

Alfa Laval SaniMicro UltraPure

Rotary Spray Head

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 m³.

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

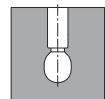
Different choice of spray patterns suitable for various applications and tank designs, ranging from simple tanks to more complex tanks with structures such as agitator and baffles. The SaniMicro UltraPure is lubricated by the cleaning media.

Working principle

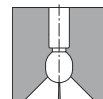
The flow of the cleaning media causes the head of the Alfa Laval SaniMicro UltraPure to rotate, and the fan-shaped jets layout a swirling pattern throughout the tank or reactor. This generates the wetting/impact needed for the efficient removal of the residual product; the cascading flow covers all internal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



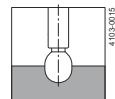
Spray Pattern



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

Pressure

Working pressure:	1 - 3 bar
Recommended pressure:	2 bar

PHYSICAL DATA

Materials:	AISI 316L (UNS S31603), PTFE ¹
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¹ FDA compliance 21CFR§177

Clip parts:	316
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Standard Surface finish

Exterior + Electro polished:	Ra 0.5 µm
Internal + Electro polished:	Ra 0.5 µm

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

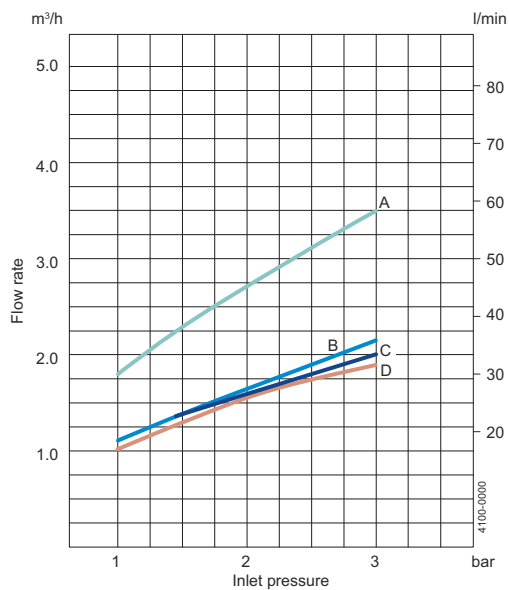
Caution

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

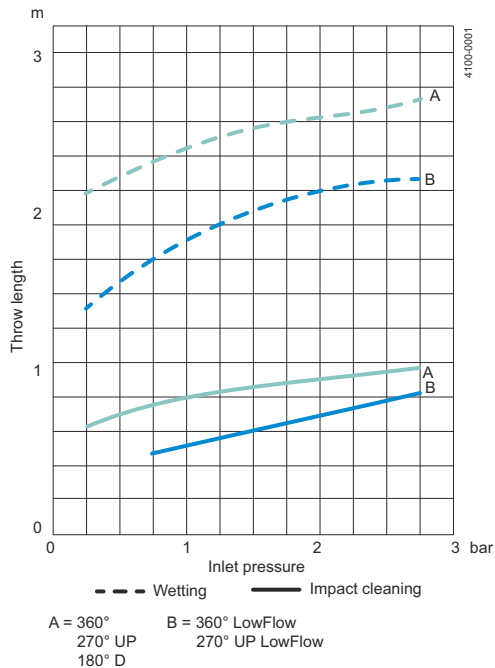
Documentation specification	
Q-doc	Equipment Documentation includes: • EN 1935/2004 DoC • EN 10204 type 3.1 inspection Certificate and DoC • FDA DoC • GMP EC 2023/2006 DoC • EU 10/2011 DoC • ADI DoC • QC DoC
	ATEX approved machine for use in explosive atmospheres. Category 1 for installation in zone 0/20 in accordance with Directive 2014/34/EU II 1G Ex h IIC 85 °C ...175 °C Ga II 1D Ex h IIC T85 °C ...T140 °C Da
Q-doc + FAT-SAT	Qualification Documentation includes • Q-doc • RS, Requirement Specification • DS, Design Specification incl. Traceability Matrix • FAT, Factory Acceptance Test incl. IQ and OQ • SAT, Site Acceptance Test protocol incl. IQ and OQ for End-User Execution

Flow Rate



A = 360°
270° UP
B = 360° LowFlow
C = 270° UP LowFlow
D = 180° D

Cleaning Radius



A = 360°
270° UP
180° D
B = 360° LowFlow
270° UP LowFlow

Dimensions (mm)

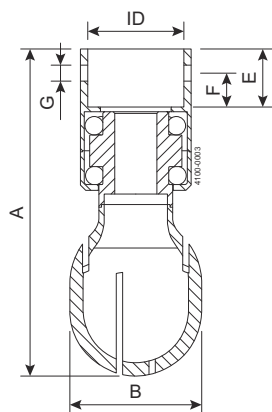


Figure 1. Clip-on

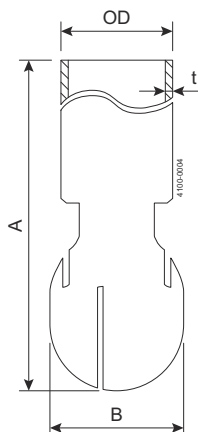


Figure 2. Weld-on

ID
ISO: Ø17.4 mm
DIN Range 1: Ø18.2 mm
BPE US / DIN Range 2: Ø19.2 mm

OD x t
ISO: Ø17.2 x 1 mm
DIN Range 1: Ø18 x 1 mm
DIN Range 2: Ø19 x 1.5 mm
BPE US: Ø19.05 x Ø1.65 mm

Type	A	B	E	F	G
Weld-on	77	Ø25			
Clip-on	62	Ø25	11	5.9	Ø3.6

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