



A pneumatically operated, double seated, balanced mixproof process valve, EHEDG approved.

Features

- Available in stop-, multi-way and tank bottom valves.
- One piece body design.
- Balanced piston-shaped valve design.
- Insensitive to pipeline stresses, waterhammer proof.
- No additional CIP connections needed to clean leakage outlet.
- Patented double seat design, 100 percent mixproof.
- Eliminates product loss during switching.
- 100% protection against bacteria build-up from outside.
- Optimal flow control, high Kv values.
- All wetted parts inside the valve body to prevent cross contamination.
- In-line servicing and cleaning. The valve internals may be lifted from the body for inspection and cleaning. No special tooling required.
- CE Machine Directive constructed.
- Suitable to build manifolds with continuous piping.
- Self draining, no residue.
- Integrated 3 position pneumatic actuator for independent seat lifting.
- Encapsulated spring package.
- Position indication available.
- Varioflow® tank bottom valves convert batch systems to continual processes.
- Control head available.
- Fieldbus compatible.



Integrated Flow Control Manifolds

- Tailored around customer specifications.
- Compact design.
- Up to 150 valves per manifold.
- Easy maintenance.
- 100% pressure and function tested.
- Electronic control head available.

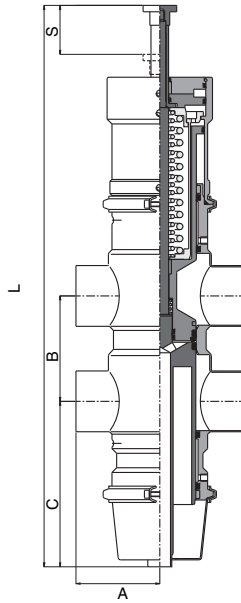
General Application

Varioflow® is an advanced design of process valve offering unequalled double sealing performance for increased process efficiency in the food, dairy, brewing, pharmaceutical, beverage and biochemical industries.

Materials

Wetted parts: 1.4404/316L
Other parts: 1.4301
Seals: EPDM, NBR, FPM, Silicon

Hygienic Mixproof Process Valves - Varioflow® Tankbottom Valve



Overall Dimensions

DN Inch	Pipe	A	B	C	L	S
1½"	38.1x1.5	75	86.5	177.5	595.5	51.0
2"	50.8x1.5	85	102.0	168.5	595.5	51.0
2½"	63.5x1.5	95	117.5	216.5	703.0	61.5
3"	76.1x1.5	105	132.0	208.0	703.0	61.5
4"	101.6x2.0	120	162.0	235.0	797.0	71.0

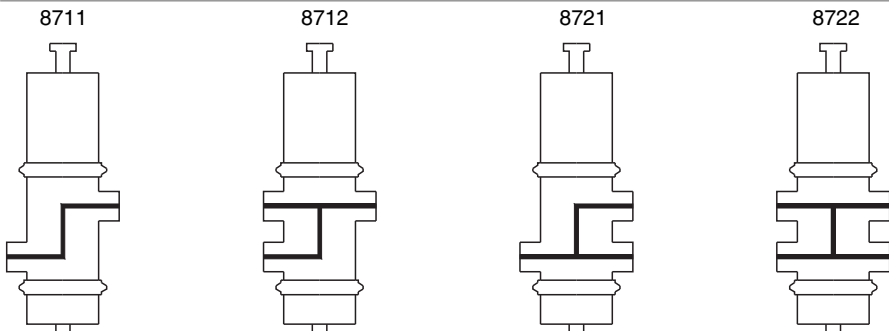
DIN 11850

40	40x1.5	75	85	180.0	595.5	51.0
50	54x2.0	85	101	170.5	595.5	51.0
65	70x2.0	95	114	222.5	703.0	61.5
80	85x2.0	105	138	206.0	703.0	61.5
100	104x2.0	120	161	237.0	797.0	71.0
125	129x2.0	170	210	296.0	1024.5	86.0
150	154x2.0	190	250	334.0	1137.5	98.0

ISO 1127

32	42.4x2.0	75	86.5	179.0	595.5	51.0
40	48.3x2.0	85	102.0	167.0	595.5	51.0
50	60.3x2.0	95	117.5	214.5	703.0	61.5
65	76.1x2.0	105	132.0	207.5	703.0	61.5
80	88.9x2.0	105	132.0	214.0	703.0	61.5
100	114.3x2.0	170	210.0	288.5	1024.5	86.0
125	139.7x2.0	190	250.0	327.0	1137.5	98.0

Valve Configuration



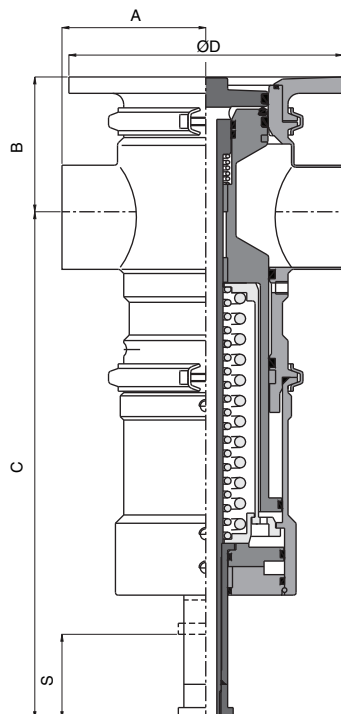
Kv Values

Inch	45	78	68
60	106	99	
93	170	141	
110	255	184	
190	520	380	
DIN 11850	45	78	68
60	106	99	
93	170	141	
110	255	184	
190	520	380	
315	755	540	
450	1035	840	
ISO 1127	45	78	68
60	106	99	
93	170	141	
110	255	184	
110	255	184	
315	755	540	
450	1035	840	

Technical Data

Pressure (bar): 10
 Temperature (°C): 140
 higher temperature seals on request
 Sizes (mm): 40-150
 Air pressure (bar): 6

Hygienic Mixproof Process Valves - Varioflow® Tankbottom Valve



Kv Values

Inch		
45	45	78
60	60	106
95	95	175
115	115	270
195	195	490

DIN 11850		
45	45	78
60	60	106
95	95	175
115	115	270
195	195	490

ISO 1127		
45	45	78
60	60	106
95	95	175
115	115	270
115	115	270

Overall Dimensions

DN	Pipe	A	B	C	D	S
1 1/2"	38.1x1.5	75	96.5	317.0	165	51.0
2"	50.8x1.5	85	90.0	323.5	165	51.0
2 1/2"	63.5x1.5	95	108.5	360.0	200	61.5
3"	76.1x1.5	105	102.0	366.5	200	61.5
4"	101.6x2.0	120	108.5	409.5	220	71.0

DIN 11850	Pipe	A	B	C	D	S
40	40x1.5	75	95.5	318.0	165	51.0
50	54x2.0	85	89.0	324.5	165	51.0
65	70x2.0	95	105.5	363.0	200	61.5
80	85x2.0	105	98.0	370.5	200	61.5
100	104x2.0	120	107.5	410.5	220	71.0

ISO 1127	Pipe	A	B	C	D	S
32	42.4x2.0	75	95.0	318.5	165	51.0
40	48.3x2.0	85	92.0	321.5	165	51.0
50	60.3x2.0	95	110.5	358.0	200	61.5
65	76.1x2.0	105	102.5	366.0	200	61.5
80	88.9x2.0	105	96.0	372.5	200	61.5

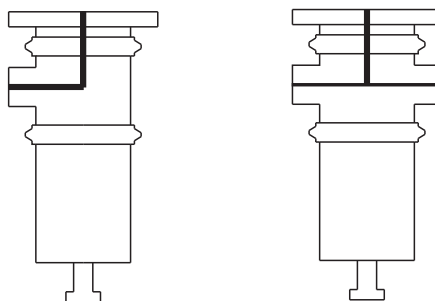
Technical Data

Pressure (bar): 10
 Temperature (°C): 140
 higher temperature seals on request
 Sizes (mm): 40-150
 Air pressure (bar): 6

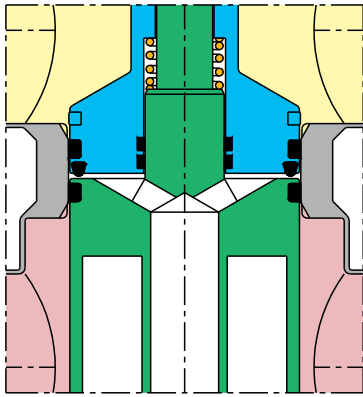
Note

Size B is the minimal size needed, and can be increased by 25 mm up to B max = 225 mm.

Valve Configuration

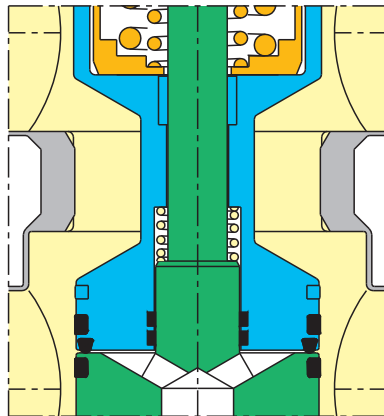


Varioflow®

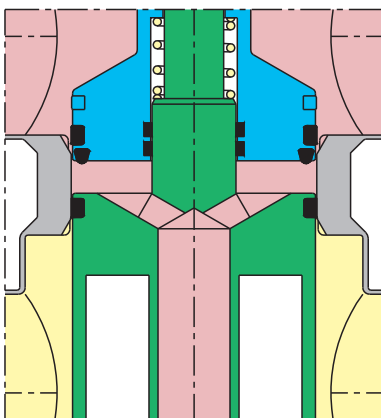


Closed position
The different liquids in the upper- and lower body are separated via a double seat design.

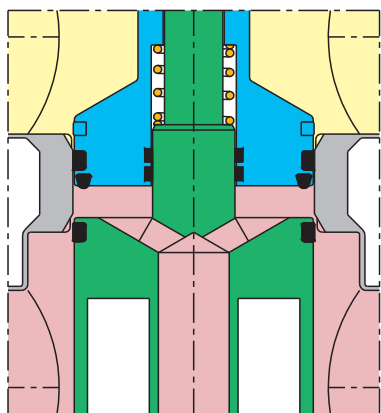
The construction offers an unpressurized leakage outlet between the seats.



Open position
The leakage outlet is initially closed after which the body piston is lowered connecting the upper and lower valve body.

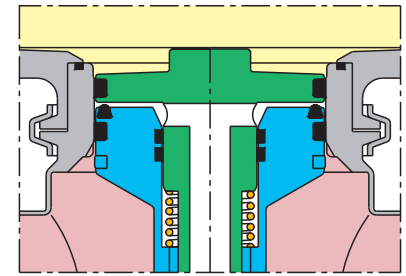


Cleaning top line
The upper stem is lifted slightly for cleaning the seat and leakage chamber in conjunction with cleaning the upper valve body.



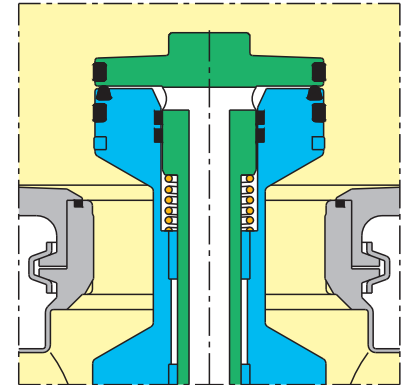
Cleaning bottom line
The lower valve stem is lowered slightly for cleaning the seal and leakage chamber in conjunction with cleaning the lower valve body.

Varioflow® Tankbottom

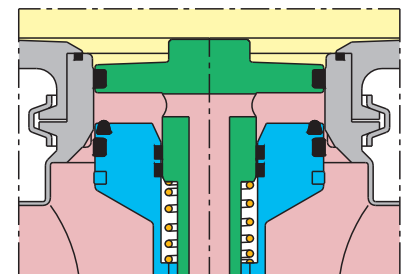


Closed position
The different liquids in the tank and the valve body are separated via a double seat design.

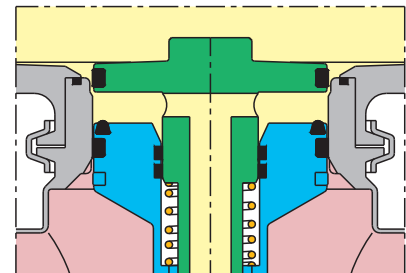
The construction offers an unpressurized leakage outlet between the seats.



Open position
The leakage outlet is initially closed after which the body piston is raised to open the valve.



Cleaning pipework
The lower valve stem is lowered slightly for cleaning the seal and leakage chamber in conjunction with cleaning the lower valve body.



Draining of vessel
The upper valve stem is lifted slightly for draining the tank and also cleaning the seat and leakage chamber at the same time.

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