

# Alfa Laval SaniMicro

# **Rotary Spray Head**

### Introduction

The Alfa Laval SaniMicro is a rotary spray head tank cleaning machine for hygienic environments. Designed to clean tanks from  $0.05-1~{\rm m}^3$ .

The Alfa Laval SaniMicro minimizes the consumption of water and cleaning media. Easy to customize to meet customer requirements, the SaniMicro allows companies to spend less time cleaning and more time producing.

#### **Application**

The Alfa Laval SaniMicro is designed for the removal of residues from hygienic tanks across the dairy, brewery, distillery, beverage, food, personal care and many other industries.

#### **Benefits**

- 40% faster cleaning = more time for production
- Saves up 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 pattern suitable for various applications and tank designs, ranging from simple tanks to more complex tanks with structure such as agitator and baffles. The SaniMicro is lubricated by the cleaning media.

### Working principle

The flow of the cleaning media causes the head of the Alfa Laval SaniMicro 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 surface of the vessel.

## **Spray Pattern**







360°

180° down



2.2 material certificate, Q-doc and ATEX.









### **Technical Data**

Pressure				
Working pressure:	1 - 3 bar / 14.5 - 44 psi	1 - 3 bar / 14.5 - 44 psi		
Recommended pressure:	2 bar / 29 psi			

Miscellaneous	
Lubricant:	Self-lubricating with the cleaning fluid

### **Physical Data**

Steel parts:	SaniMicro: AISI 316 (UNS S31600), AISI 316L (UNS S31603), Duplex steel (UNS
	S31803)
	SaniMicro Hastelloy: UNS06022, UNS N10276
Polymer parts:	PTFE <sup>1</sup>

Standard Surface finish	
External surface finish:	SaniMicro: Ra 0.5 μm / Ra 20 μin
	SaniMicro UltraPure: Ra 0.5 μm EP / Ra 20 μin EP
Internal surface finish:	SaniMicro: Ra 0.8 μm / Ra 32 μin
	SaniMicro UltraPure: Ra 0.5 μm EP / Ra 20 μin EP

Temperature		
Max. working temperature:	95 °C / 203 °F	
Max. ambient temperature:	140 °C / 284 °F	

### 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

Equipment Documentation includes:

- EN 1935/2004 DoC
- EN 10204 type 3.1 inspection Certificate and DoC
- FDA DoC

Q-doc

ATEX

- GMP EC 2023/2006 DoC
- EU 10/2011 DoC
- ADI DoC
- QC DoC

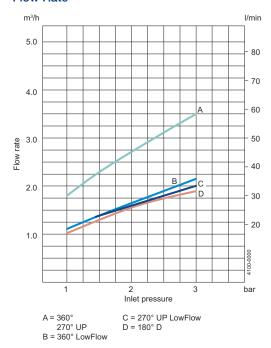
ATEX approved machine for use in explosive atmospheres

Catagory 1 for installation in zone 0/20 in accordance with Directive 2014/34/EU

II 1G Ex h IIC 85 °C ...175 °C Ga

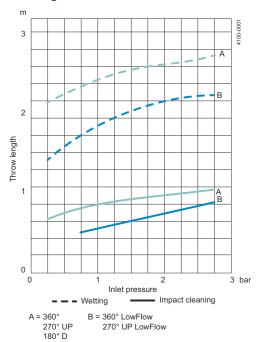
II 1D Ex h IIIC T85 °C ...T140 °C Da

### Flow Rate



For Clip-on models, the flow rate is increased by approx. 0.2  $\mbox{m}^{3}\mbox{/h}$ 

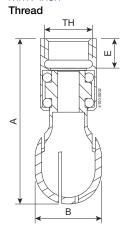
# **Cleaning Radius**



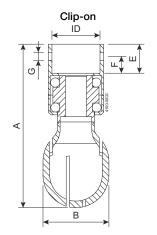
Upwards cleaning distance is considered 2/3 of the impact cleaning distance.

### **Dimensions**

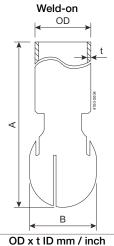
### mm / inch



**TH**3/8" Rp (BSP)
3/8" NPT



ID mm / inch ISO: 17.4 / Ø0.69 DIN Range 1: 18.2 / Ø0.75 BPE US/DIN Range 2: 19.2 / Ø0.76



ISO: Ø17.2 x 1 / Ø0.68 x 0.04 DIN Range 1: Ø18 x 1 / Ø0.71 x 0.04 DIN Range 2: Ø19 x 1.5 / Ø0.75 x 0.06 BPE US: Ø19.05 x Ø1.65 / Ø0.75 x 0.06

#### mm / inch

Туре	Α	В	E	F	G	Weight
Tread	62.0 / 2.44	Ø25 / 0.98	11 / 0.43			75 g / 0.17 lbs
Clip-on	62.0 / 2.44	Ø25 / 0.98	11 / 0.43	5.9 / 0.23	Ø3.6 / 0.14	75 g / 0.17 lbs
Weld-on	77.5 / 3.05	Ø25 / 0.98				75 g / 0.17 lbs

