Gillain & Co
HYGIENIC EQUIPMENT FOR FOOD & LIFE SCIENCES

The Optimum Choice for Viscous Liquids

SBV Sanitary Ball Valve

Application
SBV is a sanitary ball valve designed for use as a product valve. The valve is suitable for 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.
SBV is operated by a pneumatic actuator or manually operated by means of a handle.

Standard Design
SBV consists of a valve body, two flanges, PTFE valve seats, ball, stem unit and a handle or bonnet and actuator unit. SBV is a full bore valve with a constant pipeline diameter and a flow restriction comparable to that of a straight tube. 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.

The standard actuator is prepared for position indication with inductive proximity switches. A special actuator (option) is designed for mounting of the Alfa Laval ThinkTop®. 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).

The stainless steel handle for manual operation mechanically locks the valve in open or closed position. The valve is assembled with screws for easy inspection and maintenance.



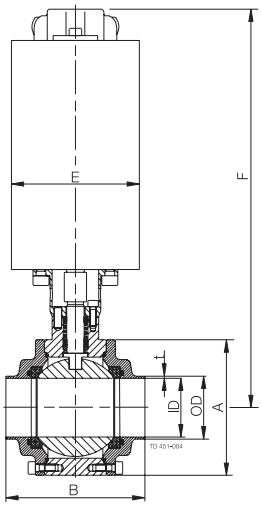
SBV with actuator and ThinkTop® (option)
Manually operated SBV

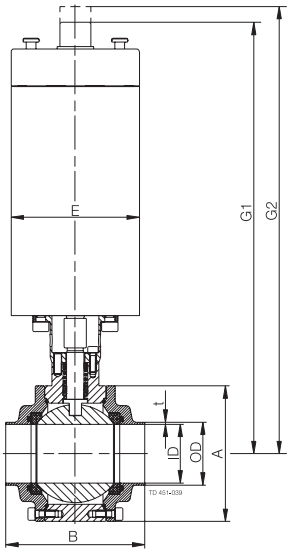
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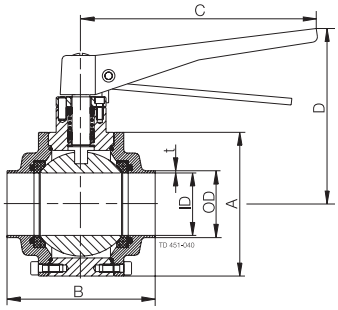
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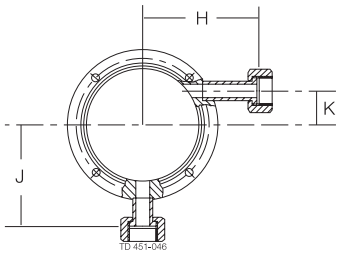
Dimensions (mm)

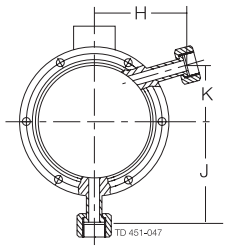
Size	Inch DN/OD 25	Inch DN/OD 38	Inch DN/OD 51	Inch DN/OD 63.5	Inch DN/OD 76.1	Inch DN/OD 101.6	DIN DN 25	DIN DN 40	DIN DN 50	DIN DN 65	DIN DN 80	DIN DN 100
A	74	95	110	130	159	195	74	95	110	130	159	195
OD	25	38	51	63.5	76.1	101.6	29	41	53	70	85	104
ID	21.8	34.8	47.8	60.3	72.9	97.6	26	38	50	66	81	100
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











DN/OD 25 - 63.5 /DN 25-65

DN/OD 76.1 - 101.6 /DN 80-100

Cavity cleaning connections (optional)

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Technical data

Valve:

Max. product pressure: . . . . . .1600 kPa (16 bar).
Max. recommended pressure during activation: . . . . . .600 kPa (6 bar).
Min. product pressure: . . . . . .Full vacuum.
Temperature range: . . . . . .-10°C to 130°C (EPDM).
Max. sterilisation temperature, short time . . . . . .+150°C.

Actuator:

Operating pressure: . . . . . .600 - 1000 kPa (6 - 10 bar).
Temperature range: . . . . . .4°C to +60°C.
Air consumption actuator ø104: . . . . . .0.5 Nl.
Air consumption actuator ø129: . . . . . .0.75 Nl.

Materials

Product wetted steel parts: . . . . . .1.4404 (316L).
Other steel parts: . . . . . .1.4307 (304).
Surface quality, product wetted parts: . . . . . .Ra < 0.8µm.
External surface finish: . . . . . .Semi-bright.
External surface finish, actuator: . . . . . .Semi bright (brushed).
Product wetted seals: . . . . . .PTFE, EPDM.
Other seals: . . . . . .PTFE, NBR.

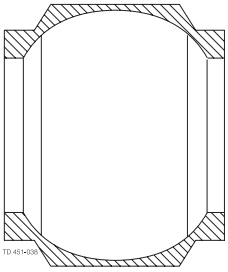
Note! If welding both flanges, ensure that the flanges can be moved axially 30-40 mm depending on size to allow for valve maintenance (see manual for further details).
Actuated valves are delivered NC (normally closed) and are easily rebuilt to NO (normally open). See manual for further details.

Options

A. Male parts or clamp liners in accordance with required standard.
B. ThinkTop®.
C. Cavity cleaning connections, (ISO 228 - G ½).
D. Cavity fillers (encapsulating valve seats).
E. Handle and bracket for inductive proximity switches (manual valves)
F. Product wetted elastomer seals of nitrile (NBR), silicone rubber (Q) or flourinated rubber (FPM).



Cavity cleaning connections



Cavity fillers



Handle and bracket for inductive proximity switches

Ordering

- Valve size and actuation type.
- Connections, if not welding ends.
- Other options.

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The information contained herein is correct at the time of issue, but may be subject to change without prior notice.

How to contact Alfa Laval
Contact details for all countries
are continually updated on our website.
Please visit www.alfalaval.com to
access the information direct.

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