



# The Optimum Choice for Viscous Liquids

## Alfa Laval 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: . . . . . 10°C to 130°C (EPDM) \*)  
 Temperature range: . . . . . -50°F to 266°F (EPDM) \*)

#### Pressure

Max. product pressure: . . . . . 1600 kPa (16 bar)  
 Max. product pressure: . . . . . 232 PSI (16 bar)  
 Min. product pressure: . . . . . 0 bar

#### Actuator:

Operating pressure: . . . . . 600 - 1000 kPa (6 - 10 bar)  
 Operating pressure: . . . . . 87-145 PSI (6 - 10 bar)  
 Temperature range: . . . . . 4°C to +60°C  
 Temperature range: . . . . . 39°F to +140°F  
 Max recommended pressure during  
 actration . . . . . 86 PSI (6 bar)  
 Air consumption actuator ø104: . . . . . 0.5 NI  
 Air consumption ø4.09": . . . . . 0.5 NI  
 Air consumption actuator ø129: . . . . . 0.75 NI  
 Air consumption ø5.08": . . . . . 0.75 NI  
 Max. recommended pressure during  
 activation: . . . . . 600 kPa (6 bar)  
 Max recommended pressure during  
 actration . . . . . 86 PSI (6 bar)

\*) SIP (Stem in place) up to 150°C/302°F is possible but only when using EPDM, and without operating it. Any seal material must be 95°C/203°F before operating.

### 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 µm  
 Internal surface finish: . . . . . Bright (polished), Ra < 32 µin  
 Product wetted seals: . . . . . EPDM  
 Other seals: . . . . . NBR

### Note!

If welding both flanges, ensure that the flanges can be moved axially 30-40 mm/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.



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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ESE00292EN 1507

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