



W600 Valve Configurations in stainless steel





Leading the world in pharmaceutical and biotechnology industry sterilisation processes

GEMÜ is one of the leading manufacturers of valves, measurement and control systems for sterile applications in the pharmaceutical and biotechnology industries. This position is based on GEMÜ's comprehensive investments in application-oriented research & development, amounting to more than 5% of the company's turnover. The versatile product range is supplemented with a wide range of advisory services provided by industry specialists and application experts.

Customized solutions for your project business

GEMÜ provides the optimal solution from a single source. As a system supplier of isolation, actuator and control technology, we can respond very flexibly to your individual project-specific needs.

Our worldwide sales network provides fast reaction times, customer oriented service and a committed project management team.



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W600 welding configurations

The arrangement of two valves welded together to suit the respective application provides maximum functionality in a restricted space. The assembly does without a T piece and thus the dead space between the valves is essentially reduced and two welds are no longer necessary. If more compact designs are required, we recommend using GEMÜ i-bodies and multi-port valve blocks from the GEMÜ M600 series which are machined from a single block. They also have a lower hold-up volume and only a minimum of welds..

Valve 1 Valve 2 Investment Ø D3 max. (from diapl

Investment cast body (code 34): ø D3 max. = 13.5 mm (from diaphragm size 10 to 50)

Features

- Standard valve body material 1.4435 in investment cast, forged and block material design or 1.4539 in forged design (diaphragm sizes 8 to 50) and block material design
- · Various connections selectable
- · Various grades of surface finish available
- Operators from the GEMÜ modular system
- · Cost effective
- · No T piece required
- · Valve 2 can be welded on with draining angle







3D and 6D rule

Various regulations form the basis for plant designs. Plant operators are normally concerned with the FDA/GMP directives and the ASME/BPE standard. Both regulatory codes define

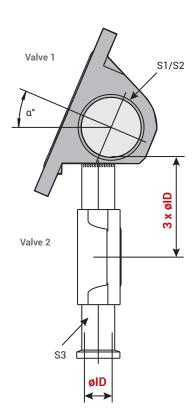
exact geometric reference points for valve configurations. This rule describes the maximum permissible pipe section with a non-turbulent flow in a valve configuration between valve 1 and valve 2. This is either designated as the 3D (3 x dia. ID) rule or the 6D (6 x dia. ID) rule.

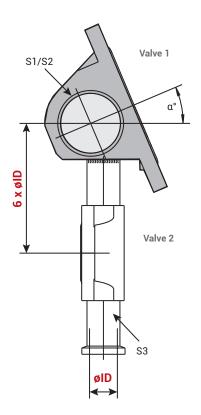
3D rule

The longitudinal distance from the main valve inside diameter lower edge to the welded-on sampling valve body sealing weir centre may not exceed 3-times the welded-on sampling valve body inside diameter.

6D rule

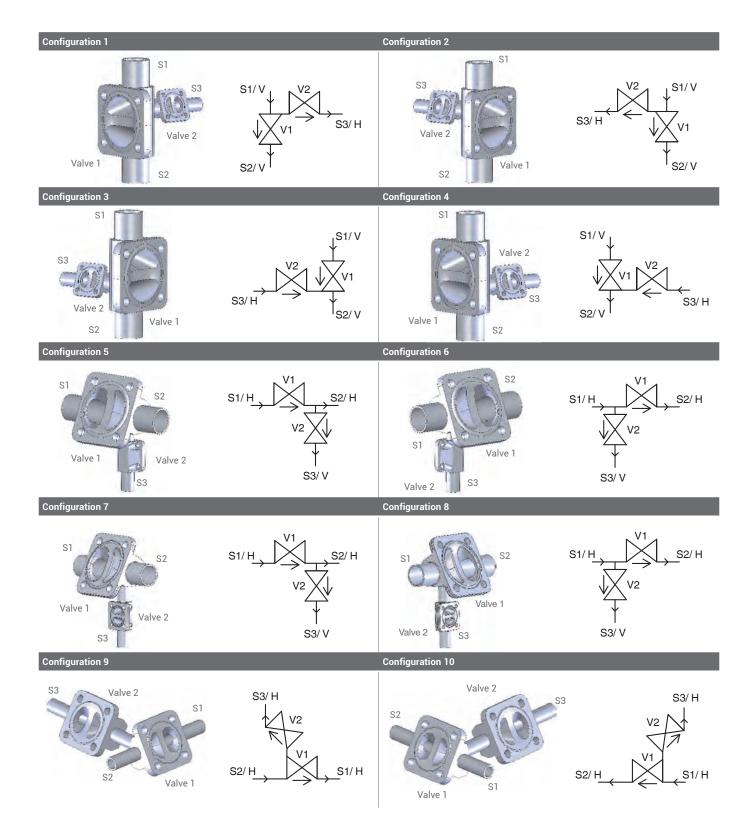
The longitudinal distance from the main valve inside diameter centre axis to the welded on sampling valve body sealing weir centre may not exceed 6-times the welded-on sampling valve body inside diameter.

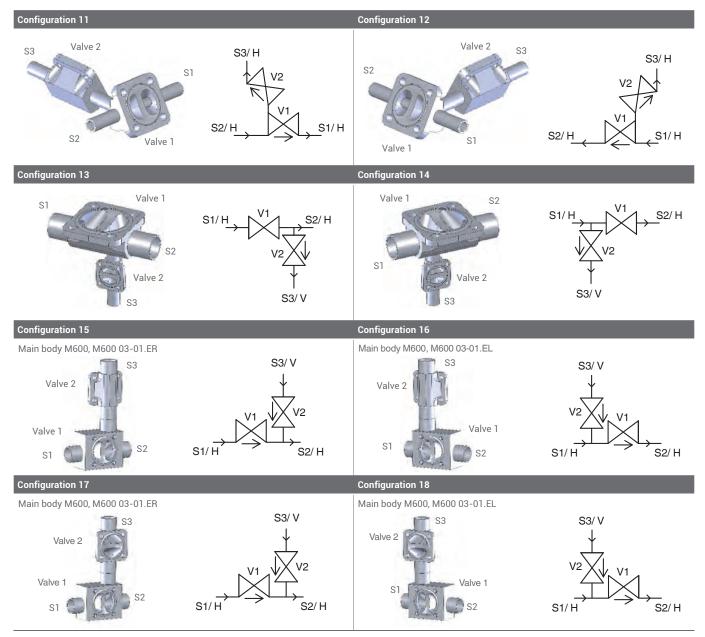




Welding configurations

Selection table





Notes:

- * Since the max. diameter that can be welded on is limited, we ask that the GEMÜ specification sheet (see page 22) is always used to request the desired combinations
- * The illustrations show recommended installation positions
- * The arrows in the flow charts are examples

S1, S2, S3: Spigots

V1, V2: Valve seat

H: Horizontal orientation

V: Vertical orientation

→ : Flow direction

→ : Draining direction

GMP / SAP configuration

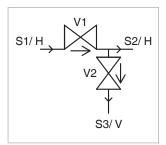
As a rule, the nominal sizes of the two valves differ for GMP and SAP valve configurations. Combinations with the same nominal sizes can, however, also be produced. However, due to the valve geometries and the available space situation (e.g. relating to the actuator dimensions and body), there are also limitations. In these cases, GEMÜ is also able to offer multiport valve blocks (series M600) manufactured from a single piece as a further customised solution.

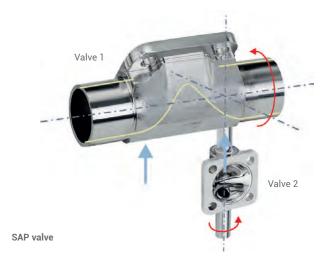
SAP valve

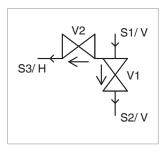
The term SAP (Sterile Access Port) valve defines a configuration of two valves welded together, with the 2/2-way valve (1) being arranged horizontally. The valve (2) is welded on vertically in front of or behind the 2/2-way valve (1) sealing weir depending on the application.

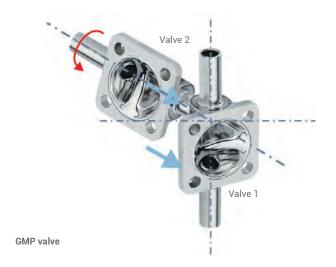
GMP valve

The term (Good Manufacturing Practice) valve defines a configuration of two valves welded together, with the 2/2-way valve (1) being arranged vertically. The valve (2) is welded on horizontally in front of or behind the 2/2-way valve (1) sealing weir depending on the application. It is twisted axially to the extent that its sealing weir is turned away from the volumetric flow and that the working medium can flow out unhindered even under depressurised conditions.









W600 i-bodies

The GEMÜ i-body (integrated valve seat) can be seen as an intermediate step to full GEMÜ M-block design machined from a piece of block material. i-bodies are a special construction type of the classical 2/2-way valve bodies. The integrated valve seat of i-bodies is used for example as sampling, steam and condensate valve. The valve bodies have two valve seats and 3 pipe connections. They are manufactured from a forging blank or a piece of block material. The i-body offers a low cost and good alternative for a number of combinations. It already exhibits two essential features of an M-block. It has a greatly reduced dead volume and no internal weld. The drain or supply spigot is only welded on behind the valve seat.

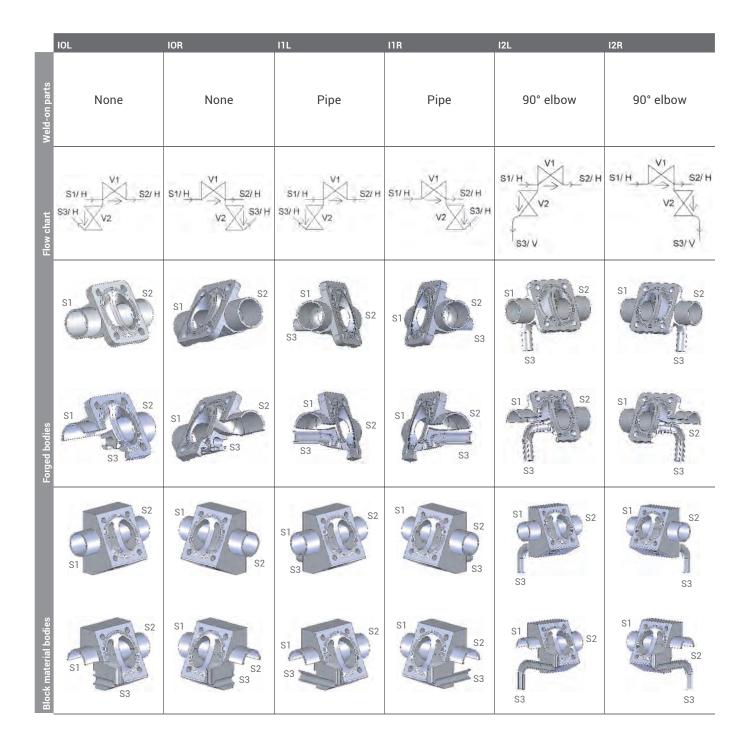
Features

- · Reduced weight
- · Minimal deadleg
- · No weld in the product area
- Compact
- · Cost effective
- · Available with spigots or elbows
- Draining in vertical installation position possible if adhering to the 3D-rule



i-bodies

Selection table



I3L	I3R	I4L	I4R	I5L	I5R
90° elbow	90° elbow	90° elbow	90° elbow	90° elbow	90° elbow
V2 S3/V V1 S2/V	\$2/V V2 V2 V1 S3/V	S3/V V2 V1 S1/H S2/H	S3/V V1 V2 S1/H	S2/ V V1 V2 S1/ V S3/ V	\$1/V V1 \$3/V
S1 S3 S2	S2 S3 S1	S3 S1 S1	\$3 \$1 \$2	\$2 \$3 \$1	S1 S3 S2
S1 S3 S2	S2 S3 S1	S3 S2 S1	S1 S3 S2	\$2 \$3 \$1	\$1 \$3 \$2
S1 S3 S2	S2 S3 S1	S3 S2 S2 S1	S1 S3 S3	S2 S3 S1	S1 S3 S2
S1 S3	S2 S3 S1	S3 S2 S2 S1 S1	S1 S3 S2	\$2 \$3 \$3	S1 S3 S2

Notes:

* Alternative installation positions are possible

* The arrows in the flow charts are examples

S1, S2, S3: Spigots

V1, V2: Valve seat

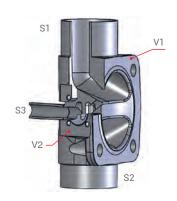
H: Horizontal orientation Vertical orientation

Flow direction

 \rightarrow : Draining direction

Technical feasibility

Alternative installation position



Application examples:

- · Condensate valve
- · Sampling valve

Available seat sizes for material 1.4435:

Diaphragm size 8/8 block material body
 Diaphragm size 10/8 block material body

• Diaphragm size 25/8 forged body

(forged body 1.4539 also

possible)

• Diaphragm size 40/8 forged body

(forged body 1.4539 also

possible)

• Diaphragm size 50/8 forged body

(forged body 1.4539 also

possible)

• Diaphragm size 80/10 forged body

· Diaphragm size 100/10 forged body



Integrated valve (valve 2) either manually or pneumatically operated Possible operators: GEMÜ 9601, 9602, 9612, 9650, 9653, 9654

i-bodies with bypass

The bypass valve comprises a forged body with an integrated smaller valve seat. Compared to the i-bodies previously described, this seat is switched in parallel to the main seat. This valve type is particularly suitable for applications which require flow rates that change and that at the same time vary considerably – as is often the case on tank systems and filling machines.

Features

- · Variable volumetric flow
- · Continuous minimum flow rate
- · Precise dosing option
- Large control range thanks to parallel connection of two different seat sizes in one valve
- · Works like a static mixer
- · Suitable as a sampling and tapping valve
- · Different installation positions are possible

Available seat sizes for material 1.4435:

• Diaphragm size 25/8 forged body

(forged body 1.4539 also

possible)

Diaphragm size 40/8 forged body

(forged body 1.4539 also

possible)

Diaphragm size 50/8 forged body

(forged body 1.4539 also

possible)

• Diaphragm size 80/10 forged body

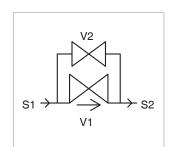
• Diaphragm size 100/10 forged body

· Diaphragm size 100/25 forged body

• Diaphragm size 100/40 forged body



Front view

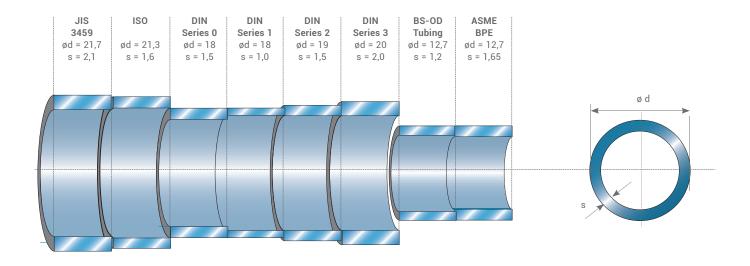




Rear view

Butt weld spigot bodies

The difference between tube specifications (Example DN 15)

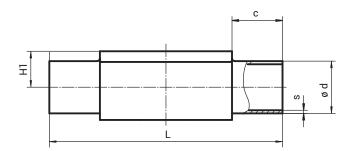


							DIN					DIN 11850 DIN 11866					EN ISO 127 / DIN EN 10357			
Dimen	sions i	n mm					Series Code 0		Series Code 1		Series Code 1		Series Code 1		Series Code 1		Series Code 1		Series Code 6	
MG	DN	NPS	L	LS	H1		ød	s	ød	s	ød	s	ød	s	ød	s	ød	s	ød	s
	4	-	72	20	8.5		6	1.0	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	72	20	8.5		8	1.0	-	-	-	-	-	-	8	1.0	10.2	1.6	10.2	1.6
8	8	1/4"	72	20	8.5		10	1.0	-	-	-	-	-	-	10	1.0	13.5	1.6	13.5	1.6
	10	3/8"	72	20	8.5		-	-	12	1.0	13	1.5	14	2.0	13	1.5	-	-	-	-
	15	1/2"	72	20	8.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10	3/8"	108	25	12.5		-	-	12	1.0	13	1.5	14	2.0	13	1.5	17.2	1.6	17.2	1.6
10	15	1/2"	108	25	12.5		18	1.5	18	1.0	19	1.5	20	2.0	19	1.5	21.3	1.6	21.3	1.6
	20	3/4"	108	25	12.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	15	1/2"	120	25	13.0	19.0	18	1.5	18	1.0	19	1.5	20	2.0	19	1.5	21.3	1.6	21.3	1.6
25	20	3/4"	120	25	16.0	19.0	22	1.5	22	1.0	23	1.5	24	2.0	23	1.5	26.9	1.6	26.9	1.6
	25	1"	120	25	19.0	19.0	28	1.5	28	1.0	29	1.5	30	2.0	29	1.5	33.7	2.0	33.7	2.0
4.0	32	1 1/4"	153	25	24.0	26.0	34	1.5	34	1.0	35	1.5	36	2.0	35	1.5	42.4	2.0	42.4	2.0
40	40	1 ½"	153	25	26.0	26.0	40	1.5	40	1.0	41	1.5	42	2.0	41	1.5	48.3	2.0	48.3	2.0
50	50	2"	173	30	32.0	32.0	52	1.5	52	1.0	53	1.5	54	2.0	53	1.5	60.3	2.0	60.3	2.0
0.0	65	2 ½"	216	30	-	62.0	-	-	-	-	70	2.0	-	-	70	2.0	76.1	2.0	76.1	2.0
80	80	3"	254	30	-	62.0	-	-	-	-	85	2.0	-	-	85	2.0	88.9	2.3	88.9	2.3
100	100	4"	305	30	-	76.0	-	-	-	-	104	2.0	-	-	104	2.0	114.3	2.3	114.3	2.3

MG = diaphragm size

Continued on the next page

^{*} replaces DIN 11850



Optimum draining angle see brochure "2/2-Way and T Valve Bodies in Stainless Steel" $\,$

			JIS-G JIS-G 3447 3459			SMS 3008		BS 4825		ASME BPE		ANSI/ASME B36.19M 10s		ANSI/A B36.191						
Dimen	sions i	n mm					Code 3	5	Code 3	6	Code 3	7	Code 5	5	Code 5	9	Code 6	3	Code 6	5
MG	DN	NPS	L	LS	Н1		ød	s	ød	s	ød	s	ød	s	ød	s	ød	s	ød	s
	4	-	72	20	8.5		-	-	-	-	-	-	-	-	-	-	-	-	-	-
	6	-	72	20	8.5		-	-	10.5	1.20	-	-	-	-	-	-	10.3	1.24	10.3	1.73
8	8	1⁄4"	72	20	8.5		-	-	13.8	1.65	-	-	6.35	1.2	6.35	0.89	13.7	1.65	13.7	2.24
	10	3/8"	72	20	8.5		-	-	-	-	-	-	9.53	1.2	9.53	0.89	-	-	-	-
	15	1/2"	72	20	8.5		-	-	-	-	-	-	12.70	1.2	12.70	1.65	-	-	-	-
	10	3/8"	108	25	12.5		-	-	17.3	1.65	-	-	9.53	1.2	9.53	0.89	17.1	1.65	17.1	2.31
10	15	1/2"	108	25	12.5		-	-	21.7	2.10	-	-	12.70	1.2	12.70	1.65	21.3	2.11	21.3	2.77
	20	3/4"	108	25	12.5		-	-	-	-	-	-	19.05	1.2	19.05	1.65	-	-	-	-
	15	1/2"	120	25	13.0	19.0	-	-	21.7	2.10	-	-	-	-	-	-	21.3	2.11	21.3	2.77
25	20	3/4"	120	25	16.0	19.0	-	-	27.2	2.10	-	-	19.05	1.2	19.05	1.65	26.7	2.11	26.7	2.87
	25	1"	120	25	19.0	19.0	25.4	1.2	34.0	2.80	25.0	1.2	-	-	25.40	1.65	33.4	2.77	33.4	3.38
40	32	1 ¼"	153	25	24.0	26.0	31.8	1.2	42.7	2.80	33.7	1.2	-	-	-	-	42.2	2.77	42.2	3.56
40	40	1 ½"	153	25	26.0	26.0	38.1	1.2	48.6	2.80	38.0	1.2	-	-	38.10	1.65	48.3	2.77	48.3	3.68
50	50	2"	173	30	32.0	32.0	50.8	1.5	60.5	2.80	51.0	1.2	-	-	50.80	1.65	60.3	2.77	60.3	3.91
80	65	2 ½"	216	30	-	62.0	63.5	2.0	76.3	3.00	63.5	1.6	-	-	63.50	1.65	73.0	3.05	73.0	5.16
80	80	3"	254	30	-	62.0	76.3	2.0	89.1	3.00	76.1	1.6	-	-	76.20	1.65	88.9	3.05	88.9	5.49
100	100	4"	305	30	-	76.0	101.6	2.0	114.3	3.00	101.6	2.0	-	-	101.60	2.11	114.3	3.05	114.3	6.02

MG = diaphragm size

Clamp bodies

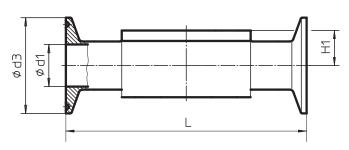
All clamp connections are machined according to the spigot dimensions to DIN EN 10357 (replaces DIN 11850), SMS 3008 or ASME BPE. We ask our customers to state which version or standard the connections shall comply with. Depending on the version, clamps are machined from the solid forged body or welded on. Investment cast bodies have welded on clamps as standard.

Welding is carried out by specially qualified and certified welders utilising state-of-the art welding technology. In principle, special connections requested by customers can be provided on GEMÜ butt weld spigot bodies. Thus it is also possible to have different connections on one body.

Clamp connections for forged 2/2-way bodies	Code
Clamps ASME BPE for pipe ASME BPE, short design	80
Clamps following ASME BPE for pipe EN ISO 1127, length EN 558-1, series 7	82
Clamps ASME BPE for pipe ASME BPE, length EN 558-1, series 7	88
Clamps DIN 32676 for pipe DIN 11850 length EN 558-1, series 7	8A
Clamps SMS 3017 for pipe SMS 3008 length EN 558-1, series 7	8E
Clamps IDF/ISO for pipe JIS-G 3447 length EN 558-1, series 7	8F
Clamps IDF/ISO for pipe JIS-G 3459 length EN 558-1, series 7	8H

Other versions on request





Optimum draining angle see brochure "2/2-Way and T Valve Bodies in Stainles Staal"

Pipe				Code ASME			Code EN IS	60 O 112	7	Code ASME			Code DIN 1	16,17, 1850	18	Code SMS			Code JIS-G			Code JIS-G		
Clam	p conn	ection		Code	80		Code	82		Code	88		Code	8A		Code	8E		Code	8F		Code	8H	
DN	NPS	MG	Н1	ød1	ød3	L	ød1	ød3	L	ød1	ød3	L	ød1	ød3	L	ød1	ød3	L	ød1	ød3	L	ød1	ød3	L
8	1/4"		8	4.57	25	63.5	10.30	25.0	63.5	-	-	-	-	-	-	-	-	-	-	-	-	10.5	34	88.9
10	3/8"	8	8	7.75	25	63.5	-	-	-	-	-	-	10.00	34	88.9	-	-	-	-	-	-	-	-	-
15	1/2"		8	9.40	25	63.5	-	-	-	9.40	25	108	-	-	-	-	-	-	-	-	-	-	-	-
10	3/8"		12.5	-	-	-	14.00	25.4	108	-	-	-	10.00	34	108	-	-	-	-	-	-	14.00	34	108
15	1/2"	10	12.5	9.40	25	88.9	18.10	50.5	108	9.40	25	108	16.00	34	108	-	-	-	-	-	-	17.50	34	108
20	3/4"		12.5	15.75	25	101.6	-	-	-	15.75	25	117	-	-	-	-	-	-	-	-	-	-	-	-
15	1/2"		19	9.40	25	101.6	18.10	50.5	108	9.40	25	108	16.00	34	108	-	-	-	-	-	-	17.50	34	108
20	3/4"	25	19	15.75	25	101.6	23.70	50.5	117	15.75	25	117	20.00	34	117	-	-	-	-	-	-	-	-	-
25	1"		19	22.10	50.5	114.3	29.70	50.5	127	22.10	50.5	127	26.00	50.5	127	22.60	50.5	127	23.00	50.5	127	-	-	-
32	1 1/4"	40	26	-	-	-	38.40	64	146	-	-	-	32.00	50.5	146	31.30	50.5	146	29.40	50.5	146	-	-	-
40	1 ½"	40	26	34.80	50.5	139.7	44.30	64	159	34.80	50.5	159	38.00	50.5	159	35.60	50.5	159	35.70	50.5	159	-	-	-
50	2"	50	32	47.50	64	158.75	56.30	77.5	190	47.50	64	190	50.00	64	190	48.60	64	190	47.80	64	190	-	-	-
65	2 ½"	80	62	60.20	77.5	193.68	72.10	91	216	60.20	77.5	216	66.00	91	216	60.30	77.5	216	59.50	77.5	216	-	-	-
80	3"	80	62	72.90	91	222.25	84.30	106	254	72.90	91	254	81.00	106	254	72.90	91	254	72.30	91	254	-	-	-
100	4"	100	76	97.38	119	292.1	109.70	144.5	305	97.38	119	305	100.00	119	305	97.60	119	305	97.60	119	305	-	-	-

Dimensions in mm MG = diaphragm size

Surface finish

Modern, ergonomically shaped workstations and trained polishing staff give us the ability to provide high quality surface finishes. Depending on the required application, surface finishes from Ra 0.8 μ m down to 0.25 μ m can be achieved by polishing, electro polishing or a special process, we call "elysieren".

Mechanical hand polishing is carried out at our works to ensure our high quality standard.

In principle, special connections requested by customers can be provided on GEMÜ butt weld spigot bodies and it is also possible to have different connections on one body.

Valve body surface finish, internal contour			
	Forged body - Codes 40, 42, F4 Block material - Codes 41, 43	Investment casting Codes 32, 34	Code
Ra ≤ 0.8 µm for media wetted surfaces, mechanically polished internal	X	Х	1502
Ra ≤ 0.8 µm for media wetted surfaces, electropolished internal/external	X	-	1503
Ra ≤ 0.6 µm for media wetted surfaces, mechanically polished internal	X 1	X 1	1507
Ra ≤ 0.6 µm for media wetted surfaces, electropolished internal/external	X 1	-	1508
Ra ≤ 0.25 µm for media wetted surfaces, electropolished internal/external	X 1	-	1516
Ra ≤ 0.25 µm for media wetted surfaces, mechanically polished internal	X 1	-	1527
Ra ≤ 0.4 µm for media wetted surfaces, mechanically polished internal	X 1	-	1536
Ra ≤ 0.4 µm for media wetted surfaces, electropolished internal/external	X 1	-	1537
Ra ≤ 0.51 µm (20 µinch) for media wetted surfaces, mechanically polished internal	X 1	-	1927
Ra ≤ 0.51 µm (20 µinch) for media wetted surfaces, electropolished internal/external	X 1	-	1928
Ra ≤ 0.38 µm (15 µinch) for media wetted surfaces, electropolished internal/external	X 1	-	1929

Ra in accordance with DIN 4768; at defined reference points. 1 For pipe inside diameter < 6 mm, surface in spigots Ra \leq 0.8 μ m.

Selection of operators

	Manually opera	ted					Motorized	
_								
Туре	9601**	9602** Stainless	9612** Stainless	9673 Stainless	9653** Stainless	9654** Stainless	9618	9698 Plastic, with
Material	Stainless steel, plastic handwheel, with optical position indicator and seal adjuster	steel, with optical position indicator and seal adjuster	steel, plastic handwheel, with optical position indicator and seal adjuster	steel, plastic handwheel, with optical position indicator and seal adjuster	steel, plastic handwheel, with optical position indicator, stroke limiter/ seal adjuster, lockable, optional: electrical position indicator	steel, with optical position indicator, stroke limiter/ seal adjuster, lockable, optional: electrical position indicator	Plastic, with or without stainless steel distance piece, optical position indicator	or without stainless steel distance piece, optical position indicator and manual override
Autoclavable	•	•	•	•	•	•	-	-
Operating temperature*	-10 to 150 °C	-10 to 150 °C	-10 to 150 °C	-10 to 150 °C	-10 to 150 °C	-10 to 150 °C	0 to 130 °C (without distance piece 15 to 60 °C)	0 to 150 °C
Operating pressure*	0 to 10 bar	0 to 10 bar	0 to 10 bar	0 to 10 bar	0 to 10 bar	0 to 10 bar	0 to 6 bar	0 to 6 bar
DN	4 to 15	4 to 15	10 to 20	15 to 50	10 to 100	4 to 100	4 to 15	15 to 50
0 1							24 VAC,	24 VAC,
Supply voltage	-	-	-	-	-	-	120 VAC, 230 VAC, 50/60Hz	120 VAC, 230 VAC, 50/60Hz
Diaphragm size 8	-	•	-	-	-	•	230 VAC,	230 VAC,
	•	•	-	-	-	•	230 VAC, 50/60Hz	230 VAC,
Diaphragm size 8				-			230 VAC, 50/60Hz	230 VAC,
Diaphragm size 8 Diaphragm size 10	-	-	•	-	•	•	230 VAC, 50/60Hz	230 VAC, 50/60Hz -
Diaphragm size 8 Diaphragm size 10 Diaphragm size 25	-	-	•	-	•	•	230 VAC, 50/60Hz	230 VAC, 50/60Hz - -
Diaphragm size 8 Diaphragm size 10 Diaphragm size 25 Diaphragm size 40		-	-	•	•	•	230 VAC, 50/60Hz	230 VAC, 50/60Hz - -

^{*} dependent on diaphragm material, see technical datasheet
** also suitable for i-body for valve seat 2







Pneumatically operated 9650** 9658/9688 Plastic, with Plastic, with Plastic, with Stainless steel, Two stage actuator, Filling valve, stainless steel with optical stainless steel stainless steel stainless steel with stainless steel position indicator, optical position distance piece, distance piece, distance piece optionally optical position optical position indicator indicator indicator autoclavable Material Autoclavable (DN 4 to 25) Operating temperature* -10 to 150 °C 0 to 10 bar Operating pressure* 0 to 8 bar 0 to 6 bar 0 to 10 bar 0 to 10 bar 0 to 5 bar DN 4 to 15 10 to 20 10 to 100 4 to 100 10 to 50 4 to 25 Supply voltage Diaphragm size 8 • • • • Diaphragm size 10 • • • • • Diaphragm size 25 . . . Diaphragm size 40

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Diaphragm size 50

Diaphragm size 80

Diaphragm size 100





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^{*} dependent on diaphragm material, see technical datasheet

^{**} also suitable for i-body for valve seat 2

Selection of diaphragms

		Dia- phragm		erature media	range [°C]	Certificate FDA compli- ant	es and ap USP Class VI	provals EHEDG	TA Luft (German Clean Air	O ₂ BAM	
Diaphragm	Material/Design	size	Min.	Max.	Sterilisation ¹	Code	un.			Act)	
EPDM	Ethylene-propylene-diene rubber	8 - 100	-10	100	max. 150 °C ² max. 60 min. per cycle	13/3A					
EPDM	Ethylene-propylene-diene rubber	8 - 100	-10	100	max. 150 °C ² max. 180 min. per cycle	17					
PTFE/ EPDM	Fully laminated PTFE diaphragm with EPDM back	8, 10, 100	-10	100	max. 150 °C ², no time limit per cycle	52/5A					
	Convex two-piece PTFE diaphragm with loose EPDM back	25, 40, 50, 80	-10	100	max. 150 °C ², no time limit per cycle	5E					

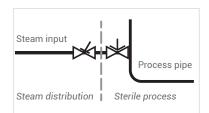
¹ The sterilisation temperature is valid for steam (saturated steam) or superheated water.

This also applies to PTFE diaphragms exposed to high temperature fluctuations.

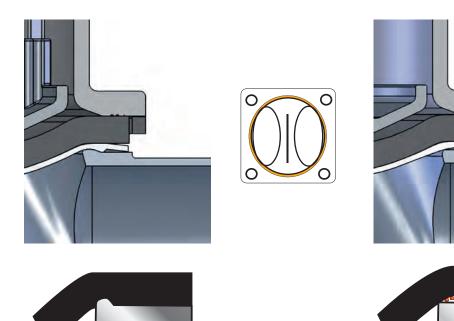
GEMÜ seal system

PTFE diaphragms can also be used as moisture barriers; however, this will reduce their service life. The maintenance cycles must be adapted accordingly.

GEMÜ 555 and 505 globe valves are particularly suitable for use in the area of steam generation and distribution. The following valve arrangement for interfaces between steam pipes and process pipes has proven itself over time: A globe valve for shutting off steam pipes and a diaphragm valve as an interface to the process pipes.



Das Original GEMÜ Dichtsystem





If the sterilisation temperatures listed above are applied to the EPDM diaphragms for longer periods of time, the service life of the diaphragms will be reduced. In these cases, maintenance cycles must be adapted accordingly.

Materials and certificates

The table below provides an overview of the possible certificates which are generally available. The type of certificate and its content must be specified exactly before ordering to be able to provide the required documents. Later requests of certificates may not be possible or possible only under certain conditions.

Our specialists are happy to answer any questions you might have.

Туре	Designation of the test certificate in accordance with EN 10204	Content of the certificate	Confirmation of the certificate by
2.1	Certificate of compliance with the order	Confirmation of compliance with the order	the manufacturer
2.2	Test report	Confirmation of compliance with the order with specification of results of non-specific testing	the manufacturer
3.1	Inspection certificate 3.1	Confirmation of compliance with the order with specification of results of specific testing	the manufacturer acceptance officer independent of the production division
3.2	Inspection certificate 3.2	Confirmation of compliance with the order with specification of results of specific testing	the manufacturer acceptance officer independent of the production division and the acceptance officer commissioned by the purchaser or the acceptance officer named in the official regulations



Specification W600 Valve configurations

Please complete this form and return it to your nearest GEMÜ office or to the address listed below!

Configu Quantit	uration no.:					Operating p		re				bar °C
Quanti	. y					Wicalam ten	прегиси					Ü
			alve 1		- [1				alve 2		- f	1
Colone	. 01	DN	Code	ød(a) [mm]	s [mm]	Onimat CO		DN	Code	ød(a) [mm]	s [mr	nj
Spigot						Spigot S3						
Spigot						no deadl requirem		•	rule	O 6D rt		
O or	nly bored (mal	ke entries fo	r dimensio	ns for S3)		1.		See sket	ch below	See sketch	below	
Operat	or type					Operator typ	pe					
Diaphra	agm size					Diaphragm	size					
Contro	function					Control fund	ction					
Access	ories					Accessories	S					
Remarl	(Remark						
*	1.4435	0 (4 =	2 =0.\		0	* 1.4	435	0 (1 =	0.50.			
Body material * Valve 1	1.4435 BN	2 (∆ Fe < 0	0,5%)			1 2 %		2 (∆ Fe <	0,5%)			
y mater Valve 1	1.4539						539					
Bod	Other					bog oth						
	* Forged body	as standard				_ ^Fo	rged body	as standard				
٦						Ε						
Diaphragm material	EPDM	_	ode			Diaphragm material		_	ode			
iaph mat	PTFE	_	ode			mate ITQ PTI		_	ode			
	Other	O _				Oth	ner	O _				
							/7					
tour	1502	(Ra) ≤ 0,8	-		0	Valve 1		S1/S2		S1/S2 V	alve 1	
ernal contour ind 2	1503		-	ectropolished	0	α°)	7		<u>f</u> er	
iternal and 2	1507	(Ra) ≤ 0,6	-		0			<u>∕</u>	٥			
	1508		-	ectropolished	0	Ų		Olo ×	6 x ølD			
finish In valve 1	1536	(Ra) ≤ 0,4	-		0	V I 0		<u>"</u>	<u>.</u>			
e fin	1537			ectropolished		Valve 2				Va	alve 2	
Surface finish Int valve 1 a	1527	$(Ra) \le 0.2$		aluan eli IIII		s				\$ 53		
Sul	1516	(Ra) ≤ 0,2	5 µm eie	ectropolished		٥.	TT	D rule		T-T-	rule	
	Other						1 2 2 1			11.51		
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Addre	SS:							- —				
D!								- —				
Phone	j:			E	-mail:			- —				

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GEMÜ manufacturing site





