigots	Unions	
16	10	3/8	M 6	14,0	40			0,80	0,85	0,67	0,72	1,02	1,07	
20	15	1/2	M 6	16,0	40			0,85	0,90	0,72	0,77	1,07	1,12	
25	20	3/4	M 6	19,0	46			1,86	1,91	1,57	1,62	2,11	2,16	
32	25	1	M 6	22,0	46			1,90	1,95	1,61	1,66	2,15	2,20	
40	32	1 1/4	M 6	26,0	65			5,00	5,05	4,10	4,15	5,45	5,50	
50	40	1 1/2	M 6	31,0	65			5,10	5,15	4,18	4,23	5,55	5,60	
63	50	2	M 6	38,0	65			5,20	5,25	4,28	4,32	5,65	5,70	

¹⁾ also valid for PP



Ident-No. GLV 300 with union ends DIN 8063

Housing			uPVC		PP		PVDF	
d	DN	DN	Seals		Seals		Seals	
mm	mm	Inch	EPDM	FPM	EPDM	FPM	EPDM	FPM
16	10	3/8	127560	127567	127604	127611	127632	127639
20	15	1/2	127561	127568	127605	127612	127633	127640
25	20	3/4	127562	127569	127606	127613	127634	127641
32	25	1	127563	127570	127607	127614	127635	127642
40	32	1 1/4	127564	127571	127608	127615	127636	127643
50	40	1 1/2	127565	127572	127609	127616	127637	127644
63	50	2	127566	127573	127610	127617	127638	127645

Torque: Screws Pos. 16

Size			Torque
d	DN	DN	Nm (standard value)
mm	mm	Inch	
16	10	3/8	2
20	15	1/2	2
25	20	3/4	2
32	25	1	4
40	32	1 1/4	4
50	40	1 1/2	15
63	50	2	15

Ident-No. GLV 300 with spigot ends ISO/DIN

Housing			uPVC		PP		PVDF	
d	DN	DN	Seals		Seals		Seals	
mm	mm	Inch	EPDM	FPM	EPDM	FPM	EPDM	FPM
16	10	3/8	127590	127597	127618	127625	127646	127653
20	15	1/2	127591	127598	127619	127626	127647	127654
25	20	3/4	127592	127599	127620	127627	127648	127655
32	25	1	127593	127600	127621	127628	127649	127656
40	32	1 1/4	127594	127601	127622	127629	127650	127657
50	40	1 1/2	127595	127602	127623	127630	127651	127658
63	50	2	127596	127603	127624	127631	127652	127659

Operating instructions:



Safe operation of the valve can only be ensured if it is properly installed, operated, serviced or repaired by qualified personnel according to its intended use while observing the accident prevention regulations, safety regulations, standards and technical regulations.

The intended use includes adhering to the specified limit values for pressure and temperature as well as the chemical resistance referring to the operating conditions.

For this purpose, ensure that all components getting in contact with the media are »resistant« in accordance with the ASV resistance guide.

The owner/user must inform the authorized qualified personnel instructed to perform the assembly, inspection and/or maintenance work of any potential danger emanating from the machine line/medium, and ensure that suitable safety measures are observed including local regulations and laws of the territories of use.

Non-observance of the specified information and safety instructions may lead to injuries and/or property damages.

Installation:

- Depending on the type of connection the pipe ends have to be properly prepared acc. to all technical standards.
- Valve to be radially installed acc. to all technical standards between the pipe ends.

In case of flange connections the torques of the screws to fasten the flanges have to be observed.

- After proper installation the pipe system with all components has to be tested for leakages.

Disassembly:

NOTE The operating instructions are to be observed.

- If required protection clothes must be worn.
- The pipe section is to be shut-off and to be emptied.
- Any fluid rest is to be disposed properly.
- Remove screws (16), nuts (17) with washers (18 + 19).
- Remove bonnet (2) with internal parts of the body (1).
- Remove head (4) of piston (3).
- Remove flat seal ring (12).
- Remove piston guide (6) from piston (3) and O-ring sealings (9 + 10) with proper tools.

Assembly:

In the reverse order to disassembly.

NOTE Before assembling sealing elements as well as the valve seat are to be checked carefully against any damages and eventually to be replaced.

Always use new sealing elements when refitting.

- At assembling the valve the torques of the screws have to be observed.
- Prior using the valve again the connections and all the components of the pipe system are to be checked for leakages.
- For proper assembling wet the sealing elements only with water or standard commercial detergent (lubrication).

NOTE Elastomers, especially the EPDM sealing elements, should not be touched or cleaned with synthetic oils, mineral oils, fats or cleaning agents. Danger of swelling. Only appropriate fats should be used, e.g. silicone greases.