

# Alfa Laval GJ BB

# Rotary jet heads

#### Introduction

The Alfa Laval GJ BB is a rotary jet head tank cleaning machine for use as a portable tank cleaning machine in both industrial and hygienic applications. Built to clean barrels and drums in two to three minutes using as little as 30-45 litres of water, it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern.

The GJ BB minimizes the consumption of water and cleaning media. The gear train, which uses food-grade lubricant, reduces the risk of particle damage to the machine during operation. Easy to customize to meet customer requirements, it allows companies to spend less time on their barrels and drums and more time producing.

#### **Applications**

The Alfa Laval GJ BB is designed for the removal of the toughest residues in drums and barrels across a broad range of industries in both industrial and hygienic applications.

#### **Benefits**

- Fast cleaning time in two to three minutes
- High-impact cleaning in a 360° repeatable cleaning pattern
- Slim design makes it possible to insert through small tank inlet openings
- Light weight, easy to handle

# Standard design

The choice of nozzle diameters can optimize jet impact length and flow rate at the desired pressure.

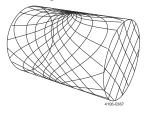
#### Working principle

The high-impact jet stream from the Alfa Laval GJ BB rotary jet head covers the entire surface of the interior of the barrel or drum. This achieves a powerful mechanical impact with a low volume of water and cleaning media.

The flow of the cleaning fluid makes the nozzles perform a geared rotation around the vertical and horizontal axes. In the first cycle, the nozzles lay out a course pattern on the tank surface. The subsequent cycles gradually make the pattern denser until at full cleaning pattern is reached. Once the full cleaning pattern is reached, the machine will start over again and continue to perform the next full cleaning pattern.



#### **Cleaning Pattern**





First Cycle

Full Pattern

The above drawings show the cleaning pattern achieved on a cylindrical horizontal vessel. The difference between the first cycle and the full pattern represents the number of additional cycles available to increase the density of the cleaning.

## **TECHNICAL DATA**

Lubricant:	Food grade	
Max. throw length:	2.5 m	

Pressure	
Working pressure:	5.5 - 83 bar
Recommended pressure:	5.5 - 55 bar

# PHYSICAL DATA

Materials	
Materials:	1.4404 (316L), PPS, PFTE, EPDM

Temperature	
Max. working temperature:	95 °C
Max. ambient temperature:	140 °C

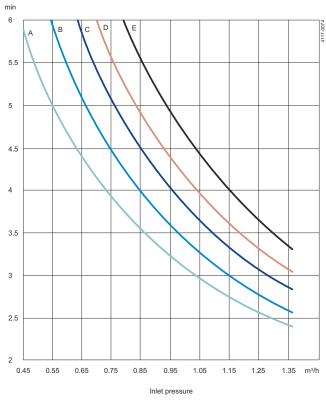
Weight	
Weight:	2.5 kg

Connections	
Standard thread:	3%" NPT
Available option:	¾" NPT, ¾" BSP

## Concept

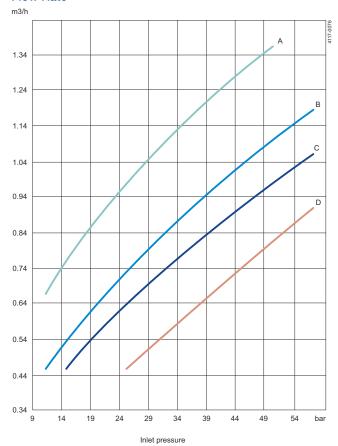
Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

# Cleaning time



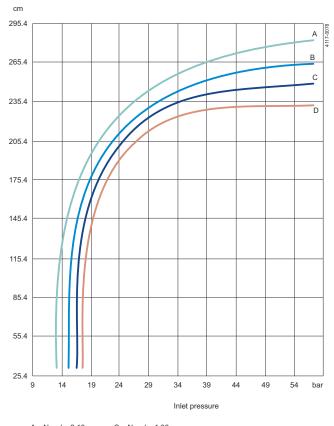
A = Nozzle: 1.18 mm Stator 3.5 B = Nozzle: 1.90 mm Stator 4.0

## Flow Rate



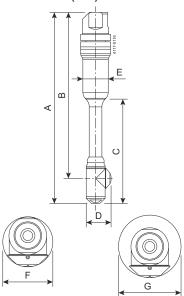
- A = Nozzle: 2.16 mm Stator: 5.0 & 5.5 B = Nozzle: 2.03 mm Stator 4.5

# Impact Throw Length



- A = Nozzle: 2.16 mm Stator: 5.0 & 5.5 B = Nozzle: 2.03 mm Stator 4.5
- C = Nozzle: 1.90 mm Stator: 4.0 D = Nozzle: 1.18 mm Stator 3.5

# Dimensions (mm)



Α	В	С	D	E	F	G
325	282	178	42	44	43	52

