

# Tank Bottom Valve, Metal

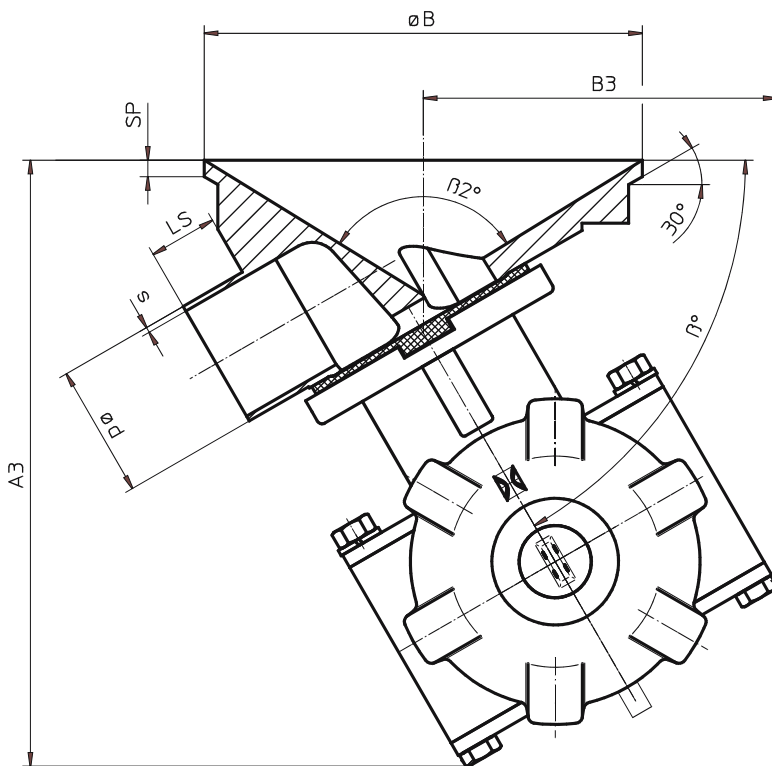
## Construction

The 2/2 way tank bottom valve is manually operated with a side mounted gear operator. The stainless steel valve body is welded into a tank bottom machined from a single block (no welds). The distance piece and the gearbox housing are made of stainless steel has an optical position indicator.

## Advantages

- Tanks can be optimally drained, cleaned and sterilised by using the GEMÜ 643
- The temperature-resistant hand wheel prevents burns injuries at high working temperatures
- Mounting is possible where space is at a premium
- Tank bottom valve body also available with pneumatic or motorized actuator upon request
- Optional accessories such as electrical position indicators

Actuator dimensions (mm)



Nominal size	A3	B3	ø B	SP
DN	(mm)	(mm)	(mm)	(mm)
15-25	166	104	120	6
32-40	190	110	160	6

For pipe dimensions or butt weld spigots see our aseptic diaphragm valve brochure. Further dimensions upon request.



## Flow medium

Maximum permissible pressure of working medium	10 bar
Max. permissible temperature of working medium (depending on diaphragm material and working pressure)	160° C

Nominal size (mm)	Actuator (Size)	Working pressure* (bar)	Weight (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

\* Working pressure with EPDM and FPM diaphragms 10 bar  
Working pressure with PTFE diaphragm 6 bar

## Body configuration

Body configuration	Ref. no.
Tank bottom valve body	B

## Connections (Take off)

Connections (Take off)	Ref. no.
<b>Butt weld spigots</b>	
Butt weld spigot DIN	0
Butt weld spigot to DIN 11850, series 1	16
Butt weld spigot to DIN 11850, series 2	17
Butt weld spigot to DIN 11850, series 3	18
Butt weld spigot to SMS 3008	37
Butt weld spigot to BS 4825 Part 1 (O.D.Tubing)	55
Butt weld spigot ASME BPE	59
Butt weld spigot to EN ISO 1127	60

## Valve body material

Valve body material	Ref. no.
Special body "machined from a block" 1.4435 (316L)	41
Special body "machined from a block" Fe < 0.5 % 1.4435 (BN2)	43
Special body "machined from a block" 1.4539	44

## Diaphragm material

Diaphragm material	Ref. no.
Viton <sup>®</sup> FPM	4
Ethylene-Propylene EPDM max. 130°C*	12
Ethylene-Propylene EPDM max. 150°C*	13
Ethylene-Propylene EPDM max. 150°C*	16
PTFE/EPDM convex PTFE loose max. 150°C*	5E
PTFE/Viton <sup>®</sup> convex PTFE loose max. 150°C*	5F
PTFE/Silicon convex PTFE loose max. 160°C*	5S
PTFE/EPDM PTFE lamin. max. 150°C*	52

\* steam sterilization temperature

## Control function

Control function	Ref. no.
Manually operated	0

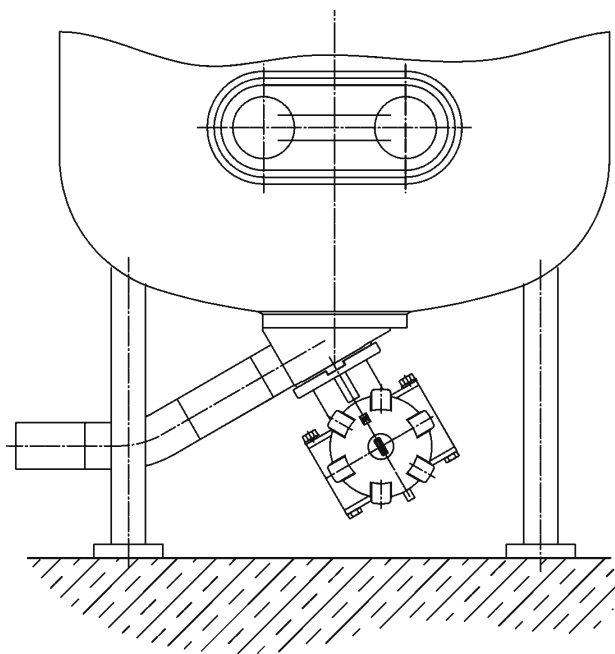
## Valve body surface finishes, internal finish (acc. to DIN 4768)

Valve body surface finishes, internal finish (acc. to DIN 4768)	Ref. no.
Ra ≤ 6.3 µm blasted internal / external	1500
Ra ≤ 6.3 µm electropolished internal / external	1509
Ra ≤ 0.8 µm mechanically polished internal, blasted external	1502
Ra ≤ 0.8 µm electropolished internal / external	1503
Ra ≤ 0.6 µm mechanically polished internal, blasted external	1507
Ra ≤ 0.6 µm electropolished internal / external	1508
Ra ≤ 0.4 µm mechanically polished internal, blasted external	1536
Ra ≤ 0.4 µm electropolished internal / external	1537
Ra ≤ 0.25 µm mechanically polished internal, blasted external	1527
Ra ≤ 0.25 µm electropolished internal / external	1516

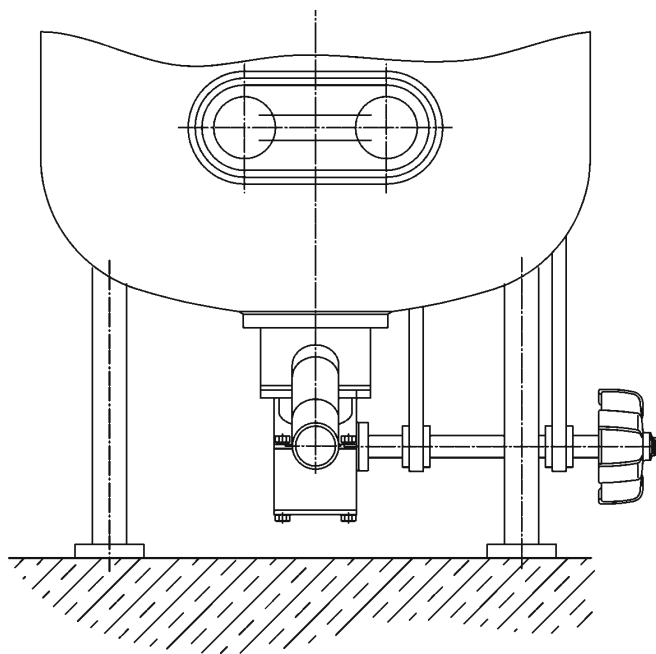
## Order example

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

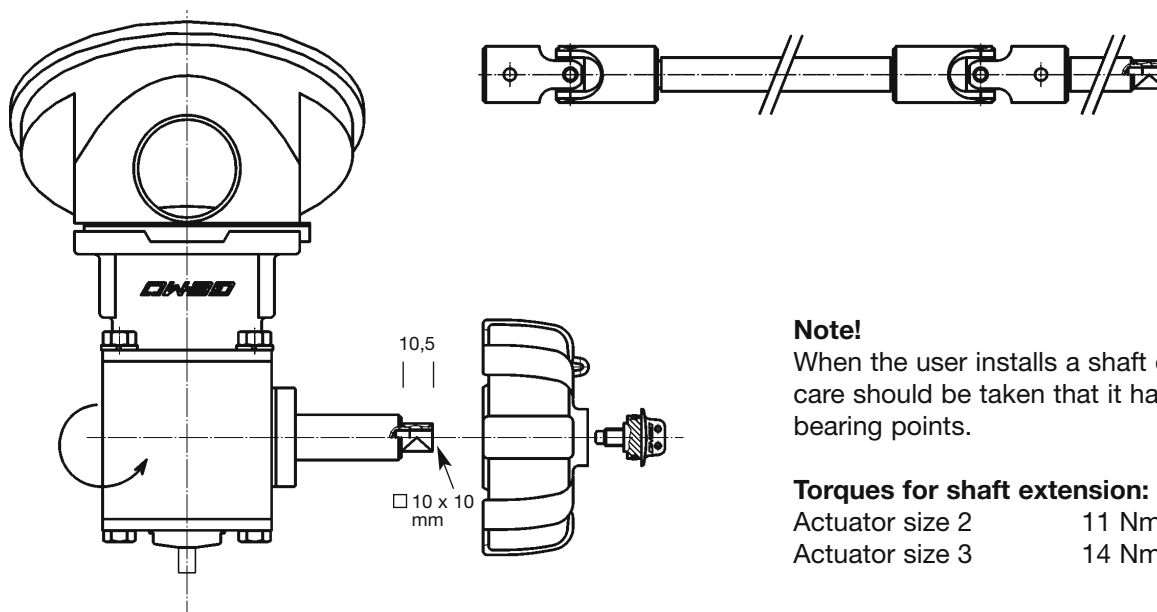
### Mounting position



### Mounting position (with handwheel extension by user)



### Shaft extension (by user)



#### Note!

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

#### Torques for shaft extension:

Actuator size 2	11 Nm
Actuator size 3	14 Nm

## Stainless steel diaphragm valves, manually operated



- FDA conformity and GMP design
- DN 4 - 100 mm
- Investment cast and forged bodies
- Sterilizable as standard / autoclavable versions available
- Surface finish dependent on process requirements
- Versions with seal adjuster
- Versions with stroke limiter "open"
- Versions with electrical position indicators
- Body and diaphragm materials can be chosen to suit the application
- All common connections

## Stainless steel diaphragm valves, pneumatically operated



- FDA conformity and GMP design
- DN 4 - 100 mm
- Investment cast and forged bodies
- Sterilizable as standard / autoclavable versions available
- Surface finish dependent on process requirements
- Body and diaphragm materials can be chosen to suit the application
- All common connections
- Stroke limiters, electrical position indicators and positioners can also be easily retrofitted

## Stainless steel diaphragm valves, motorized or with pneumatic two stage actuators



- FDA conformity and GMP design
- DN 4 - 50 mm
- Investment cast and forged bodies
- Sterilizable as standard / autoclavable versions available (only two stage actuator)
- Surface finish dependent on process requirements
- Body and diaphragm materials can be chosen to suit the application
- All common connections
- Precise electric motors, which will withstand being stalled, in all common AC voltages
- Two stage actuator, continuously adjustable

Our GEMÜ M600 multi-port valves can be fitted with all the actuators shown above.



**GEMÜ**® VALVES, ACTUATORS  
AND CONTROL SYSTEMS