



## Alfa Laval SaniMicro UltraPure

Rotary spray head tank cleaning device for low-flow cleaning in hygienic applications

### Introduction

The Alfa Laval SaniMicro UltraPure is a rotary spray head tank cleaning machine for hygienic environments. Designed to clean tanks from 0.05-1 m<sup>3</sup>

The Alfa Laval SaniMicro UltraPure minimizes the consumption of water, and cleaning media. Easy to customize to meet customer requirements, the SaniMicro UltraPure 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.

### Application

The Alfa Laval SaniMicro UltraPure is engineered for the removal of residues from hygienic tanks across the biotech and pharmaceutical industries.

### Benefits

- 40% faster cleaning = more time for production
- Saves up to 40% of your cleaning cost
- Dynamic cleaning performance and 360° full wetting
- Easy to retrofit traditional spray balls to a more economical solution

### Standard design

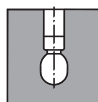
Different choice of spray patterns suitable for various applications and tank designs, ranging from simple tanks to more complex tanks with structures such as agitator and baffles. The SaniMicro UltraPure is lubricated by the cleaning media.

### Working principle

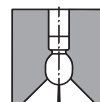
The flow of the cleaning media causes the head of the Alfa Laval SaniMicro UltraPure to rotate, and the fan-shaped jets layout a swirling pattern throughout the tank or reactor. This generates the wetting/impact needed for the efficient removal of the residual product; the cascading flow covers all internal surfaces of the vessel.



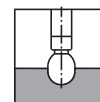
### Spray Pattern



360°



270° up



180° down

### Certificates

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



## TECHNICAL DATA

Lubricant:	Self-lubricating with the cleaning fluid
Wetting radius:	Max. 2.5 m.
Impact cleaning radius:	Max. effective 0.6 m.
<b>Pressure</b>	
Working pressure:	1-3 bar
Recommended pressure:	2 bar

## PHYSICAL DATA

Materials:	AISI 316L (UNS S31603). PTFE*
* FDA compliance 21CFR§177	
Clip parts:	316

### Standard Surface finish

exterior + Electro polished:	Ra 0.5µm
internal + Electro polished:	Ra 0.5µm

### Temperature

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

### Connections

Weld-on: 3/4" ISO 2037, or DN15 DIN11850-R1 or R2, or 3/4" BPE US
Clip-on: 3/4" ISO 2037, or DN15 DIN11850-R1 or R2, or 3/4" BPE US

### Caution

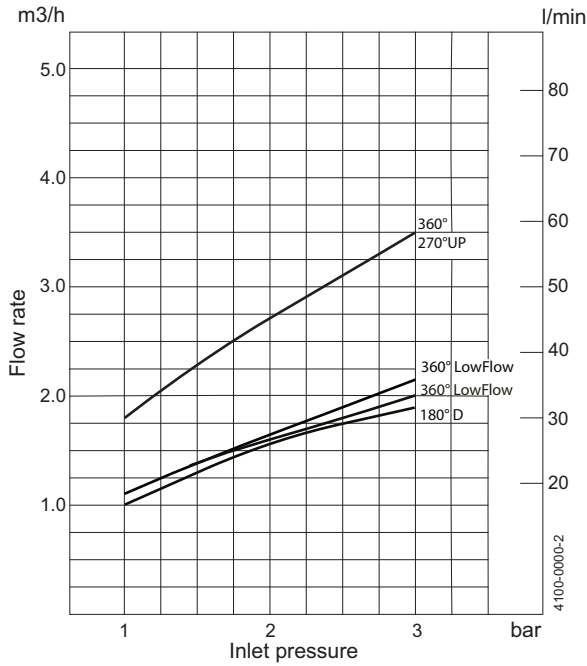
Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

## Qualification Documentation (Q-doc)

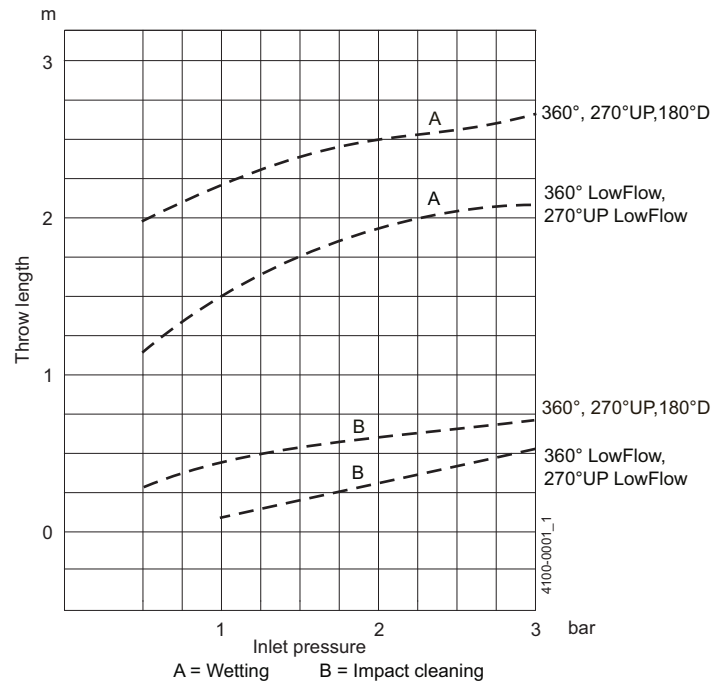
### Documentation specification

Q-doc	Equipment Documentation includes: <ul style="list-style-type: none"><li>- EN 10204 type 3.1 Material Inspection certificate</li><li>- USP Class VI certificate</li><li>- FDA Declaration of Conformity</li><li>- ADI Declaration (TSE)</li><li>- QC Declaration of Conformity</li></ul>
ATEX	ATEX approved machine for use in explosive atmospheres. Category 1 for installation in zone 0/20 in accordance to Ex II 1 GD c T 140°C.
Q-doc + FAT-SAT	Qualification Documentation includes <ul style="list-style-type: none"><li>- Q-doc: 3.1 , USP Class VI, FDA, ADI (TSE) and QC Declaration of Conformity</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>

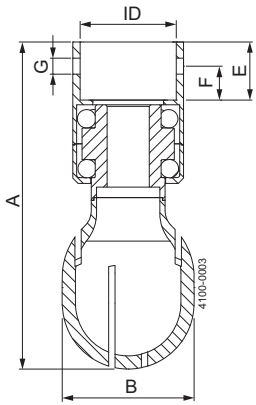
### Flow Rate



### Cleaning Radius



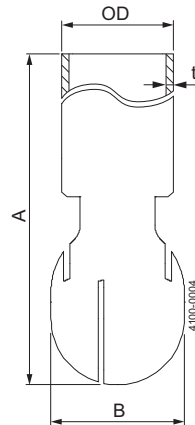
### Clip-on



ID  
 ISO:  $\varnothing 17.4$  mm  
 DIN Range 1:  $\varnothing 18.2$  mm  
 BPE US / DIN Range 2:  $\varnothing 19.2$  mm

### Dimensions (mm)

#### Weld-on



OD x t  
 ISO:  $\varnothing 17.2 \times 1$  mm  
 DIN Range 1:  $\varnothing 18 \times 1$  mm  
 DIN Range 2:  $\varnothing 19 \times 1.5$  mm  
 BPE US:  $\varnothing 19.05 \times \varnothing 1.65$  mm

Type	A	B	E	F	G
Weld-on	77	$\varnothing 25$			
Clip-on	62	$\varnothing 25$	11	5.9	$\varnothing 3.6$

Alfa Laval reserves the right to change specifications without prior notification.

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**How to contact Alfa Laval**

Contact details for all countries  
are continually updated on our website.  
Please visit [www.alfalaval.com](http://www.alfalaval.com) to  
access the information direct.