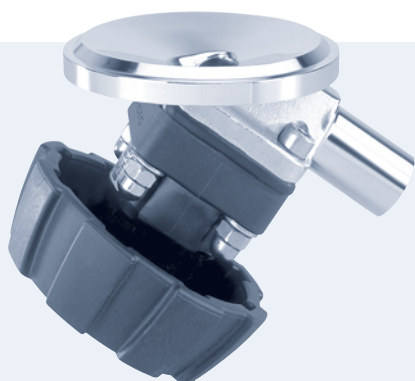
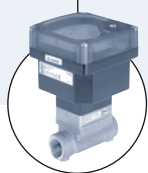


Tank Bottom Valve, Manually Operated, Stainless Steel Block Material



Type 3235 can be combined with...



Type 8034

Flow meter

The Burkert Tank Bottom Valve system is designed for control of ultra pure, sterile, aggressive or abrasive fluids. Enables especially optimal filling and emptying vessels with less dead leg.

The valve body consists of two parts- a flange and a body welded together. It is also available in block material on request (in that case no weld seam). The Tank Bottom Valve has two welding bevels to ease the welding and valve positioning operations.

The high quality diaphragms separate hermetically critical fluids from the actuator. The manual actuator in PPS or stainless steel can be sterilized.

Applications

- Pharma
- Biotechnology
- Food Industry

- Fully integrated in Burkert's Process Control Systems
- Easy welding design
- Quality certifications FDA/A

Technical data			
Orifice DN (diaphragm)	DN 15.0-100.0		
Materials			
Valve body	<ul style="list-style-type: none"> ▪ 316 L stainless steel ▪ 316 L/1.4435/BN2 Fe < 0.5%/C ≤ 0.03% 		
Diaphragm	EPDM, PTFE/EPDM		
Manual actuator	PPS, stainless steel 1.4581		
Bonnet	PPS, stainless steel 1.4581		
End connections			
Weld end	<ul style="list-style-type: none"> ▪ EN ISO 1127 / ISO 4200 ▪ DIN 11850 RG2 ▪ ASME BPE ▪ SMS 3008 ▪ BS 4825 (various other Weld end, Tri-Clamp® and Sterile threaded end connections are available, please consult for advice)		
Surface finish	Ra [µm]	Ra [µInch]	Ra [Grit #]
	Internal	Internal	Internal
Satin finished	0.5	20	240
Electro polished	0.4	16	280
Mirror finished ¹⁾	0.25	10	330
Temperatures			
Medium	-10°C... +130°C (short +150°C)		
Ambient	+5°C... +140°C		

¹⁾ Internal Ra < 0.1µm/4 µInch/Grit 500 on request.

Specification Key Type 3235

Example 3235 - 15.0 - AB - W - VI - FO85 - SA42 - D050 * N009+N017

Specification key 3235 - XX.X - XX - X - XX - XXXX - XXXX - XXXX * Variable codes

Orifice [mm] (diaphragm)

15.0
20.0
25.0
40.0
50.0
80.0
0100

Seal material

AB	EPDM in food quality
EA	PTFE
FF	FKM

Production of body

B	Monoblock
W	Weld

Body material

VH	AISI 316L
VI	1.4435 BN2/ASME

Tank flange

DN15	FO85 (Ø 85 mm)
DN20	FO85 (Ø 85 mm)
DN25	F120 (Ø 120 mm)
DN40	F150 (Ø 150 mm)
DN50	F180 (Ø 180 mm)
DN80	F254 (Ø 254 mm)
DN100	F300 (Ø 300 mm)

Variable codes

Surface finish external

NO03	Ext. Mirror finished Ra=0.25 µm
N009	Ext. Electro polished Ra=3.2 µm standard
NO15	Ext. Electro polished Ra=0.8 µm
NO19	Ext. Mech. polished poliirt Ra=1.6 µm

Surface finish internal

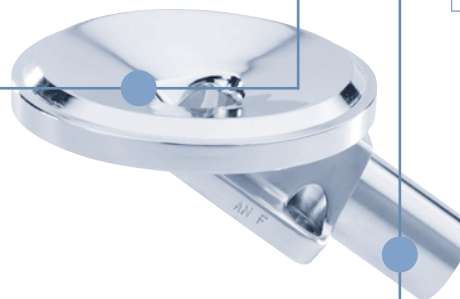
NO07	Int. Mirror finished Ra=0.25 µm
NO14	Int. Satin finished Ra=0.5 µm
N017	Int. Electro polished Ra=0.4 µm standard
NO20	Int. Electro polished Ra=0.25 µm

Specific angle

AF71	45° Outlet angle
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Actuator version

D050	Top PPS, Handwheel PPS
D058	Top Stainless steel, Handwheel PPS for Tank Bottom
D085	Grey Cast iron, white epoxid painted



Port connection

Port connection weld end

Orifice [mm]	EN ISO 1127/ ISO 4200	SMS 3008	DIN 11850				BS 4825	ASME BPE	JIS Sanitary	JIS Utility
			RG0	RG1	RG2	RG3				
15	SA42=21.3x1.6		SC43=18x1.5	SF41=18x1.0	SD42=19x1.5	SE42=20x2.0	SODD=12.7x1.2	SA92=12.7x1.65	SA72=21.7x2.1	
20	SA43=26.9x1.6		SC44=22x1.5	SF42=22x1.0	SD43=23x1.5	SE43=24x2.0	SODE=19.05x1.2	SA93=19.05x1.65	SA76=27.2x2.1	SA80=27.2x2.1
25	SA44=33.7x2.0	SA60=25.0x1.2	SC45=28x1.5	SF43=28x1.0	SD44=29x1.5	SE44=30x2.0	SODF=25.4x1.65	SODF=25.4x1.65	SA73=25.4x1.2	SA81=34x2.0
32	SA45=42.4x2.0		SC46=34x1.5	SF44=34x1.0	SD45=35x1.5	SE45=36x2.0				SA83=42.7x2.0
40	SA46=48.3x2.0	SA62=38.0x1.2	SC47=40x1.5	SF45=40x1.0	SD46=41x1.5	SE46=42x2.0	SODH=38.1x1.65	SODH=38.1x1.65	SA74=38.1x1.2	SA84=60.5x2.0
50	SA47=60.3x2.0	SA63=51.0x1.2	SC48=52x1.5	SF46=52x1.0	SD47=53x1.5	SE47=54x2.0	SODI=50.8x1.65	SODI=50.8x1.65	SA75=50.8x1.5	
65	SA48=76.1x2.0	SA64=63.5x1.6			SD48=70x2.0		SA64=63.5x1.65	SA64=63.5x1.65		
80	SA49=88.9x2.3	SA65=76.1x1.6			SD49=85x2.0		SA65=76.2x1.65	SA65=76.2x1.65		
100	SA39=114.3x2.3	SA66=101.6x2.0			SD50=104x2.0		SA66=101.6x2.11	SA66=101.6x2.11		

Port connection Tri-Clamp®

Orifice [mm]	ISO 2852 SMS 3017	ASME BPE	DIN 32676	Port connection Sterile threaded ends	
				DIN 11851	SMS 1145
15		TI42=clamp 25 - Dint=9.4	TD42=clamp 34 - Dint=16	RV42: Rd34 - Dint=16	
20		TI43=clamp 25 - Dint=15.75	TD43=clamp 34 - Dint=22	RV43: Rd44 - Dint=20	
25	TC44=clamp 50.5 - Dint=22.6	TI44=clamp 50.5 - Dint=22.2	TD44=clamp 50.5 - Dint=26	RV44: Rd52 - Dint=26	RT44: Rd40 - Dint=23
40	TC46=clamp 50.5 - Dint=35.7	TI46=clamp 50.5 - Dint=34.9	TD46=clamp 50.5 - Dint=38	RV46: Rd65 - Dint=38	RT46: Rd60 - Dint=36
50	TC47=clamp 64 - Dint=48.6	TI47=clamp 64 - Dint=47.6	TD47=clamp 64 - Dint=50	RV47: Rd78 - Dint=50	RT47: Rd70 - Dint=49


Technical data

Orifice DN diaphragm [mm]	Kv value water [m ² /h]	Max. Operating pressure (medium) for seal material EPDM and PTFE/EPDM [bar]
8	1.0	10
15	6.0	10
20	11.0	10
25	16.0	10
40	29.0	10
50	50.0	10 ¹⁾
80	160.0	7
100	235.0	7

¹⁾ Max. operating pressure 7 bar for bonnet and manual actuator in PPS.

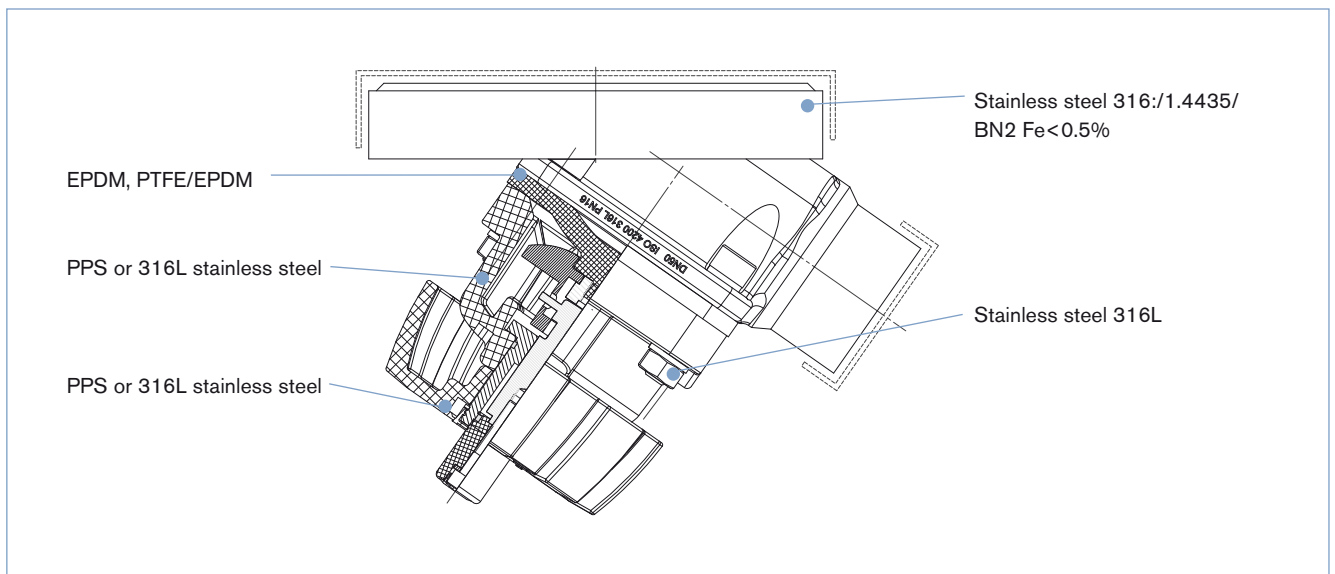
Various other Tri-Clamp®- and Sterile threaded end connection combination are available, please consult for advice.

Validation/Certification

- Certification of Conformity for Raw Material EN-ISO 10204 3.1.B
- Attestation of compliance with the order EN-ISO 10204 2.1
- Testreport EN-ISO 10204 2.2
- 3A Certification 
- Certification of Conformity for Pickling and Electropolishing Processes
- Certification of Conformity for the Surface Quality DIN4762-DIN4768-ISO/4287/1
- FDA CFR No. 21 177.2600 Certification
- Test Certification and Conformity Certification for the Final Assembly of Diaphragm Valves
- ISO 9001 Certification

Note: Retrospective manufacturing certification for process diaphragm valves can not be made, therefore please notify when ordering.

Materials



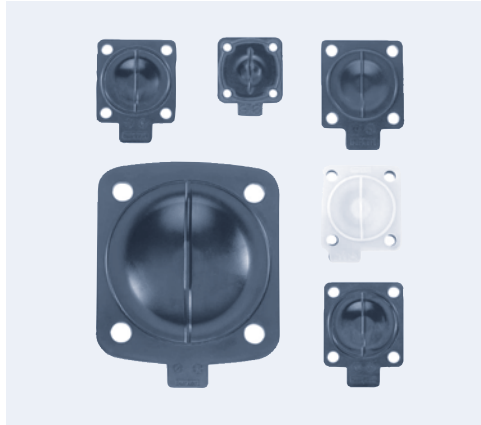
Diaphragms

Developed to handle the unique challenges of hygienic and sterile applications, Burkert offers diaphragms with precise material formula and physical tolerances.

Burkert diaphragms are available in a wide range of materials which have been proven in food & beverage, biotechnology pharmaceutical and cosmetic industry applications.

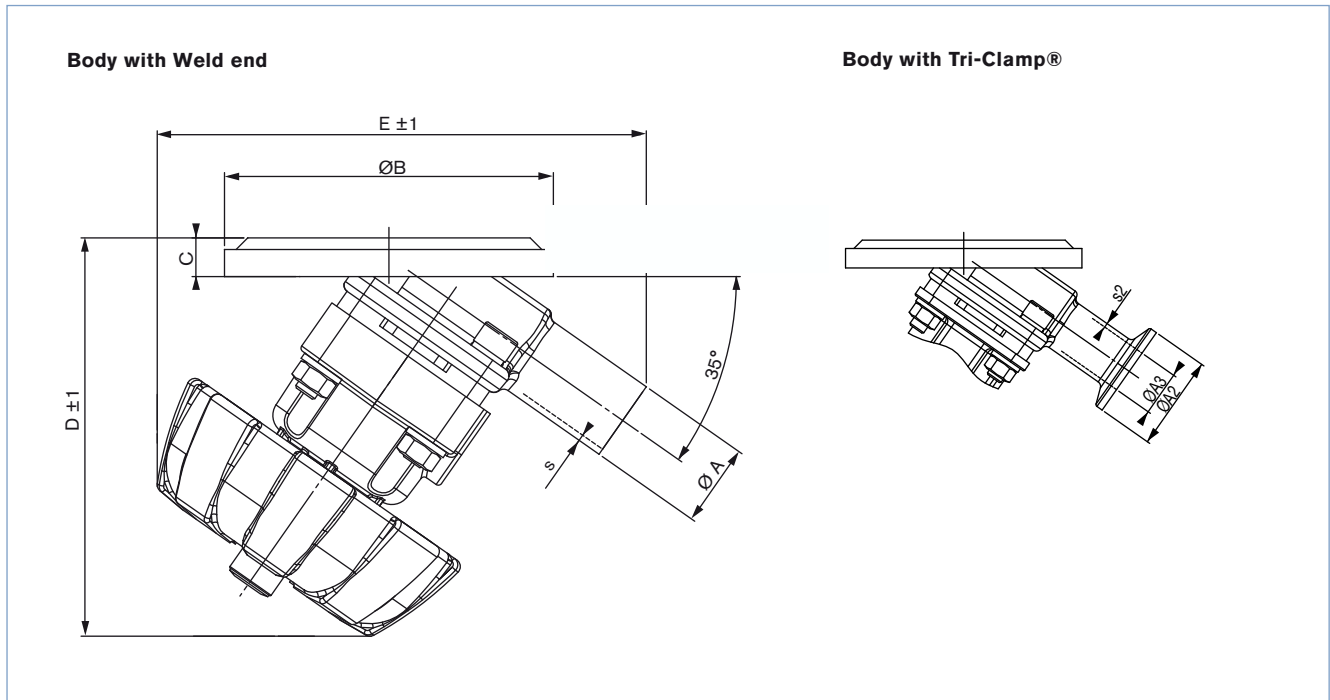
Diaphragms are tested during development and production to ensure reliability in critical processing environments.

Example of available materials, diaphragms



- EPDM (Ethylene-Propylene Rubber)
- PTFE/EPDM
- FKM
- CSM
- PSI (Silicone)
- PTFE/FKM
- NBR
- Butyl

Dimensions [mm]



Body with Weld end EN ISO 1127 / ISO 4200

Dimensions [mm]

Orifice	ØA	s	ØB	C	D	E
15	21.3	1.6	85.0	10.0	103.0	126.0
20	26.9	1.6	85.0	10.0	110.0	140.0
25	33.7	2.0	120.0	15.0	118.0	144.0
40	48.3	2.0	150.0	15.0	145.0	187.0
50	60.3	2.0	180.0	30.0	171.0	219.0
80	88.9	2.3	254.0	30.0	288.0	332.0
100	114.3	2.3	300.0	30.0	356.0	418.0

DIN 11850 RG2

Dimensions [mm]

Orifice	ØA	s	ØB	C	D	E
15	19.0	1.5	85.0	10.0	103.0	126.0
20	23.0	1.5	85.0	10.0	110.0	140.0
25	29.0	1.5	120.0	15.0	118.0	144.0
40	41.0	1.5	150.0	15.0	145.0	187.0
50	53.0	1.5	180.0	30.0	171.0	219.0
80	85.0	2.0	254.0	30.0	288.0	332.0
100	104.0	2.0	300.0	30.0	356.0	418.0

Dimensions [mm]

ASME BPE

Dimensions [mm]

Orifice	ØA	s	ØB	C	D	E
15	12.7	1.65	85.0	10.0	103.0	126.0
20	19.05	1.65	85.0	10.0	110.0	140.0
25	25.4	1.65	120.0	15.0	118.0	144.0
40	38.1	1.65	150.0	15.0	145.0	187.0
50	50.8	1.65	180.0	30.0	171.0	219.0
80	76.1	1.65	254.0	30.0	288.0	332.0
100	101.6	2.0	300.0	30.0	356.0	418.0

SMS 3008

Dimensions [mm]

Orifice	ØA	s	ØB	C	D	E
15	–	–	–	–	–	–
20	–	–	–	–	–	–
25	25.0	1.2	120.0	15.0	118.0	144.0
40	38.0	1.2	150.0	15.0	145.0	187.0
50	51.0	1.2	180.0	30.0	171.0	219.0
80	76.1	1.65	254.0	30.0	288.0	332.0
100	101.6	2.0	300.0	30.0	356.0	418.0

Body with Tri-Clamp®

DIN 32676

Dimensions [mm]

Orifice	ØA2	ØA3	s2	ØB	C	D	E
15	34.0	16.0	1.5	85.0	10.0	103.0	126.0
20	34.0	20.0	1.5	85.0	10.0	110.0	140.0
25	50.5	26.0	1.5	120.0	15.0	118.0	144.0
40	50.5	38.0	1.5	150.0	15.0	145.0	187.0
50	64.0	50.0	1.5	180.0	30.0	171.0	219.0

BS4825-3

Dimensions [mm]

Orifice	ØA2	ØA3	s2	ØB	C	D	E
15	25.0	9.4	1.65	85.0	10.0	103.0	126.0
20	25.0	15.75	1.65	85.0	10.0	110.0	140.0
25	50.5	22.2	1.65	120.0	15.0	118.0	144.0
40	50.5	34.9	1.65	150.0	15.0	145.0	187.0
50	64.0	47.6	1.65	180.0	30.0	171.0	219.0