

Alfa Laval C45 Check Valve

Control/Check valves

Introduction

The Alfa Laval C45 Check valve is designed for use in sanitary stainless steel pipe systems to prevent reverse product flow. It is easy to install, ensuring safety and high product quality.

Application

The C45 Check Valve is widely used for single directional product flow through hygienic process lines across the dairy, food, beverage, brewery and many other industries.

Benefits

- Straight forward, robust, hygienic and reliable design
- Minimal pressure drop
- Easy to install
- Protects process equipment
- Prevents reverse flow

Standard design

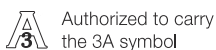
The Alfa Laval C45 Check Valve consists of a valve body in two parts, assembled by means of a clamp ring and hygienically sealed with a special seal ring. This fractional check valve is available with a 316L stainless steel ball (vertical applications only) or PTFE spring loaded plug in 1/2" or 3/4" sizes.

Working principle

The Alfa Laval C45 Check Valve opens and closes depending on the pressure. The PTFE spring loaded plug or 316L SS ball keeps the valve closed until the force from the pressure in the inlet exceeds the force. If a reverse flow should occur, the spring force/316L SS ball and the pressure from the outlet will keep the valve closed.



Certificates



Technical data

Temperature

Max. temperature:	105°C/221°F
Min. temperature:	10°C/14°F

Pressure

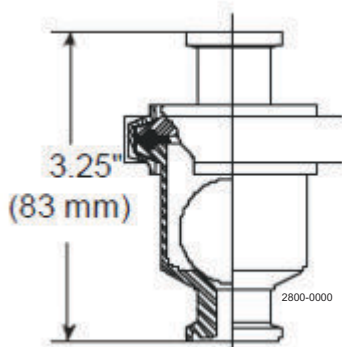
Max. pressure:	10 bar/145 PSI
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Physical data

Physical data

Product wetted steel parts:	1.4404 (316L)/ Plug PTFE
External surface finish:	Bright (Machined Ra < 1.6 µm/63 µin)
Internal surface finish:	Ra < 0.5 µm/20 µin
Product wetted seals:	EPDM rubber

Dimensions



C45 Check Valve:

- 1/2" (12.7 mm) or 3/4" (19 mm) sizes with Tri-Clamp® end connections
- Available with a 316 stainless steel ball (vertical installation only) or with PTFE plug and spring
- Relief pressure:
 - 3/4" size: 1.5 PSI/0.1 bar
 - 1/2" size: 3 PSI/0.2 bar

Check Valve

C45MP (Ball Check)

C45MPS (Plug/Spring check) 

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