

Angle Seat Globe Valve, Metal Aseptic

Construction

The GEMÜ 505 manually operated 2/2-way valve has a high temperature rated plastic handwheel and is designed for pure steam applications. The valve has a PTFE seat for tight shut off and the valve spindle is sealed by a stainless steel bellows.

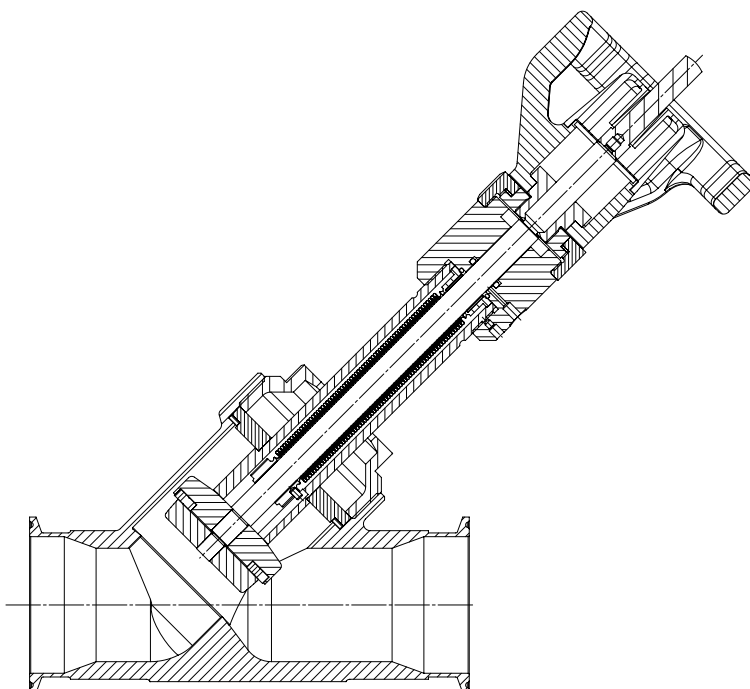
Features

- Suitable for pure steam and gaseous media
- For materials and connections see the following pages
- Internal surface of valve body down to Ra 0.4 µm mechanically polished, optionally electropolished

Advantages

- Free from non-ferrous metals
- Stainless steel bellows seal
- Welded valve plug
- Fixed seat plug (without threads)
- Fast operator change possible
- Optical position indicator integrated as standard
- Traceability of all wetted parts
- Suitable for contact with food according to Regulation (EC) No. 1935/2004
- Suitable for vacuum up to 20 mbar (a) as standard

Sectional drawing

**GEMÜ® 505**

Connection code 80 /
Valve body material code C2

Technical data

Working medium

Pure steam and gaseous media which have no negative impact on the physical and chemical properties of the body and seal material.

Max. perm. pressure of working medium see table

Media temperature -10 to 180 °C

Max. permissible viscosity 600 mm²/s (cSt)

Other versions for lower/higher temperatures on request

Ambient conditions

Max. ambient temperature 60 °C

Maximum permissible seat leakage rate

Seat seal	Standard	Test procedure	Leakage rate	Test medium
PTFE	DIN EN 12266-1	P12	A	air

Bonnet size	Nominal size	Max. operating pressure	Kv value
	DN	[bar]	[m ³ /h]
1	15	10	2.0
	20		4.0
	25		8.7
2	40	10	17.5
3	50	10	32.5
	65		33.0

Kv values determined acc. to DIN EN 60534.

The Kv values for other product configurations (e.g. other connections or body materials) may differ.

Order data

Body configuration	Code
2/2-way body	D

Connection	Code
Clamps ASME BPE for pipe ASME BPE, length ASME BPE	80

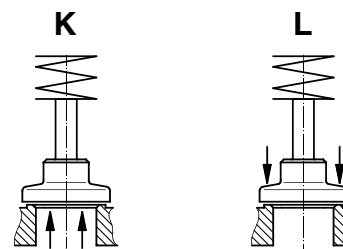
Valve body material	Code
1.4435, Investment casting Material equivalency 316 L, $\Delta Fe < 2,0\%$	C2
A surface finish from the order code table "K number" must be specified for valve body material.	

Seat seal	Code
PTFE	5P

Control function	Code
Manually operated	0

Bonnet size	Code
DN 8 - 20	1
DN 25 - 32	2
DN 40 - 80	3

Flow direction	Code
Under the seat	K
Over the seat (up to DN 65)	L



Handwheel material	Code
Plastic	P

Version	Code
Surface finish	
Ra ≤ 0.6 μm (25 μinch) for process contact surfaces, in accordance with ASME BPE SF2 + SF3, mechanically polished internal	1903
Ra ≤ 0.8 μm (30 μinch) for process contact surfaces, in accordance with DIN 11866 H3, mechanically polished internal	1904
Ra ≤ 0.4 μm (15 μinch) for process contact surfaces, in accordance with DIN 11866 H4, ASME BPE SF1, mechanically polished internal	1909
Ra ≤ 0.6 μm for process contact surfaces, in accordance with ASME BPE SF6, electropolished internal/external	1953
Ra ≤ 0.8 μm for process contact surfaces, in accordance with DIN 11866 HE3, electropolished internal/external	1954
Ra ≤ 0.4 μm for process contact surfaces, in accordance with DIN 11866 HE4/ASME BPE SF5, electropolished internal/external	1959

Special version	Code
Stainless steel bellows seal	F

Order data

Order example	505	25	D	80	C2	5P	0	1	K	P	1903	F
Type	505											
Nominal size		25										
Body configuration (code)			D									
Connection (code)				80								
Valve body material (code)					C2							
Seat seal (code)						5P						
Control function (code)							0					
Bonnet size (code)								1				
Flow direction (code)									K			
Handwheel material (code)										P		
Version (code)											1903	
Special version (code)												F

Version for food contact

For food contact, the product must be ordered with the following ordering options:

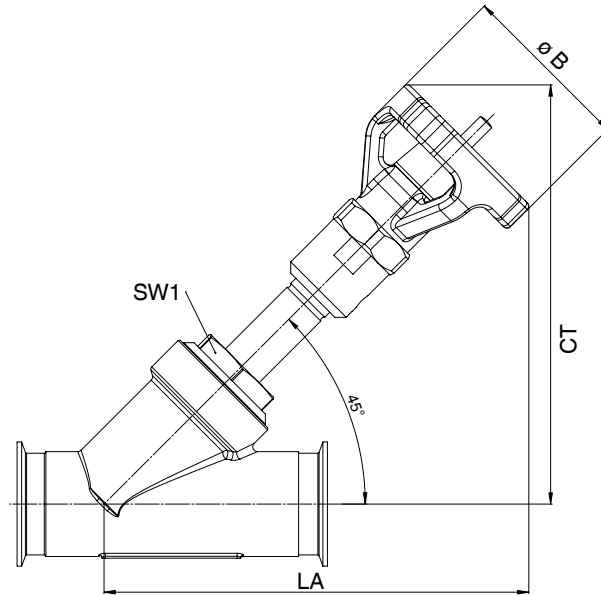
Seat seal code 5P

Valve body material code C2

Dimensions [mm]

Actuator dimensions / Installation dimensions

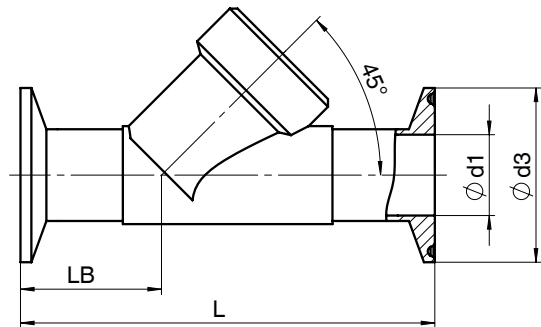
Actuator size	DN	SW1	ø B	CT/LA	Weight Bonnet	Weight Body
1	15	36	63	159	0,6	0,35
	20	36	63	159	0,6	0,30
	25	41	63	159	0,6	0,50
2	40	55	92	195	1,6	1,00
3	50	60	114	263	2,4	1,40
	65	55	114	266	3,0	2,40



Body dimensions [mm]

Clamp connections, connection code 80
Valve body material: 1.4435 (code C2)

DN	NPS	LB	L	ø d1	ø d3
15	1/2"	28.5	88.9	9.40	25.0
20	3/4"	35.0	101.6	15.75	25.0
25	1"	33.0	114.3	22.10	50.5
40	1 1/2"	40.0	139.7	34.80	50.5
50	2"	44.0	158.8	47.50	64.0
65	2 1/2"	54.3	193.8	60.20	77.5



For further globe valves, accessories and other products, please see our Product Range catalogue and Price List.
 Contact GEMÜ.

GEMÜ VALVES, MEASUREMENT
 AND CONTROL SYSTEMS

