

Tank Bottom Valve, Metal

Construction

The 2/2-way metal tank bottom valve GEMÜ 643 is manually operated with a side mounted gear which has an optical position indicator as standard. The stainless steel valve body is machined from a single block (no welds) and is designed for welding directly into a tank bottom. The distance piece and the gearbox housing are made of stainless steel.

Features

- Suitable for inert and corrosive* liquid and gaseous media
- CIP/SIP cleaning and sterilizing capabilities

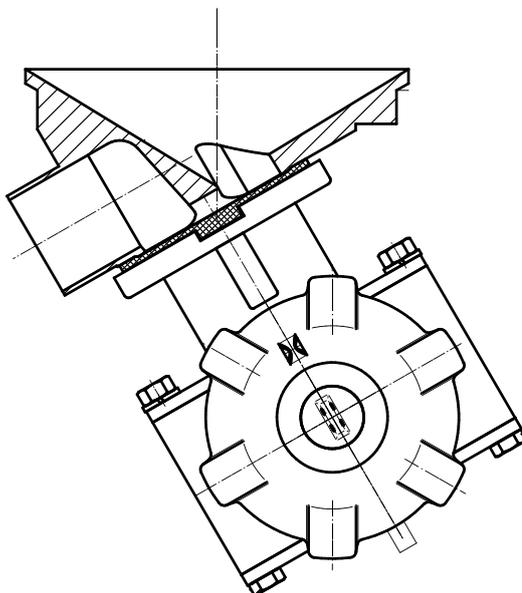
Advantages

- Tanks can be optimally drained, cleaned and sterilized by using the GEMÜ 643
- The temperature resistant plastic handwheel prevents burns injuries at high operating temperatures
- Compact design (ideal when space is at a premium)
- Tank bottom valve body also available with pneumatic or motorized actuator on request
- Bonnet can be rotated through 360°

*see information on working medium on page 2



GEMÜ 643



Technical data

Working medium

Corrosive, inert, gaseous and liquid media which have no negative impact on the physical and chemical properties of the body and diaphragm material.

Maximum permissible pressure of working medium, applied upstream 10 bar

Temperatures

Media temperature -10 ... 100 °C

Sterilisation temperature

EPDM (Code 13) 150 °C, max. 60 min

EPDM (Code 17) 150 °C, max. 180 min

PTFE (Code 52) Constant temperature* 150 °C

PTFE (Code 5E) Constant temperature* 150 °C

The sterilisation temperature is valid for steam or superheated water

* The valves concerned must be serviced regularly if steam is applied continuously

Nominal size	Bonnet	Operating pressure*	Weight
[mm]	size	[bar]	[kg]
15	2	10	3,0
20	2	10	3,0
25	2	10	3,0
32	3	10	6,0
40	3	10	6,0

* Operating pressure with EPDM and FPM diaphragms 10 bar, Operating pressure with PTFE diaphragms 6 bar

Order data

Body configuration	Code
Tank valve body	B

Connection	Code
Butt weld spigots	
Spigots DIN	0
Spigots DIN 11850, series 1	16
Spigots DIN 11850, series 2	17
Spigots DIN 11850, series 3	18
Spigots DIN 11866, series A	1A
Spigots DIN 11866, series B	1B
Spigots SMS 3008	37
Spigots ASME BPE	59
Spigots EN ISO 1127	60
Spigots ANSI/ASME B36.19M, Schedule 10s	63
Spigots ANSI/ASME B36.19M, Schedule 40s	65

Valve body material	Code
1.4435 (316L), Block material	41
1.4435 (BN2), Block material Fe < 0.5 %	43
Other valve body material on request	

Diaphragm material	Code	
EPDM	13	
EPDM	17	
PTFE/EPDM convex	PTFE loose	5E
PTFE/EPDM	PTFE lamin.	52
Material complies with FDA requirements		

Control function	Code
Manually operated	0

Bonnet size	Code
Bonnet size 2 (DN 15 - 25)	2
Bonnet size 3 (DN 32 - 40)	3

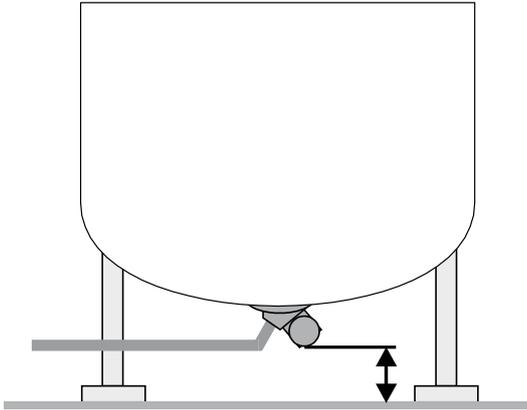
Valve body surface finish, internal contour

	Block material Code 41, 43	Code
Ra ≤ 6.3 µm blasted internal/external	-	1500
Ra ≤ 6.3 µm optical electropolishing	-	1509
Ra ≤ 0.8 µm mechanically polished internal, blasted external	X	1502
Ra ≤ 0.8 µm electropolished internal/external	X	1503
Ra ≤ 0.6 µm mechanically polished internal, blasted external	X	1507
Ra ≤ 0.6 µm electropolished internal/external	X	1508
Ra ≤ 0.4 µm mechanically polished internal, blasted external	X	1536
Ra ≤ 0.4 µm electropolished internal/external	X	1537
Ra ≤ 0.25 µm mechanically polished internal, blasted external	X	1527
Ra ≤ 0.25 µm electropolished internal/external	X	1516

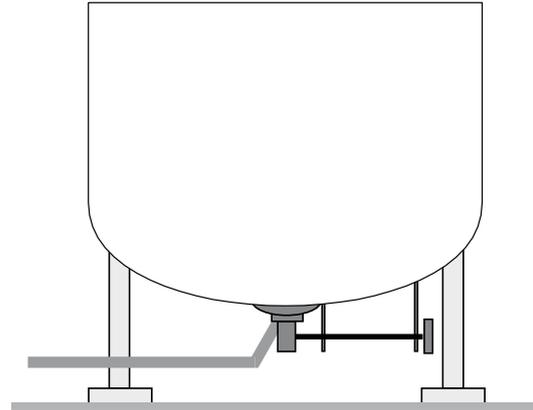
Ra acc. to DIN 4768; at defined reference points
Surface finish data refer to medium wetted surfaces

Order example	643	25	B	60	41	13	0	2	1503
Type	643								
Nominal size		25							
Body configuration (code)			B						
Connection (code)				60					
Valve body material (code)					41				
Diaphragm material (code)						13			
Control function (code)							0		
Bonnet size (code)								2	
Surface finish (code)									1503

Mounting position



Mounting position (with handwheel extension by user)

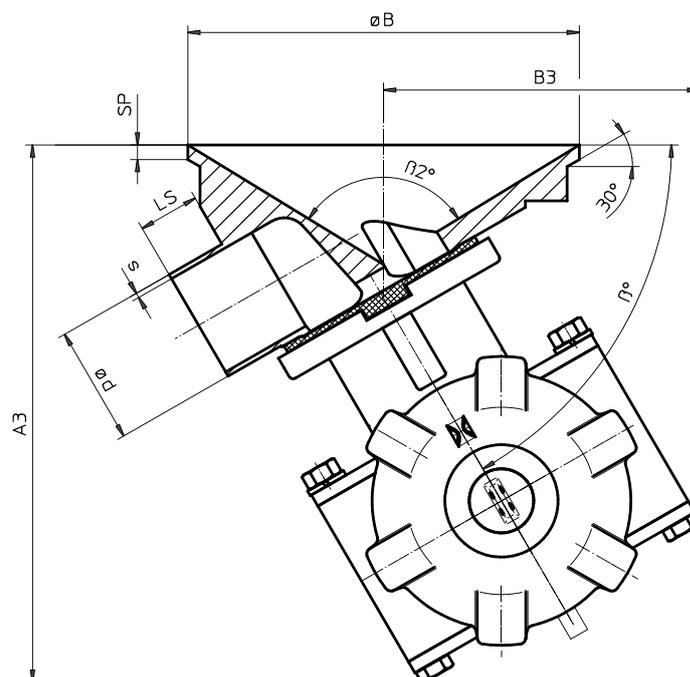


Dimensions [mm]

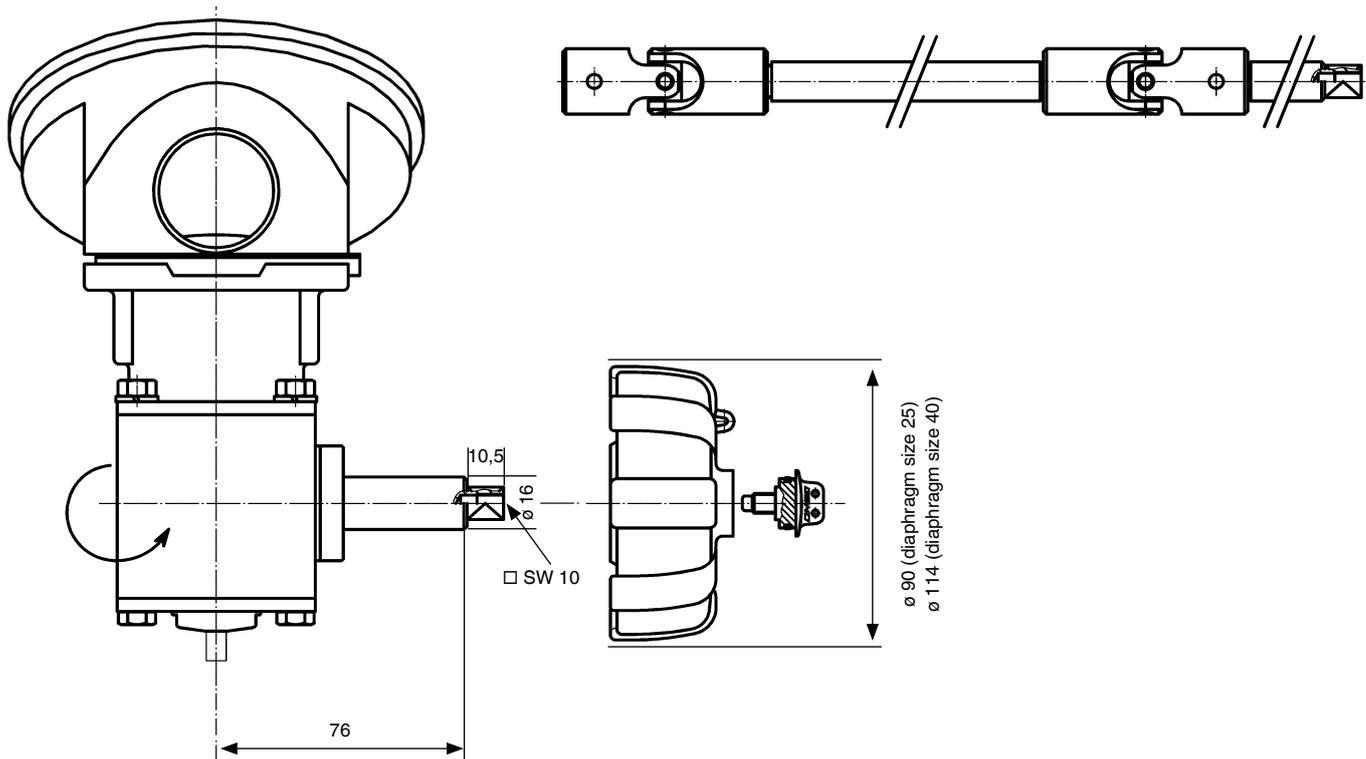
Bonnet dimensions

DN	A3	B3	ø B	SP
15 - 25	166	104	120	6
32 - 40	190	110	160	6

For pipe dimensions or butt weld spigots see our aseptic diaphragm valves brochure. Other dimensions on request.



Shaft extension (by user)



Attention!

When the user installs a handwheel extension care should be taken that it has sufficient bearing points.

Torques for shaft extension:

Bonnet size 2	11 Nm
Bonnet size 3	14 Nm

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

GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

