

# Alfa Laval SaniJet 20 UltraPure

## Rotary jet heads

### Introduction

The Alfa Laval SaniJet 20 UltraPure is a rotary jet head tank cleaning machine for hygienic environments. Built to clean tanks with capacities from 5-30 m<sup>3</sup> it combines pressure and flow to create high-impact cleaning jets that rotate in a repeatable and reliable 360-degree cleaning pattern.

The SaniJet 20 UltraPure minimizes the consumption of water and cleaning media. Easy to customize to meet customer requirements, it allows companies to spend less time cleaning and more time producing.

Alfa Laval UltraPure equipment is designed and configured to meet the high demands of the biotech and pharmaceutical industry. Special attention is given to documentation, material and surface finish, in compliance with current Good Manufacturing Practices (cGMP) and other guidance for this industry.

### Applications

The Alfa Laval SaniJet 20 UltraPure is designed for the removal of the toughest residues from hygienic tanks across a broad range of industries, such as the pharmaceutical and personal care 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 Rotacheck
- Alfa Laval Q-doc documentation package for full traceability of product-contacted parts and smooth qualification and validation processes

### Standard design

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

### Certificates

Q-doc, Q-doc incl. FAT & SAT and ATEX.

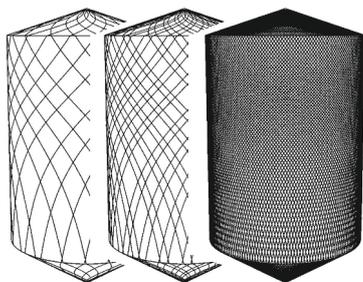


## Working principle

The high-impact jet stream from the rotary jet head covers the entire surface 360° 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.



## Technical data

### Lubricant

Machine:	Self-lubricating with the cleaning fluid
Air motor:	Must <b>NOT</b> be operated non-lubricated

### Surface finish

Product contact parts:	Ra 0.5 µm
------------------------	-----------

### Impact throw length

Impact throw length:	1.5 - 4 m
----------------------	-----------

### Tank opening

Min. tank opening:	4" Clamp w. rotacheck 3" Clamp - rotacheck N/A
--------------------	---

### Pressure

CIP media working pressure:	3 - 13 bar
CIP media recommended pressure:	5 - 8 bar

### Air driven. Air quality

Clean, filtered max.:	50 µm
Dry, dew point max.:	5°C Must <b>NOT</b> be operated non-lubricated. <b>MUST</b> be lubricated
Air supply pressure:	Max. 6 bar
Air consumption at max. speed:	6 l/sec. (22 m <sup>3</sup> /h)

Adjustable speed:	3 - 14 RPM
Cleaning time:	4 - 18 min. (adjustable)

### 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.

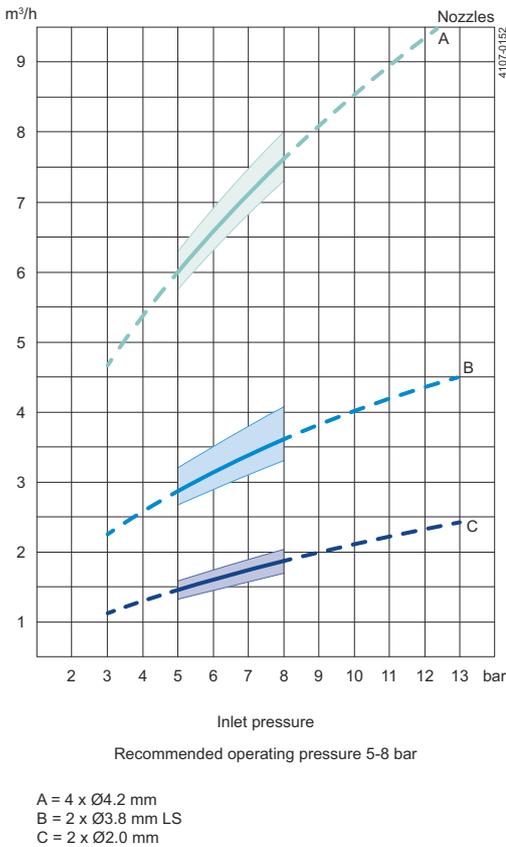
## Qualification documentation

Designed for the BioPharm and Personal Care industry for qualification of hygienic Tank Cleaning Machines. Developed in accordance to the ISPEV-model and GDP, Good Documentation Practice, and includes: RS (Requirement Specification); DS (Design Specification incl. Traceability Matrix); FAT (Factory Acceptance Test incl. IQ & OQ); 3.1 and USP Class VI Certificates; FDA Declaration of Conformity; TSE Declaration; QC Declaration of Conformity; SAT (Site Acceptance Test Protocol incl. IQ & OQ) for End-User Execution.

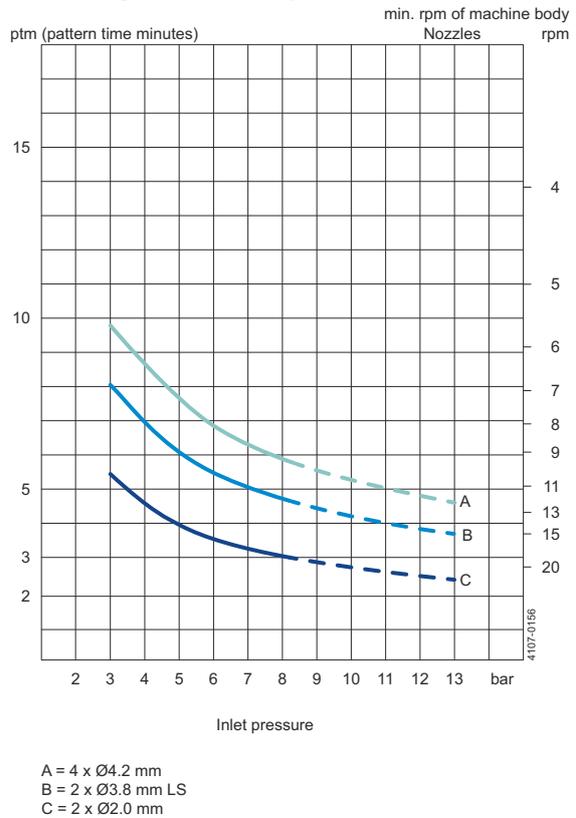
**Documentation specification**

Q-doc	<p>Equipment Documentation includes:</p> <ul style="list-style-type: none"> <li>• EN 1935/2004 DoC</li> <li>• EN 10204 type 3.1 inspection Certificate and DoC</li> <li>• FDA DoC</li> <li>• GMP EC 2023/2006 DoC</li> <li>• EU 10/2011 DoC</li> <li>• ADI DoC</li> <li>• QC DoC</li> <li>• USP Class VI certificate</li> </ul>
Q-doc + FAT-SAT	<p>Qualification Documentation includes:</p> <ul style="list-style-type: none"> <li>• Q-doc</li> <li>• RS, Requirement Specification</li> <li>• DS, Design Specification incl. Traceability Matrix</li> <li>• FAT, Factory Acceptance Test incl. IQ and OQ</li> <li>• SAT, Site Acceptance Test protocol incl. IQ and OQ for End-User Execution</li> </ul>
ATEX	<p>ATEX approved machine for use in explosive atmospheres                  Media/Air driven:                  Cleaning unit:                  Category 1 for installation in zone 0/20 in accordance with Directive 2014/34/EU                  II 1G Ex h IIC 85°C ... 175°C Ga                  II 1D Ex h IIIIC T85°C ... T140°C Da                  Air driven:                  Air motor unit:                  Category 2 for installation in zone 1/21 in accordance with Directive 2014/34/EU                  II 2G Ex h IIC T4 Gb                  II 2D Ex h IIIIC T135°C Db</p>

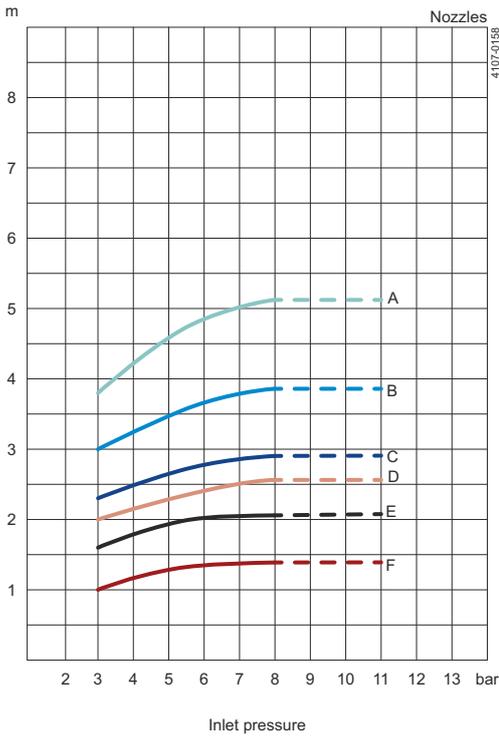
**Flow Rate**



**Cleaning Time, Complete Pattern, Media driven**

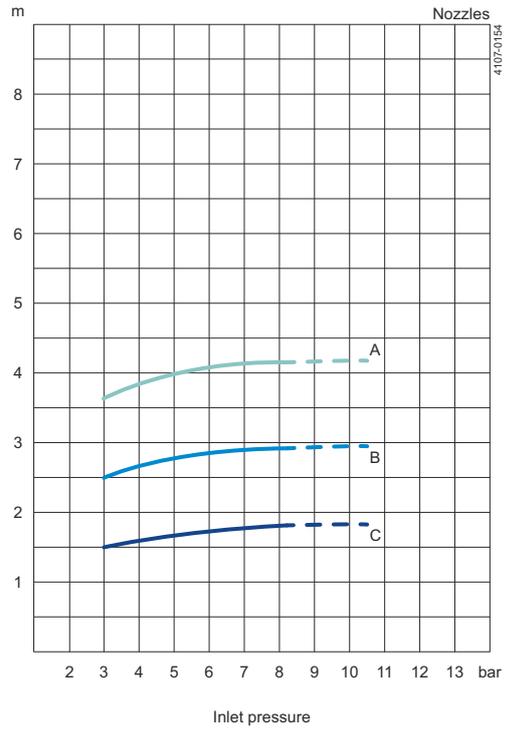


### Impact Throw Length, Air Driven



- A = (5 rpm) 4 x Ø4.2 mm      D = (5 rpm) 2 x Ø2.0 mm
- B = (5 rpm) 2 x Ø3.8 mm      E = (16 rpm) 2 x Ø3.8 mm
- C = (16 rpm) 4 x Ø4.2 mm      F = (16 rpm) 2 x Ø2.0 mm

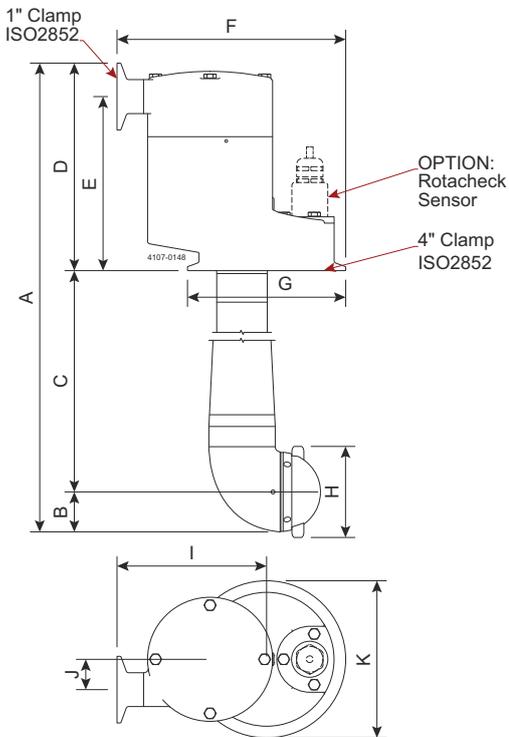
### Impact Throw Length, Media Driven



- A = 4 x Ø4.2 mm
- B = 2 x Ø3.8 mm LS
- C = 2 x Ø2.0 mm

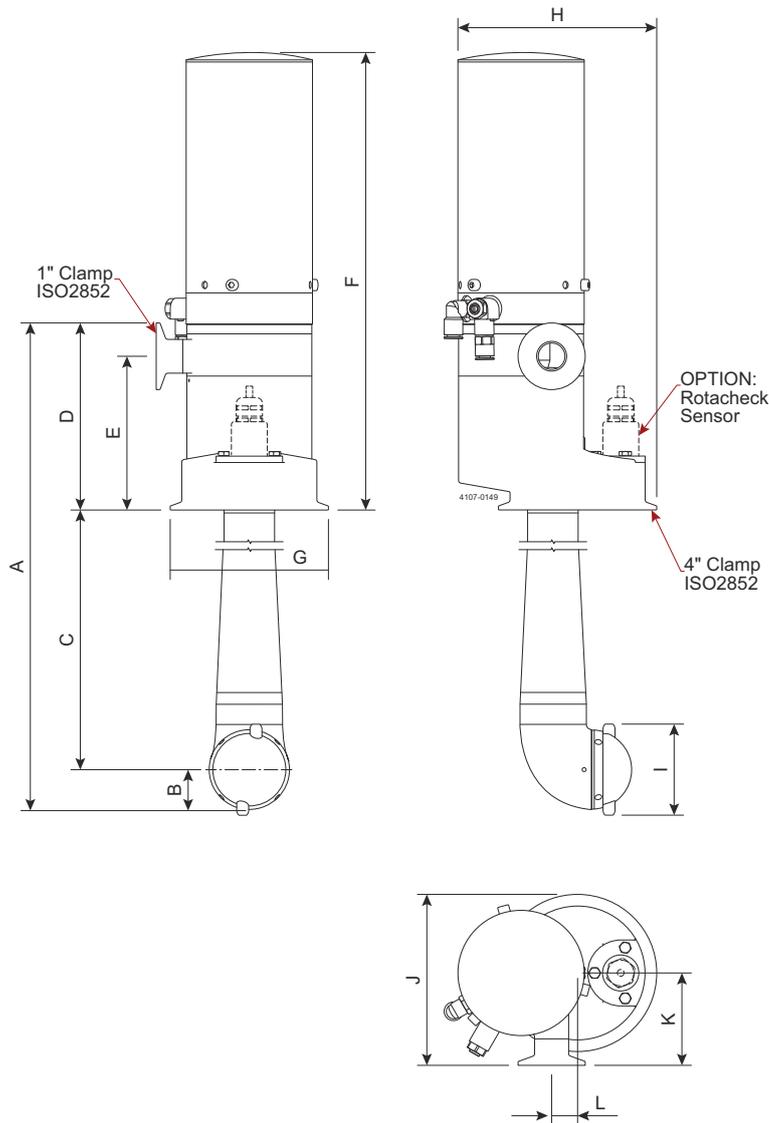
### Dimensions (mm)

#### Media Driven



A	B	C	D	E	F	G	H	I	J	K
537 - 687 - 887 - 1187 - 1387 - 1687	31	350 - 500 - 700 - 1000 - 1200 - 1500	157.25	132	172	Ø119	Ø69	112.5	23	Ø119

#### Air Driven



A	B	C	D	E	F	G	H	I	J	K	L
523 - 673 - 873 - 1173 - 1376 - 1673	31	360 - 500 - 700 - 1000 - 1200 - 1500	142	117	340	Ø119	168	Ø69	130	70	19.5

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval AB (publ) or any of its affiliates (jointly "Alfa Laval"). No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Alfa Laval's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose. All rights are reserved.

200006924-5-EN-GB

© Alfa Laval AB

**How to contact Alfa Laval**

Up-to-date Alfa Laval contact details for all countries are always available on our website at [www.alfalaval.com](http://www.alfalaval.com)