

# Alfa Laval SaniMagnum

## Rotary Spray Head

### Introduction

The Alfa Laval SaniMagnum is a rotary spray head tank cleaning machine for hygienic environments. Designed to clean tanks from 5 - 40 m<sup>3</sup>.

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

### Application

The Alfa Laval SaniMagnum is designed for the removal of residues from hygienic tanks across the dairy, brewery, distillery, beverage, food, IBC (intermediate bulk container), personal care and many other 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

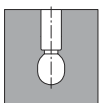
### Standard design

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

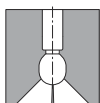
### Working principle

The flow of the cleaning media causes the head of the Alfa Laval SaniMagnum 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.

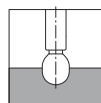
### Spray Pattern



360°



270° up



180° down

### Certificates

2.2 material certificate, Q-doc and ATEX.



## TECHNICAL DATA

Lubricant:	Self-lubricating with the cleaning fluid
Wetting radius:	Max. 3 m
Impact cleaning radius:	Max. effective 2 m

### Pressure

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

## PHYSICAL DATA

### Materials

Inlet connections/Head:	316L (UNS S31603)
Bearing race parts:	Duplex steel (UNS S31803)
Balls:	316L (UNS S31603) /PTFE
Clip parts:	316

### Standard Surface finish

Exterior:	Ra 0.8 µm
Internal:	Ra 0.8 µm

### Improved Surface finish

Exterior + Electro polished:	Ra 0.5 µm
Internal + Electro polished:	Ra 0.8 µm

### Temperature

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

### Weight

Thread and clip-on:	0.76 kg
On pipe:	0.97/1.52 kg

### Connections

- Thread: 1 1/4" or 1 1/2" Rp (BSP) or NPT
- Weld-on: 1 1/2" or 2" ISO 2037, or DN40 DIN11850-R2, or 1 1/2" or 2" BPE US
- Clip-on: 1 1/2" or 2" ISO 2037, or DN40 DIN11850-R1 or R2, or 1 1/2" or 2" BPE US

## Caution

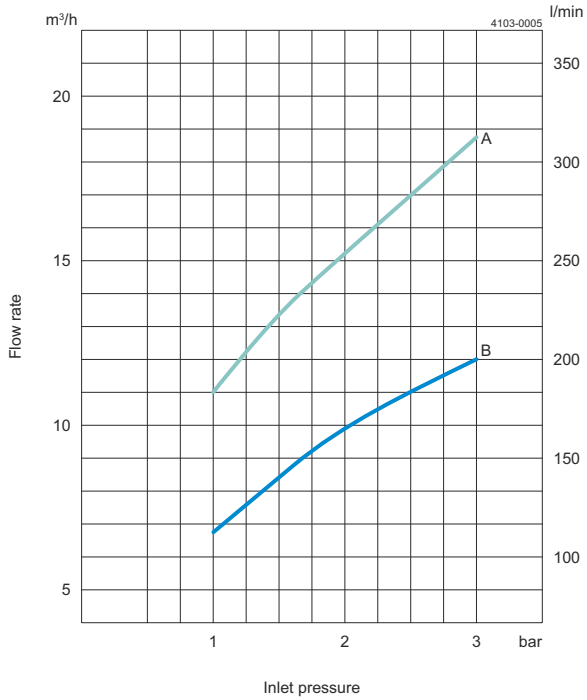
Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

## Qualification Documentation

### Documentation specification

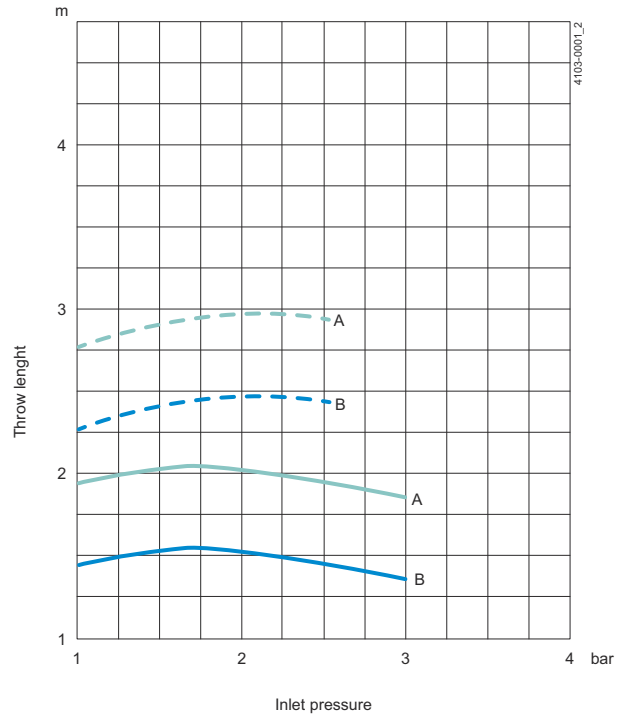
	Equipment Documentation includes:
Q-doc	<ul style="list-style-type: none"><li>• EN 1935/2004 DoC</li><li>• EN 10204 type 3.1 inspection Certificate and DoC</li><li>• FDA DoC</li><li>• GMP EC 2023/2006 DoC</li><li>• EU 10/2011 DoC</li><li>• ADI DoC</li><li>• QC DoC</li></ul>
ATEX	ATEX approved machine 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 IIIC T85 °C ...T140 °C Da

## Flow Rate



A = 360° / 270° UP  
 B = 360° LowFlow / 270° UP LowFlow / 180° Down

## Cleaning radius



A = 360° / 270° UP  
 B = 270° UP LowFlow / 360° LowFlow / 180° Down

For Clip-on models, the flow rate is increased by approx. 1.5 m³/h

## Dimensions (mm)

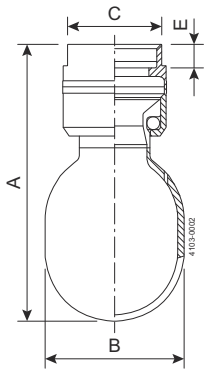


Figure 1. Thread

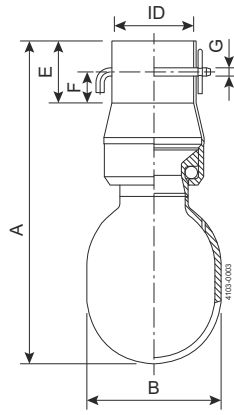


Figure 2. Clip-on

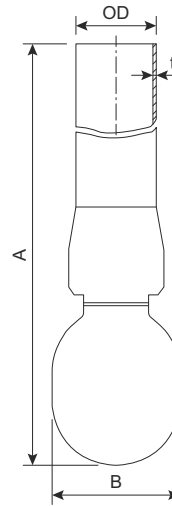


Figure 3. Weld-on

### TH

1 1/4" (BSP)  
 1 1/4" NPT  
 1 1/2" (BSP)  
 1 1/2" NPT

### ID

ID 1: 1 1/2"      Ø38.4 mm  
 ID 2: 2"          Ø51.3 mm  
 DIN Range 1      Ø40.4 mm  
 DIN Range 2      Ø41.4 mm

### OD x t

ISO                      Ø38 x 1.2 mm  
 BPE US                Ø38.1 x 1.65 mm  
 BPE US                Ø50.8 x 1.65 mm  
 DIN Range 1        Ø40 x 1 mm  
 DIN Range 2        Ø41 x 1.5 mm

Type	A	B	C	E	F	G
Thread	130	Ø65		10		
Clip-on	157	Ø65		30	15	Ø4.2
Weld-on	157, 500, 1000	Ø65				

This document and its contents are subject to copyrights and other intellectual property rights owned by Alfa Laval Corporate AB. 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 Corporate AB'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.

200006936-1-EN-GB

© Alfa Laval Corporate AB



**ALFA ENGENHARIA**

Rua Dom Pedro Henrique de Orleans e Bragança, 809 - CEP 05117-002 - Vila Jaguara - São Paulo-SP  
[www.alfaengenharia.com.br](http://www.alfaengenharia.com.br) - [contato@alfaengenharia.com.br](mailto:contato@alfaengenharia.com.br)  
Tel:+55 11 3644-5476