



# 3-A, Sanitary, Low-Flow Cleaning

## Toftejorg SaniMidget SB/3-A Rotary Spray Head

### Application

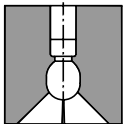
The Alfa Laval Toftejorg SaniMidget SB/3-A Rotary Spray Head is uniquely designed with respect to self-cleaning, self-draining and inspectability. Its novel patent pending one-clip assembly offers easy installation, disassembly and inspection without compromising cleanability or drainability. The SaniMidget SB/3-A is an efficient replacement for the traditional static spray ball as it offers liquid impact on the entire tank wall that lies within the 270° upward pattern; this at a lower flow rate at equally low pressure.

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

### Working Principles

The flow of cleaning media causes the head of the SaniMidget SB/3-A to rotate, with fans of water laid out in a swirling pattern on the entire perimeter exposed to the spray pattern. This generates a vibrating impact in the 270° upward pattern and a dynamic cascading flow that covers all internal surfaces of the tank, vessel or reactor. The SaniMidget SB/3-A is designed according to EHEDG and GMP guidelines and meets the requirements of 3-A standards\*\*. The self-cleaning feature is due to the unique design that includes cleaning of the down pipe. The device is self-draining.

### Spray Pattern



270° up

### Standard design

The SaniMidget SB/3-A can be supplied with 3.1 certificates for metallic parts and 3-A conformity\*\*\* on its plastic part. The SaniMidget SB/UltraPure is also available with Alfa Laval Q-doc.

\*\*\* = Implies that the material complies with FDA 21CFR.

### Materials

Metallic parts: . . . . . AISI 316L (UNS S31603)  
 Non-metallic parts: . . . . . PEEK 450G

### Clip-on options

Easy-on/off clip (ø4.0 mm / 0.16 inch).  
 Clip needed for both clip-on and weld-on versions to assemble the machine.

### Ordering

Please specify required connection and type of certification and confirm the application suitability

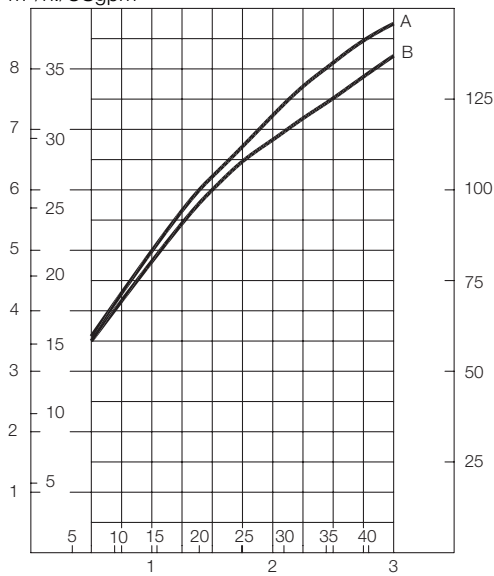


### Technical data

Surface finish:	. . . . . Ra < 0.8 µm (32µin) Option (EP): Ra < 0.5 µm (20µin)
Weight:	. . . . . 1" : 0.20 kg (0.44 lbs) 1½": 0.44 kg (0.97 lbs)
Lubricant:	. . . . . Lubrication by rinse/cleaning fluid
Steam or gas (air):	. . . . . Not supported - contact Alfa Laval
Working pressure:	. . . . . 1-3 bar (14.5-44 psi)
Recommended pressure:	. . . . . .2 bar (29 psi)
Max. working temperature:	. . . . . .95°C (203°F)
Max. ambient temperature:	. . . . . .150°C (284°F)
Wetting radius:	. . . . . .3 m (9.8 ft)
Impact cleaning radius:	. . . . . .1.4 m (4.6 ft)
Connections:	. . . . . .Clip-on 1" BPE US . . . . . .Clip-on 1½" BPE US . . . . . .Weld-on 1" ISO . . . . . .Weld-on 1" BPE US . . . . . .Weld-on DIN Ran. 1 ø28

**Flow rate**

Flow rate  
m<sup>3</sup>/h./USgpm

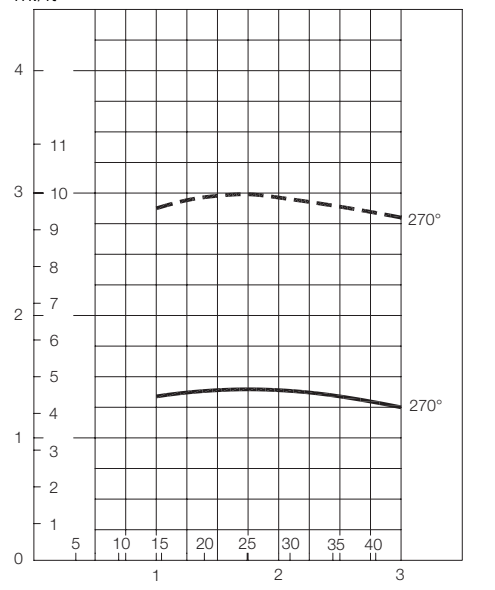


A= Clip on  
B = Weld on

Inlet pressure  
psi/bar

**Cleaning**

Throw length  
m./ft

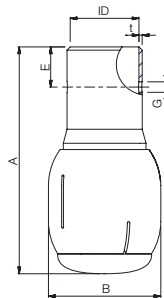


Inlet pressure  
psi/bar

**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 and inch)**



	Clip-on 1" BPE US		Clip-on 1½" BPE US		Weld-on* 1" ISO		Weld-on* 1" BPE US		Weld-on* DIN Range 1 (Ø28)	
	mm	inch	mm	inch	mm	Inch	mm	inch	mm	inch
ID	25.7	1.012	38.4	1.512	22.6	0.890	22.1	0.870	25.7	1.010
t	1.2	0.047	1.2	0.047	1.2	0.047	1.65	0.065	1.2	0.047
B	42.0	1.653	54.7	2.154	42.0	1.653	42.0	1.653	42.0	1.653
A	84.8	3.338	118.3	4.659	104.8	4.126	104.8	4.126	84.8	3.338
Ø-clip	4.0	0.157	4.0	0.157	4.0	0.157	4.0	0.157	4.0	0.157
G	4.1	0.161	4.1	0.161	4.1	0.161	4.1	0.161	4.1	0.161
E	15.0	0.590	25.4	1.000						

\* Weld-on version only meets the requirements of the 3-A Sanitary Standard 78-01 if installed according to the user manual.

\*\* Third Party Verification shows that this machine meets the requirements of the 3-A Sanitary Standard 78-01.

**How to contact Alfa Laval**

Contact details for all countries  
are continually updated on our website.  
Please visit [www.alfalaval.com](http://www.alfalaval.com) to  
access the information direct.