

# Alfa Laval SB Self-cleaning CO<sub>2</sub>-valve

## Control/Check valves

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### Introduction

The Alfa Laval SB Self-cleaning CO<sub>2</sub> Valve is a combination gas supply-gas vent valve to control the flow of carbon dioxide in tank top systems and other applications in order to vent and/or pressurize a vessel. Fully cleanable and self-draining, this hygienic valve provides safe, reliable and cost-effective gas management.

### Application

This gas management valve is designed to vent and/or pressurize vessels used in hygienic applications, mainly used in brewery industries.

### Benefits

- Cost-effective, hygienic design
- Safe, reliable operation
- Minimized risk of overpressure and underpressure
- Self-cleaning and self-draining
- Straightforward installation

### Working principle

The Alfa Laval SB Self-cleaning CO<sub>2</sub> Valve uses a stainless steel spring to force open the internal polypropylene valve body, enabling the full flow of gas to pass through the valve in both directions. The introduction of CIP fluid through a special drilled opening in the valve body in a direction counter-current to the spring force pushes the internal valve body into closed position and ensures cleaning of all valve parts. The CIP flow is approximately 3.5-4.GPM, depending on the valve size.

### Standard design

The SB Self-cleaning CO<sub>2</sub> Valve consists of a valve housing comprised of two parts held together by a threaded connection. Inside there is a valve body and a spring to keep the body in open position. A special drilled opening in the valve body ensures internal cleaning of the valve during Cleaning-in-Place (CIP).

Typically positioned as an integrated part of the gas/CIP pipe at the top plate, the valve can be mounted at an angle of 45° (maximum) to the ideal vertical position.



## TECHNICAL DATA

### Maximum gas flow (both directions) at max.1.45 PSI ΔP

Size	Flow (SCFM)
1"/DN25	65
1½"/DN40	129
2"/DN50	389
2½"/DN65	647
3"/DN80	1165
4"/DN100	1554

## PHYSICAL DATA

### Materials

Steel parts:	EN 1.4404 (AISI 316L) with 3.1 cert.
Product wetted seals:	EPDM
Product wetted polymers:	Polypropelen

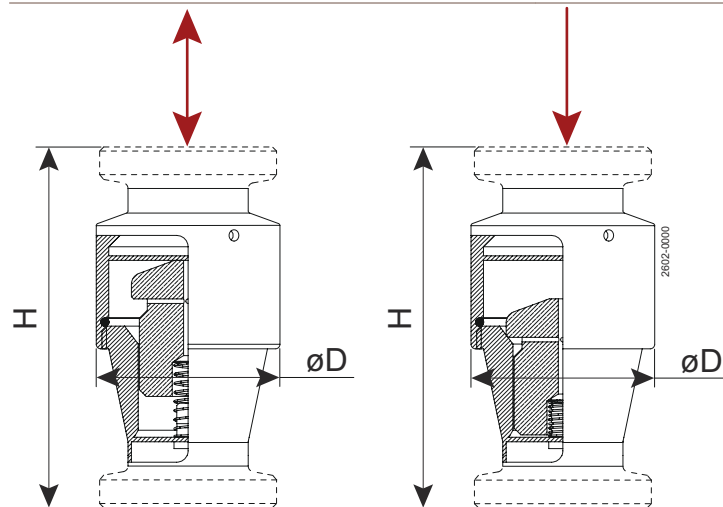
### Connections

Weld end acc. DIN 11850
Weld end acc. ISO 2037
Unions DIN 11851
Hygienic - Unions DIN 11853
Clamps ferrule ISO 2852

## Dimensions (inch)

Open for gas in/out

Partly closed during CIP flow



	25/DN25	38/DN40	51/DN50	63.5/DN65	76.1/DN80	101.6/DN100
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Welding End - DIN 11850	3.07	3.39	4.45	5.24	6.5	6.5
Welding End - ISO 2037	3.07	3.39	4.45	5.24	6.5	6.5
DIN Male Part - DIN 11851	4.8	5.12	6.26	7.2	8.46	8.86
Clamp Ferrule - ISO 2852	5.12	5.39	6.46	7.24	8.5	8.5
DIN Hygienic Male Part - DIN 11853	5.12	5.83	6.89	8.07	9.8	10.43
DIN Male/Weld End - DIN11851 / DIN11850	3.94	4.25	5.35	6.22	7.48	7.68
Clamp Ferrule/Weld End - ISO2852 / ISO2037	4.09	4.41	5.47	6.26	7.52	7.52
Hygienic/Weld End - DIN11853 / DIN11850	4.09	4.61	5.67	6.65	8.15	8.46
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	1.93	2.52	3.19	4.17	5.12	6.26

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