

The Optimum Choice for Viscous Liquids

Alfa Laval SBV Ball Valve

Concept

SBV is a hygienic ball valve designed for use as a product valve, in applications within food, beverage, pharmaceutical and chemical industries. The full bore design with zero flow restriction makes SBV the optimum choice for viscous or particulate liquids.

Working principle

A precision made ball with a bore is positioned inside the valve body between two flanges and two PTFE valve seats. A 90° rotation of the valve stem is transferred to the ball and thereby opening or closing the valve. A special selected PTFE material grade secures long lifetime of the product wetted seals. Reliable valve stem sealing is achieved by the use of spring loaded and self adjusting seal rings. SBV is operated by a pneumatic actuator or manually operated by means of a handle with lockable positions. The valve is assembled with screws for easy inspection and maintenance.

Standard Design

The standard actuator is prepared for position indication with inductive proximity switches. The actuator is maintenance free. Two inspection holes in the bonnet connecting valve body and actuator allow for easy inspection of the stem seal tightness. Actuated valves are delivered NC (normally closed) and are easily rebuilt to NO (normally open).



TECHNICAL DATA

Temperature

Temperature range: 0°C to 130°C (EPDM)
 However max. 95°C when
 operating the valve

Pressure

Max. product pressure: 1600 kPa (16 bar)
 Min. product pressure: 0 bar

Actuator:

Operating pressure: 600 - 1000 kPa (6 - 10 bar)
 Temperature range: 4°C to +60°C
 Air consumption actuator \varnothing 104: 0.5 NI
 Air consumption actuator \varnothing 129: 0.75 NI
 Max. recommended pressure during
 activation: 600 kPa (6 bar)

Note!

If welding both flanges, ensure that the flanges can be moved axially 30-40 mm depending on size to allow for valve maintenance (see manual for further details).

Actuated valves are delivered NC (normally closed) and are easily rebuilt to NO (normally open). See manual for further details.

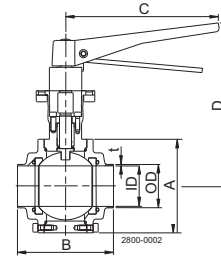
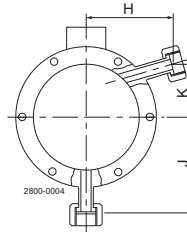
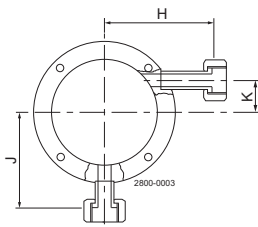
PHYSICAL DATA

Materials

Product wetted steel parts: 1.4404 (316L)
 Other steel parts: 1.4307 (304)
 External surface finish: Semi-bright (blasted)
 Internal surface finish: Bright (polished), Ra < 0.8 μ m
 Product wetted seals: EPDM
 Other seals: NBR

Options

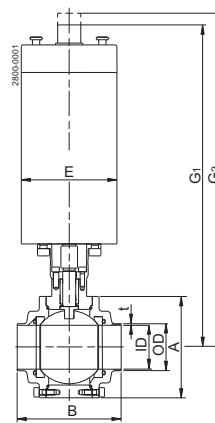
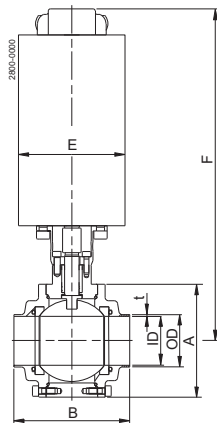
- A. Male parts or clamp liners in accordance with required standard.
- B. Actuator for mounting of the Alfa Laval.: IndiTop, ThinkTop or ThinkTop Basic.
- C. Cavity cleaning connections, (ISO 228 - 6 1/2).
- D. Cavity fillers (encapsulating valve seats).
- E. Handle and bracket for inductive proximity switches (manual valves).
- F. Product wetted elastomer seals of NBR, Q or FPM.



DN/OD 25 - 63.5 / DN 25-65

DN/OD 76.1 - 101.6 / DN 80100

Cavity cleaning connections (optional)



Dimensions (mm)

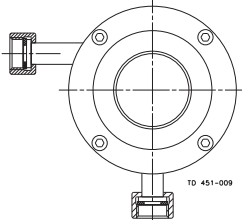
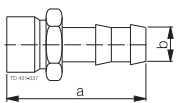
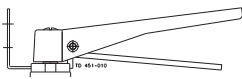
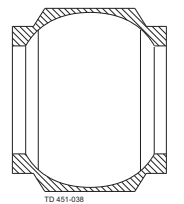
Size	Inch tube						DIN tube					
	DN/OD	DN/OD	DN/OD	DN/OD	DN/OD	DN/OD	DN 25	DN 40	DN 50	DN 65	DN 80	DN 100
A	25	38	51	63.5	76.1	101.6	74	95	110	130	159	195
OD	25	38	51	63.5	76.1	101.6	29	41	53	70	85	104
ID	21.8	34.8	47.8	60.3	72.9	97.6	26	38	50	66	81	100
t	1.6	1.6	1.6	1.6	1.6	2	1.5	1.5	1.5	2	2	2
B	93	103	113	125	163	220	93	103	113	125	163	220
C	180	180	180	180	180	291	180	180	180	180	180	291
D	117	125	135	145	156	206	117	125	135	145	156	206
E	104	104	104	104	104	129	104	104	104	104	104	129
F	307	315	324	335	346	395	307	315	324	335	346	395
G1	334	342	350	362	372	422	334	342	350	362	372	422
G2	344	352	360	372	382	432	344	352	360	372	382	432
H	70.5	79	84	90.5	104	114	70.5	79	84	90.5	104	114
J	55	65.5	73	83	97.5	115.5	55	65.5	73	83	97.5	115.5
K	13	19	25	33	54.5	65.5	13	19	25	33	54.5	65.5
Weight manual (kg)	2.3	3.4	4.8	7	13.5	27	2	3.1	4.5	6.4	12.3	24
Weight actuated (kg)	6.7	7.8	9.2	11.4	17.9	35.8	6.4	7.5	8.9	10.8	17.9	32.8
Weight with ThinkTop® adapter (kg)	8.6	9.7	11.1	13.3	19.8	37.7	8.3	9.4	10.8	12.7	19.8	34.7

Hygienic ball valves
Product code: 5272

Material: 1.4404 (316L)
Connection: Welding ends
Seals: EPDM

Item No.	PPL EUR	Item No.	PPL EUR	Size		Dimension (mm)		
Inch tube DN/OD		DIN tube DN		DN/OD	DN	A	B	Manually operated
9612644001	841	9612646037	841	25	25	117	93	
9612644002	969	9612646038	969	38	40	125	103	
9612644003	1076	9612646039	1076	51	50	135	113	
9612644004	1291	9612646040	1291	63.5	65	145	125	
9612644005	1884	9612646041	1884	76.1	80	156	163	
9612644006	3464	9612646042	3464	101.6	100	206	220	
Air-operated - normally closed								
9612644013	1538	9612646049	1538	25	25	307	93	
9612644014	1667	9612646050	1667	38	40	315	103	
9612644015	1773	9612646051	1773	51	50	324	113	
9612644016	1989	9612646052	1989	63.5	65	335	125	
9612644017	2583	9612646053	2583	76.1	80	346	163	
9612644018	5462	9612646054	5462	101.6	100	395	220	
Air-operated - normally closed, prepared for ThinkTop®								
9612644019	1976	9612646055	1976	25	25	344	93	
9612644020	2101	9612646056	2101	38	40	352	103	
9612644021	2209	9612646057	2209	51	50	360	113	
9612644022	2426	9612646058	2426	63.5	65	372	125	
9612644023	3019	9612646059	3019	76.1	80	382	163	
9612644024	5902	9612646060	5902	101.6	100	432	220	

Hygienic ball valves
Product code: 5272, 5822

Item No.	PPL EUR	Size		Options	Dimension (mm)		Alternative elastomer seals
		Inch DN/OD	DIN DN		a	b	
Product code: 5272							
	26	25-101.6	25100	Replacement to seals of Nitrile (NBR).			
	50	25-101.6	25100	Replacement to seals of silicone (Q).			
	87	25-101.6	25100	Replacement to seals of Fluorinated rubber (FPM).			
Product code: 5272 Cavity cleaning feature							
	779	25-101.6	25100	Additional price not including male connection parts.			
Product code: 5822 Connection parts for cavity cleaning feature							
9611993783	257	25-101.6	25100	Male connection part for hose, Internal $\varnothing 12$.	54	13	
9611993784	236	25-101.6	25100	Male connection part for welding, pipe $\varnothing 13/10$.	31	13	
Product code: 5272 Bracket and handle for inductive proximity switches							
	325	25-101.6	25100	Additional price. Prepared for up to two M12 inductive proximity switches.			
Product code: 5272 Cavity fillers (encapsulating valve seats)							
	373	25	25	Additional price. Material: PTFE.			
	478	38	40				
	545	51	50				
	768	63.5	65				
	1051	76.1	80				
	2007	101.6	100				
Product code: 5272 Fitting of male part							
	47	25	25	Inch valves: SMS, DIN or clamp. DIN valves: DIN or clamp. Price per fitting.			
	47	38	40				
	59	51	50				
	90	63.5	65				
	99	76.1	80				
	173	101.6	100				