

Alfa Laval GJ 7

Rotary jet heads

Introduction

The Alfa Laval GJ 7 is our smallest rotary jet head tank cleaning machine. Built to clean small tanks, filling machines, drums and barrels, it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern.

The GJ 7 minimizes the consumption of water and cleaning media. The gear train, which uses food-grade lubricants, 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 cleaning and more time producing.

Applications

The Alfa Laval GJ 7 is designed for the removal of residues in small tanks, filling machines, drums and barrels across a broad range of industrial applications, such as paint, ink and chemical industries.

Benefits

- 60% faster cleaning = more time for production
- Saves up to 70% of your cleaning cost
- High-impact cleaning in a 360° repeatable cleaning pattern
- Cleaning process can be validated using Alfa Laval Rotachek
- Slim design makes it possible to insert through small tank inlet openings

Standard design

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

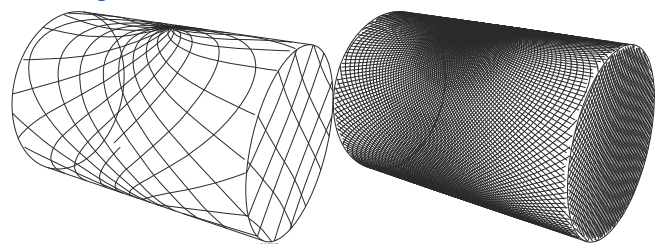
Working principle

The high-impact jet stream from the Alfa Laval GJ 7 rotary jet head covers the entire surface of the interior of drum or barrel in a successively denser pattern. 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 cleaning cycle

Full cleaning 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 - 2.5 m |

Pressure

| | |
|-----------------------|--------------|
| Working pressure: | 3.5 - 83 bar |
| Recommended pressure: | 5.5 - 55 bar |

PHYSICAL DATA

Materials

1.4404 (316L), PTFE, EPDM (FKM and FFKM available)

Temperature

| | |
|---------------------------|--------|
| Max. working temperature: | 95 °C |
| Max. ambient temperature: | 140 °C |

Weight

| | |
|---------|--------|
| Weight: | 0.7 kg |
|---------|--------|

Connections

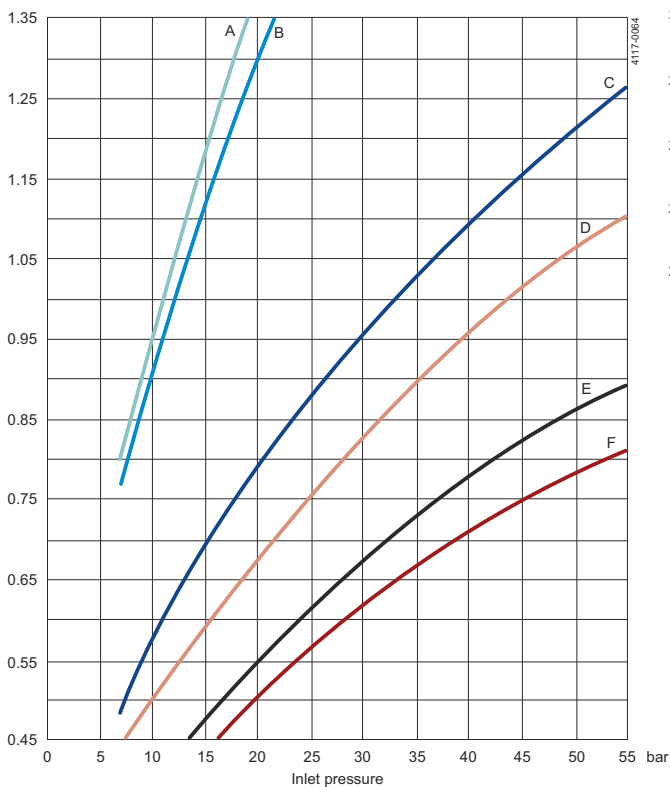
| | |
|------------------|----------------|
| Standard thread: | ½" NPT, ½" BSP |
|------------------|----------------|

Caution

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.

Flow Rate

m³/h

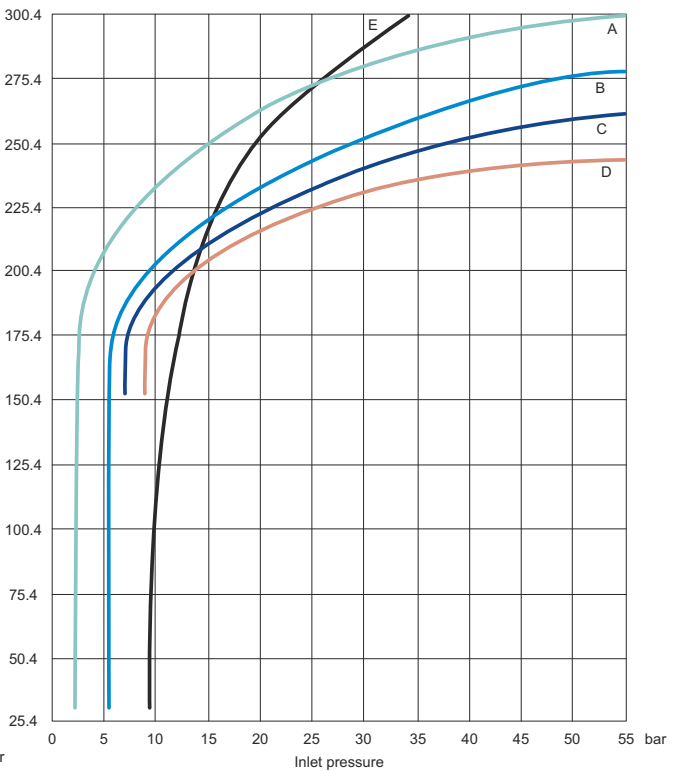


A = 3-Nozzle: 2.54 mm
 B = 2-Nozzle: 2.54 mm
 C = 2-Nozzle: 2.03 mm
 Stator: 5H

D = 2-Nozzle: 1.90 mm
 Stator: 4H
 E = 2-Nozzle: 1.78 mm
 Stator: 4X

F = 2-Nozzle: 1.78 mm
 Stator: 4

cm

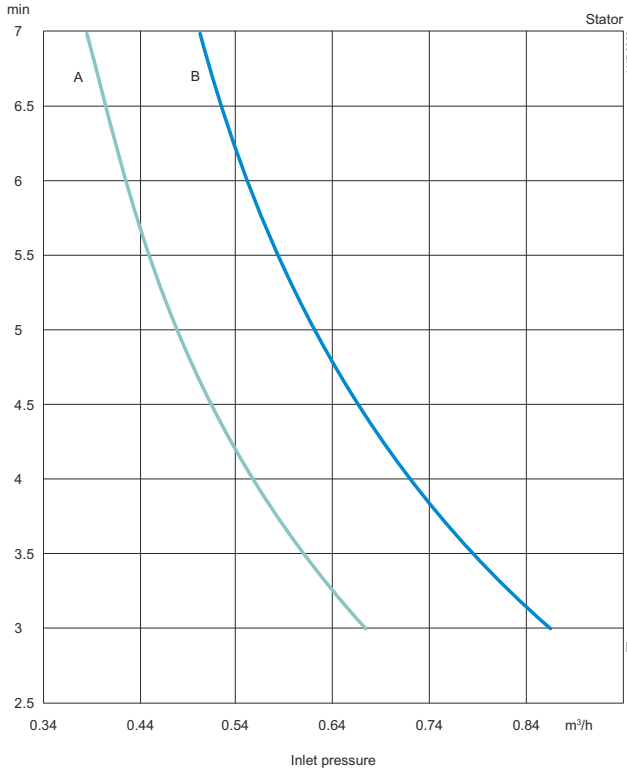


A = 2-Nozzle: 2.54 mm
 B = 3-Nozzle: 2.54 mm
 C = 2-Nozzle: 1.78 mm
 Stator: 4x

D = 2-Nozzle: 1.78 mm
 Stator: 4
 E = 2-Nozzle: 2.03 mm
 Stator: 5H

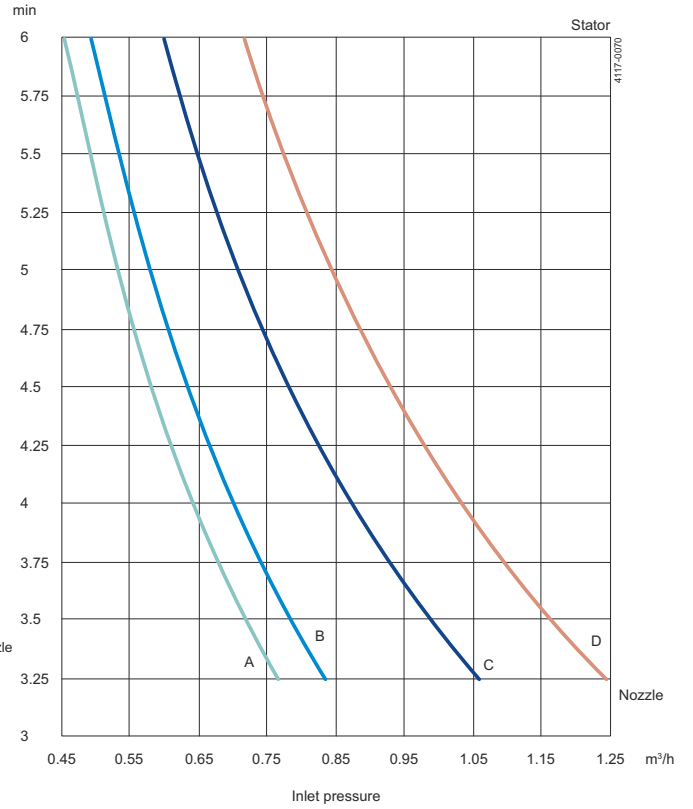
Cleaning Time

Cleaning Time .100 NOZ



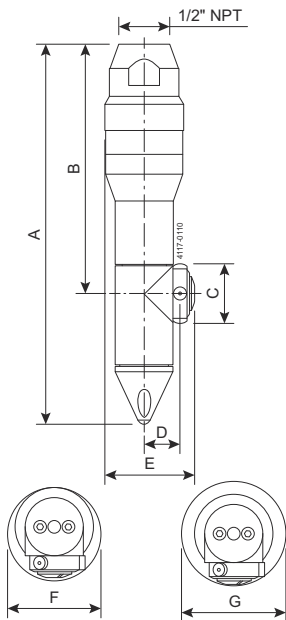
A = SV 2.54 mm
B = MV 2.54 mm

Cleaning Time .7 – .8 NOZ



A = 4 1.78 mm D = 5H 2.03 mm
B = 4X 1.78 mm
C = 4H 1.90 mm

Dimensions (mm)



| A | B | C | D | E | F | G |
|-----|-----|----|----|----|----|----|
| 176 | 115 | 27 | 17 | 42 | 43 | 48 |