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 1,321-10,567 US gallons.

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

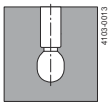
Standard design

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.

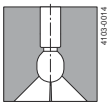
Working principle

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.

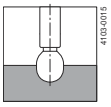
Spray Pattern



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. 10 ft
Impact cleaning radius:	Max. effective 6 ft

Pressure	
Working pressure:	14.5 - 44 PSI
Recommended pressure:	29 PSI

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 32 µin
Internal:	Ra 32 µin

Improved Surface finish	
Exterior + Electro polished:	Ra 20 µin
Internal + Electro polished:	Ra 32 µin

Temperature	
Max. working temperature:	203 °F
Max. ambient temperature:	284 °F

Weight	
Thread and clip-on:	1.48 lbs
On pipe:	2.14/3.35 lbs

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

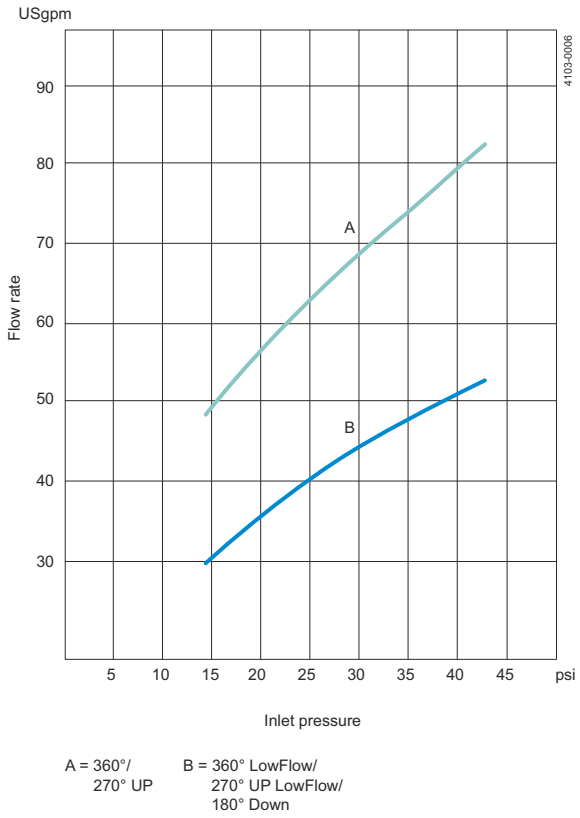
Caution

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	
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	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 185 °F ...347 °F Ga II 1D Ex h IIIC T185 °F ...T284 °F Da

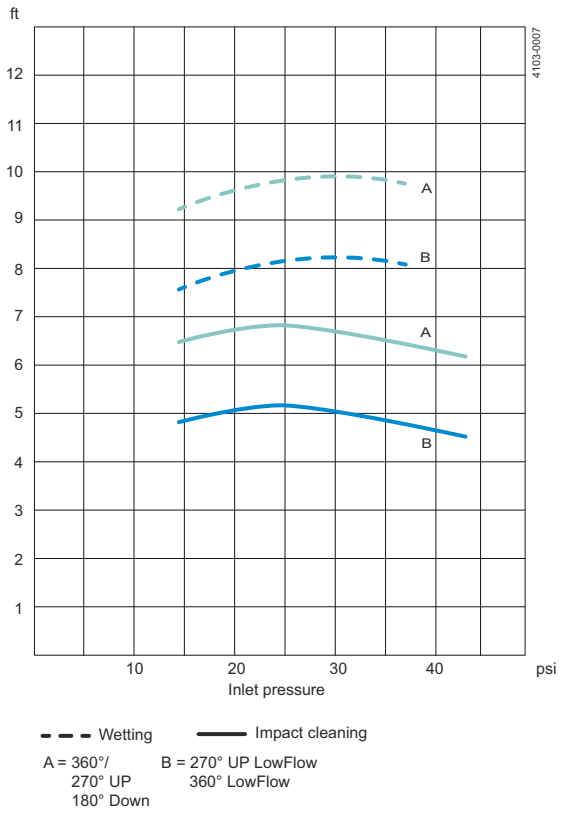
Flow Rate



A = 360°/ 270° UP

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

Cleaning radius



A = 360°/ 270° UP 180° Down

B = 270° UP LowFlow 360° LowFlow

For Clip-on models, the flow rate is increased by approx. 1.96 yard^3/h

Dimensions (inch)

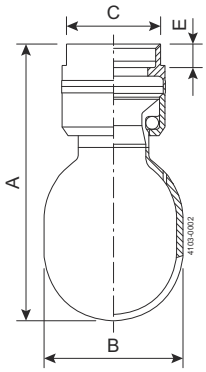


Figure 1. Thread

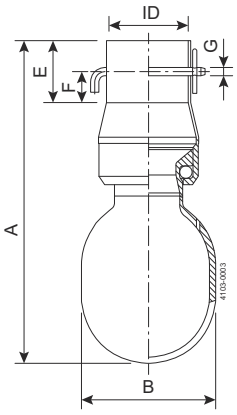


Figure 2. Clip-on

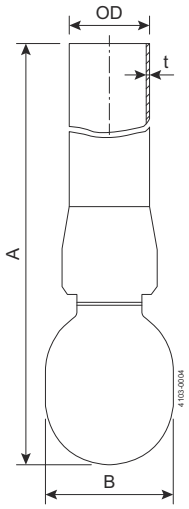


Figure 3. Weld-on

TH
1 1/4" BSP
1 1/4" NPT
1½" BSP
1½" NPT

ID	
1½"	Ø1.51 inch
2"	Ø2.02 inch
DIN Range 1	Ø1.59 inch
DIN Range 2	Ø1.63 inch

OD x t	
ISO	Ø1.50 x 0.047 inch
BPE US	Ø1.5 x 0.065 inch
BPE US	Ø2 x 0.065 inch
DIN Range 1	Ø1.57 x 0.039 inch
DIN Range 2	Ø1.61 x 0.059 inch

Type	A	B	C	E	F	G
Tread	5.12	Ø2.56	1.73	x		
Clip-on	6.18	Ø2.56		0.39	0.59	Ø0.165
Weld-on	6.18 / 19.68 / 39.37	Ø2.56				

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