Alfa Laval SaniMagnum SB

Hygienic, Low-Flow Cleaning that meet 3-A standards

Application

The Alfa Laval Toftejorg SaniMagnum SB Rotary Spray Head is designed with respect to Self-Cleaning, Self-Draining and Inspectability. Its novel patented One-clip assembly offers easy installation, disassembly and inspection without compromising cleanability and drainability. The Toftejorg SaniMagnum SB is an efficient replacement for the traditional Static Spray Ball as it offers liquid impact on the entire tank wall that lies within the spray pattern – a 270°U or a 360° pattern; both at a lower flow rate at equally low pressure.

Working principle

The flow of cleaning media causes the head of the Toftejorg SaniMagnum SB to rotate on a liquid film (Slide Bearing), with fans of water laid out in a swirling pattern on the entire perimeter within the spray pattern. This generates a vibrating impact in the impact zone and a dynamic cascading flow that covers all internal surfaces of the tank, vessel or reactor. The Self-Cleaning feature is due to the unique design that includes cleaning of the down pipe.

TECHNICAL DATA

Lubricant:	Lubrication by rinse/cleaning fluid
Wetting radius:	Max. 4.5 m
Impact cleaning radius:	Max. 2.4 m

Pressure

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

Spray Pattern

360°

270° up

Standard Design

The Toftejorg SaniMagnum SB can be supplied with 3.1 Certificates for metallic parts and 3-A Conformity* on its plastic part.

*Implies that the material complies with FDA 21CFR.

Sizing/selection and installation drawing are available. Contact Alfa Laval for recommendations.

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.

PHYSICAL DATA

Materials

Metalic parts:	316L
Non-metallic parts:	PEEK 450G*

* FDA compliance 21CFR§177

Surface finish:	Ra 0.8 µm

Temperature

Max. working temperature:	95°C
Max. ambient temperature:	150°C

FDA compliant tekst

Weight: 0.4 kg

Connections

Clip-on:	1½" BPE US, 1½" ISO 2037
Weld-on:	2" BPE US*

Clip

Easy-on/off clip (ø4.0 mm)

Clip needed for both clip-on and weld-on versions to assemble the machine.

Recommended tank size: 23-68 m^3

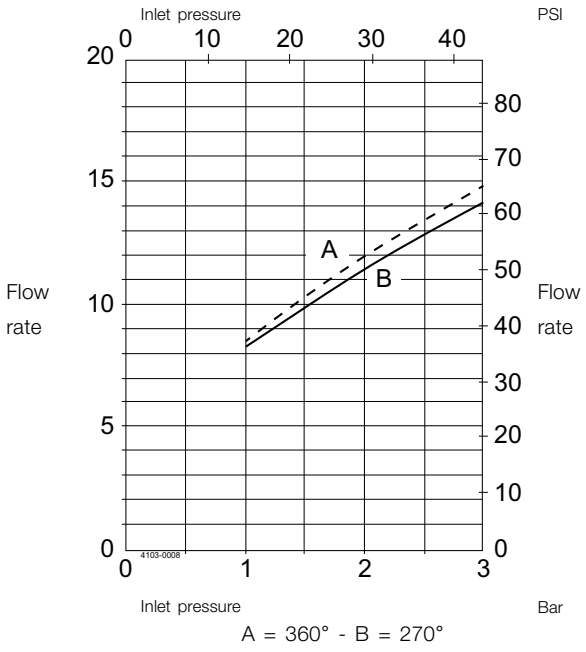
Certificates

2.2 material certificates, Q-doc, EHEDG, 3-A and ATEX

Qualification Documentation (Q-doc)

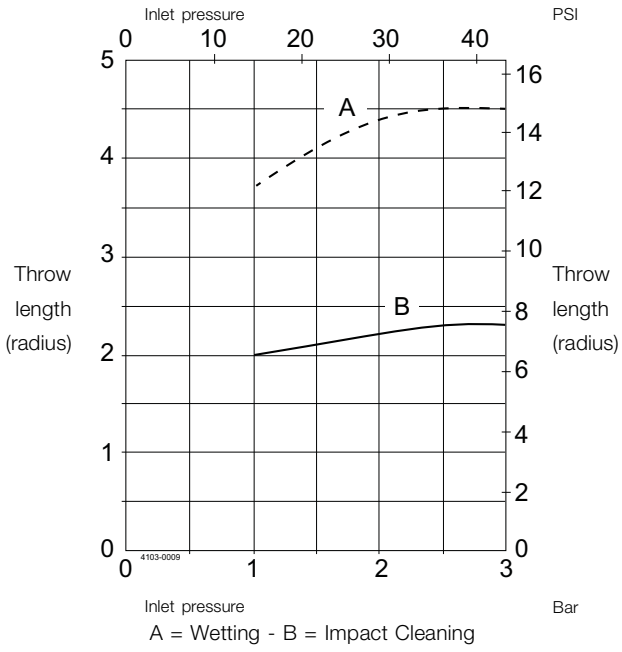
Documentation specification	
Q-doc	Equipment Documentation includes: - EN 10204 type 3.1 Material Inspection certificate - FDA Declaration of Conformity - ADI Declaration (TSE) - QC Declaration of Conformity
ATEX	ATEX approved machine for use in explosive atmospheres. Catagory 1 for installation in zone 0/20 in accordance to Ex II 1 GD c T 140°C.

Flow Rate



A = 360° - B = 270°

Cleaning radius

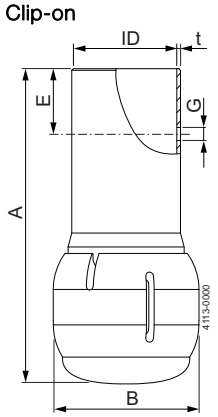


A = Wetting - B = Impact Cleaning

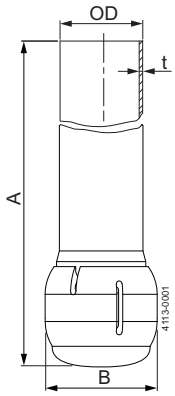
For Clip-on models, the flow rate is increased by approx. 1.5 m^3/h.

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.

Clip-on



Weld-on



Dimensions (mm)

Type	A	B	E	G	ID	OD	t	Clip
Clip-on	118.3	54.7	25.4	ø4.1	ø 38.4			ø4.0
Weld-on**	138.9	54.7				ø38.1	1.2	

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

ESE02216en 1912

Alfa Laval reserves the right to change specifications without prior notification.

How to contact Alfa Laval
Contact details for all countries
are continually updated on our website.
Please visit www.alfalaval.com to
access the information direct.

Alfa Laval is a trademark registered and owned by Alfa Laval Corporate AB.