

Alfa Laval GJ18

Rotary jet heads

Introduction

The Alfa Laval GJ 18 is a rotary jet head tank cleaning machine for industrial environments. Designed to clean tanks with capacities from 39625.5 - 594382.5 US gallons, it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern. The Alfa Laval GJ 18 minimizes the consumption of water and cleaning media. Easy to customize to meet customer requirements, it enables companies to spend less time cleaning and more time producing.

The new patented gear design will last several times longer than other large industrial tank cleaning machines.

Application

The Alfa Laval GJ 18 is designed for the removal of the toughest residues from industrial tanks across a broad range of industries, such as the chemical, pulp and paper, steel, starch, and tank truck wash industries.

Benefits

- 60% faster cleaning = more time for production
- Saves up to 70% of your cleaning cost
- Eliminates the need for confined space entry for manual tank cleaning
- High-impact cleaning in a 360° repeatable cleaning pattern
- Ideal solution for tank truck washing
- New patented gear design with long running hours

Standard design

The choice of nozzle diameters can optimize jet impact length and flow rate at the desired pressure. Alfa Laval offers a wide range of tank cleaning machines suitable for different duties and industries.

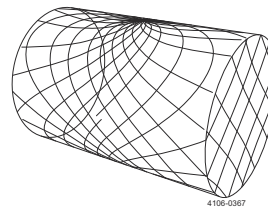
Working principle

The high-impact jet stream from the Alfa Laval GJ 18 rotary jet head covers the entire surface of the tank interior 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

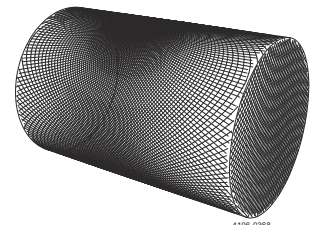


axes. In the first cycle, the nozzles lay out a course pattern on the tank surface. The subsequent cycles gradually make the pattern denser until at full cleaning pattern is reached. Once the full cleaning pattern is reached, the machine will start over again and continue to perform the next full cleaning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

Cleaning Pattern



First 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:	100 ft

Pressure

Working pressure:	45 - 300 PSI
Recommended pressure:	50 - 200 PSI

PHYSICAL DATA

Materials

1.4404 (316L), PPS, FKM (FFKM available)

Temperature

Max. working temperature:	203 °F
Max. ambient temperature:	284 °F

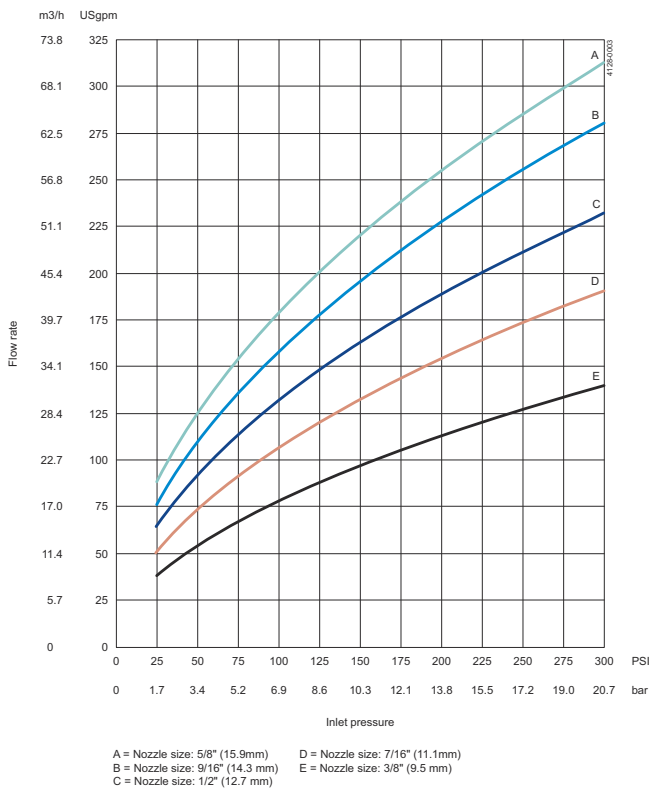
Weight

Weight:	26 lbs
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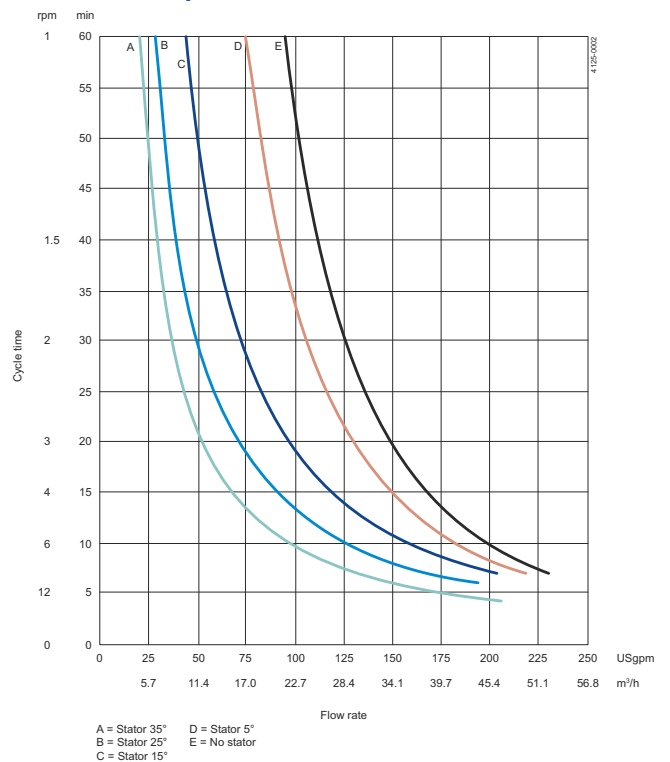
Connections

Standard thread	2½" NPT, 2½" BSP
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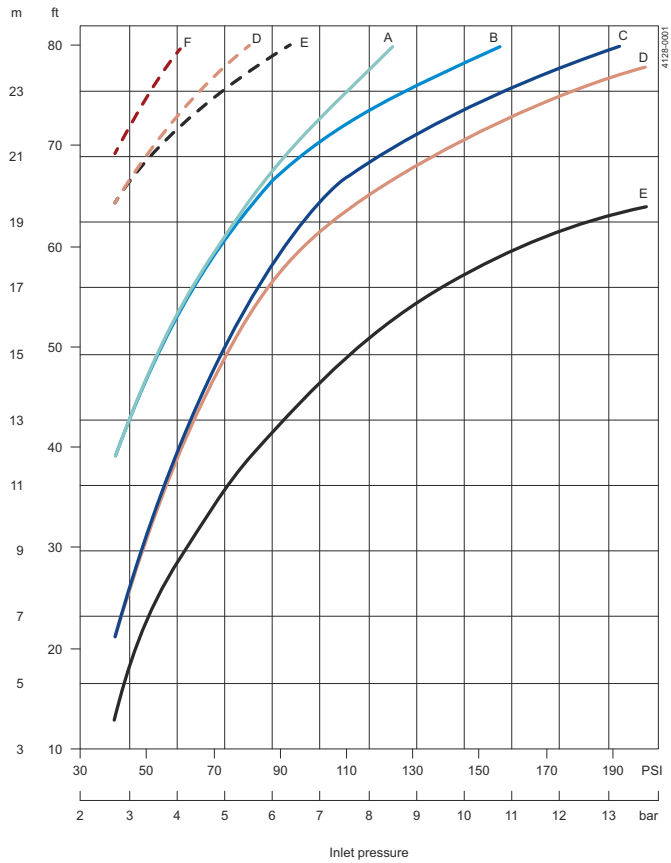
Pressure vs. Flow Rate



Flow Rate vs. Cycle Time



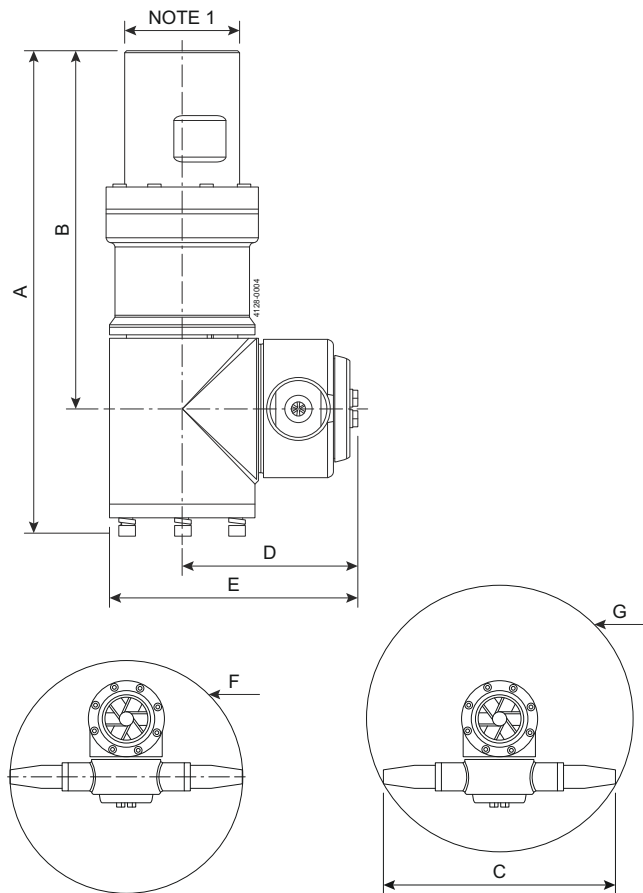
Impact Data and Flow



A = Nozzle: 5/8" (15.9 mm) D = Nozzle: 7/16" (11.1 mm) F = Nozzle: 5/8" (15.9 mm)
 B = Nozzle: 9/16" (14.3 mm) E = Nozzle: 3/8" (9.5 mm) Nozzle: 9/16" (14.3 mm)
 C = Nozzle: 1/2" (12.7 mm) Nozzle: 1/2" (12.7 mm)

4128-001

Dimensions (inch)



A	B	C	D	E	F	G
13.27	9.84	12.76	4.84	6.84	12.78	14.61



NOTE 1: 2½" NPT, 2½" BSP

Standard Design

The choice of nozzle diameters can optimize jet impact length and flow rate at the desired pressure. As standard documentation, the Alfa Laval GJ 18 can be supplied with a "Declaration of Conformity" for material specifications.

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200006883-1-EN-US

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