



# Sanitary, Low Flow cleaning that meets 3-A standards

## Alfa Laval TJ SaniMidget SB 3-A Rotary Spray Head

### Application

The Toftejorg SaniMidget SB 3-A Rotary Spray Head is preliminary designed for the pharmaceutical industry 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. 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 internal surfaces of the tank, vessel or reactor. The SaniMidget SB 3-A is designed according to EHEDG and GMP Guidelines.



### TECHNICAL DATA

Lubricant: . . . . . Lubrication by rinse/cleaning fluid  
 Wetting radius: . . . . . Max. 3 m  
 Wetting radius: . . . . . Max. 9.8 ft  
 Impact cleaning radius: . . . . . Max. effective 1.4 m  
 Impact cleaning radius: . . . . . Max. effective 4.6 ft

### Pressure

Working pressure: . . . . . 1-3 bar  
 Working pressure: . . . . . 14.5-44 PSI  
 Recommended pressure: . . . . . 2 bar  
 Recommended pressure: . . . . . 29 PSI

### Spray Pattern



360°



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.

### Certificates

2.2 material certificate and EHEDG and 3-A  
 As add-on: 3.1 material certificate and ATEX.

### PHYSICAL DATA

#### Materials

Metallic parts: . . . . . AISI 316L (UNS S31603)  
 Non-metallic parts: . . . . . PEEK 450G  
 Surface finish: . . . . . Ra < 0.8µm  
 Surface finish: . . . . . Ra < 32µin  
 Steam or gas (air): . . . . . Not supported - contact Alfa Laval

**Weight:** . . . . . 1" : 0.20 kg / 1½": 0.44 kg  
**Weight:** . . . . . 1" : 0.44 lbs. / 1½": 0.97 lbs

#### Temperature

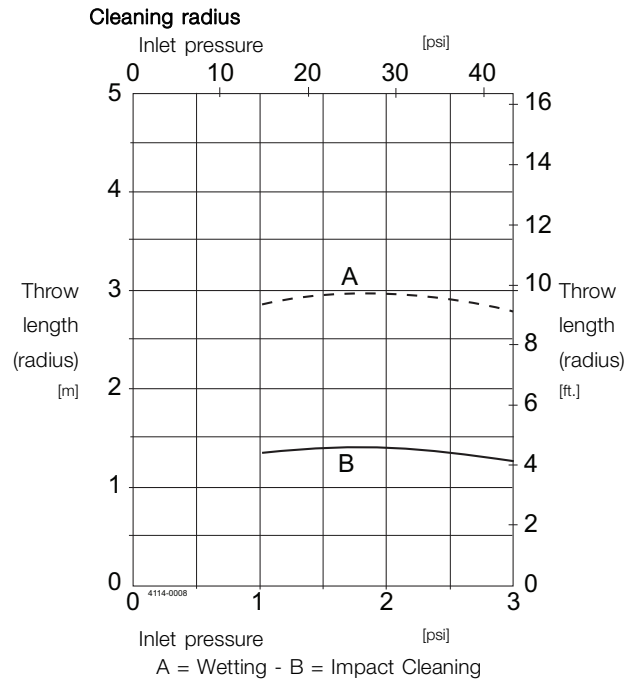
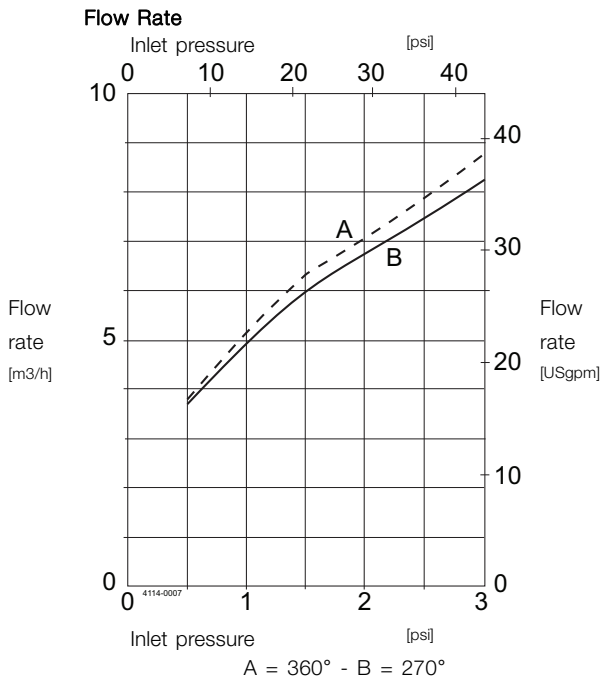
Max. working temperature: . . . 95°C  
 Max. working temperature: . . . 203°F  
 Max. ambient temperature: . . . 150°C  
 Max. ambient temperature: . . . 284°F

#### 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
- 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.  
 Easy-on/off clip (ø0.16 inch). Clip needed for both clip-on and weld-on versions to assemble the machine.



For Clip-on models, the flow rate is increased by approx. 0.5 m<sup>3</sup>/h.

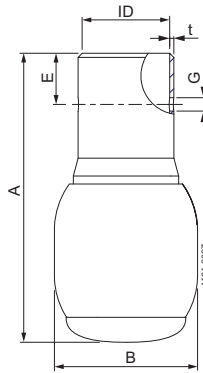
For Clip-on models, the flow rate is increased by approx. 132.1 gallon/h.

**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.

**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. 68°F.

**Dimensions (mm)**

**Dimensions (inch)**



	Clip-on 1" BPE US	Clip-on 1½" BPE US/1½"	Weld-on* 1" ISO 2037	Weld-on* 1" BPE US	Weld-on* DN25 DIN R1
	ISO 2037				
	mm	mm	mm	mm	mm
ID	ø25.7	ø38.4	ø22.6	ø22.1	ø25.7
t	1.2	1.2	1.2	1.65	1.2
B	ø42.0	ø54.7	ø42.0	ø42.0	ø42.0
A	84.8	118.3	104.8	108.8	84.8
ø-clip	ø4.0	ø4.0	ø4.0	ø4.0	ø4.0
G	ø4.1	ø4.1	ø4.1	ø4.1	ø4.1
E	15.0	25.4			

\* 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.

	Clip-on 1" BPE US	Clip-on 1½" BPE US/1½" ISO 2037	Weld-on* 1" ISO 2037	Weld-on* 1" BPE US	Weld-on* DN25 DIN R1
	inch	inch	inch	inch	inch
ID	ø1.012	ø1.512	ø0.890	ø0.870	ø1.010
t	0.047	0.047	0.047	0.065	0.047
B	ø1.653	ø2.154	ø1.653	ø1.653	ø1.653
A	3.338	4.659	4.126	4.28	3.338
ø-clip	ø0.157	ø0.157	ø0.157	ø0.157	ø0.157
G	ø0.161	ø0.161	ø0.161	ø0.161	ø0.161
E	0.590	1.000			

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

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**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.