

The Optimum Choice for Viscous Liquids

SBV Sanitary Ball Valve

Concept

SBV is a sanitary 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: -50°F to 266°F (EPDM *)

Pressure

Max. product pressure: 232 PSI (16 bar)

Min. product pressure: 0 bar

Actuator:

Operating pressure: 87-145 PSI (6 - 10 bar)

Temperature range: 39°F to +140°F

Max recommended pressure during

actration 86 PSI (6 bar)

Air consumption \varnothing 4.09": 0.5 NI

Air consumption \varnothing 5.08": 0.75 NI

Max recommended pressure during

actration 86 PSI (6 bar)

*) SIP (Stem in place) up to 302°F is possible but only when using EPDM, and without operating it. Any seal material must be 203°F before operating.

Note! If welding both flanges, ensure that the flanges can be moved axially 1.18-1.57 in 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)

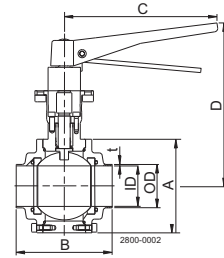
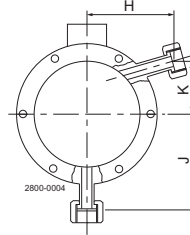
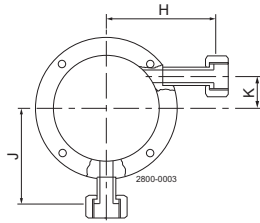
Internal surface finish: Bright (polished), Ra < 32 μ m

Product wetted seals: EPDM

Other seals: NBR

Options

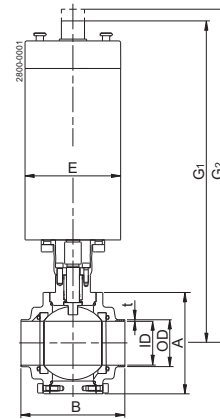
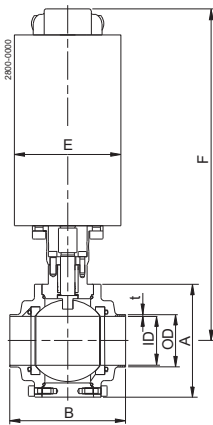
- A. Male parts or clamp liners in accordance with required standard.
- B. Actuator for mounting of the Alfa Laval.: IndiTop, ThinkTop or ThinkTop Basic.
- C. Cavity cleaning connections, (ISO 228 - 6 1/2).
- D. Cavity fillers (encapsulating valve seats).
- E. Handle and bracket for inductive proximity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

Size	DN/OD		DN/OD		DN/OD		DN/OD		DN/OD		DN/OD	
	25 mm	1"	38 mm	1.5"	51 mm	2"	63.5 mm	2.5"	76.1 mm	3"	mm	4"
A	74	2.91	95	3.74	110	4.33	130	5.12	159	6.26	195	7.68
OD	25	0.98	38	1.5	51	2.01	63.5	2.5	76.1	3	101.6	4
ID	21.8	0.86	34.8	1.37	47.8	1.88	60.3	2.37	72.9	2.87	97.6	3.84
t	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06	1.6	0.06	2	0.08
B	93	3.66	103	4.06	113	4.45	125	4.92	163	6.42	220	8.66
C	180	7.09	180	7.09	180	7.09	180	7.09	180	7.09	291	11.46
D	117	4.61	125	4.92	135	5.31	145	5.71	156	6.14	206	8.11
E	104	4.09	104	4.09	104	4.09	104	4.09	104	4.09	130	5.12
F	307	12.09	315	12.4	324	12.76	335	13.19	346	13.62	395	15.55
G1	334	13.15	342	13.46	350	13.78	362	14.25	372	14.65	422	16.61
G2	344	13.54	352	13.86	360	14.17	372	14.65	382	15.04	432	17.01
Weight manual (kg)	2.3	0.09	3.4	0.13	4.8	0.19	7	0.28	13.5	0.53	27	1.06
Weight actuated (kg)	6.7	0.26	7.8	0.31	9.2	0.36	11.4	0.45	17.9	0.7	35.8	1.41
Weight with ThinkTop® adapter (kg)/(lb)	8.6	18.96	9.7	21.38	11.1	24.47	13.3	29.32	19.8	43.65	37.7	83.11



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ESE00292ENUS 1505

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