

Alfa Laval SaniMidget SB 3-A

Rotary Spray Head

Introduction

The Alfa Laval SaniMidget SB 3-A is a rotary spray head tank cleaning machine for hygienic environments. Designed to clean tanks from $1-15 \text{ m}^3$.

The Alfa Laval SaniMidget SB 3-A minimizes the consumption of water and cleaning media. Easy to customize to meet customer requirements, the SaniMidget SB 3-A allows companies to spend less time cleaning and more time producing.

The SaniMidget SB 3-A is authorized to carry the 3-A symbol.

Application

The Alfa Laval SaniMidget SB 3-A is designed for the removal of residues from hygienic tanks across 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 patterns suitable for various applications and tank designs, ranging from simple tanks to more complex tanks with structures such as agitator and baffles. The SaniMidget SB 3-A is lubricated by the cleaning media.

Working principle

The flow of the cleaning media causes the head of the Alfa Laval SaniMidget SB 3-A 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°

270° up



Certificates

2.2 material certificate, Q-doc, 3-A and ATEX.



TECHNICAL DATA

Lubricant:	Lubrication by rinse/cleaning fluid
Wetting radius:	Max. 3 m
Impact cleaning radius:	Max. effective 1.4 m

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

PHYSICAL DATA

Materials			
Metallic parts:	AISI 316L (UNS S31603)		
Non-metallic parts:	PEEK ¹ 450G		
¹ FDA compliance 21CFR§177			
Surface finish:	Ra < 0.8 μm		
	1": 0.20 kg / 1½": 0.44 kg		
Temperature			
Max. working temperature:	95 °C		
Max. ambient temperature:	150 °C		
Connections			
- Weld-on: 1" ISO 2037, or DN25 DIN11850-R1, or 1" BPE US			
- Clip-on: 1 1/2" ISO 2037, or 1" or 1 1/2" BPE US			

Clip-on options

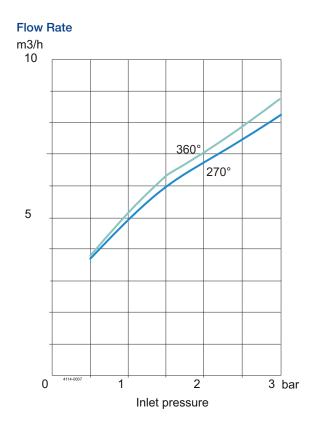
Easy-on/off clip (Ø4.0 mm). Clip needed for both clip-on and weld-on versions to assemble the machine

Caution

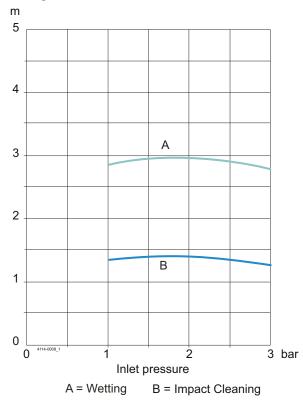
Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

Qualification Documentation

	n specification Equipment Documentation includes:			
Q-doc	• 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 IIB 85 ℃175 ℃ Ga			
	II 1D Ex h IIIC T85 °CT140 °C Da			
3-A	3-A number: 78-##. Spray Cleaning Devices			



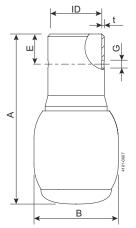
Cleaning radius



For Clip-on models, the flow rate is increased by approx. 0.5 $\ensuremath{\text{m}^3/\text{h}}$.

Note: The inlet pressure has been taken immediately before the inlet to the machine. In order to achieve the performance indicated on the curves, the pressure drop in the supply lines between pump and machine must be taken in consideration and the water temperature during testing was approx. 20 °C.

Dimensions (mm)



Clip-on 1" BPE US	Clip-on 1½" BPE US/1½" ISO 2037	Weld-on ¹ 1" ISO 2037	Weld-on ¹ 1" BPE US	Weld-on ¹ DN25 DIN R1
mm	mm	mm	mm	mm
Ø25.7	Ø38.4	Ø22.6	Ø22.1	Ø25.7
1.2	1.2	1.2	1.65	1.2
Ø42.0	Ø54.7	Ø42.0	Ø42.0	Ø42.0
84.8	118.3	104.8	108.8	84.8
ø4.0	Ø4.0	Ø4.0	Ø4.0	Ø4.0
Ø4.1	Ø4.1	Ø4.1	Ø4.1	Ø4.1
15.0	25.4			
	1" BPE US mm Ø25.7 1.2 Ø42.0 84.8 Ø4.0 Ø4.1	Clip-on 1" BPE US 1½" BPE US/1½" ISO 2037 mm mm Ø25.7 Ø38.4 1.2 1.2 Ø42.0 Ø54.7 84.8 118.3 Ø4.0 Ø4.0 Ø4.1 Ø4.1	Clip-on 1" BPE US 1½" BPE US/1½" ISO 2037 Weld-on 1 1" ISO 2037 mm mm mm Ø25.7 Ø38.4 Ø22.6 1.2 1.2 1.2 Ø42.0 Ø54.7 Ø42.0 84.8 118.3 104.8 Ø4.0 Ø4.0 Ø4.0 Ø4.1 Ø4.1 Ø4.1	Clip-on 1" BPE US 2037 Weld-on ¹ 1" ISO 2037 Weld-on ¹ 1" BPE US mm mm mm 0/25.7 0/38.4 0/22.6 0/22.1 1.2 1.2 1.2 1.65 0/42.0 0/54.7 0/42.0 0/42.0 84.8 118.3 104.8 108.8 0/4.0 0/4.0 0/4.0 0/4.0 0/4.1 0/4.1 0/4.1 0/4.1

¹ Weld-on version only meets the requirements of the 3-A Hygienic Standard 78-## if installed according to the user manual.

Third Party Verification shows that this machine meets the requirements of the 3-A Hygienic Standard 78-##.

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.

200006337-1-EN-GB



ALFA ENGENHARIA

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

© Alfa Laval Corporate AB