



Alfa Laval TJ SaniMagnum SB/3-A Rotary Spray Head

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
 Steam or gas (air): Not supported – contact AL

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.

PHYSICAL DATA

Materials

Metalic parts: 316L
 Non-metallic parts: PEEK 450G
 Surface finish: Ra 0.8 µm

Temperature

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

Weight: 0.4 kg

Connections

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

Clip

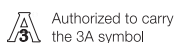
Easy-on/off clip (ø4.0 mm)

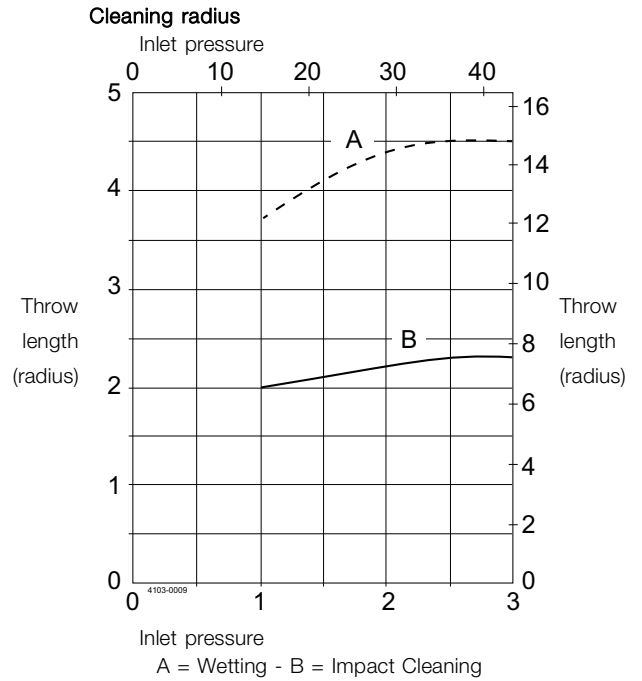
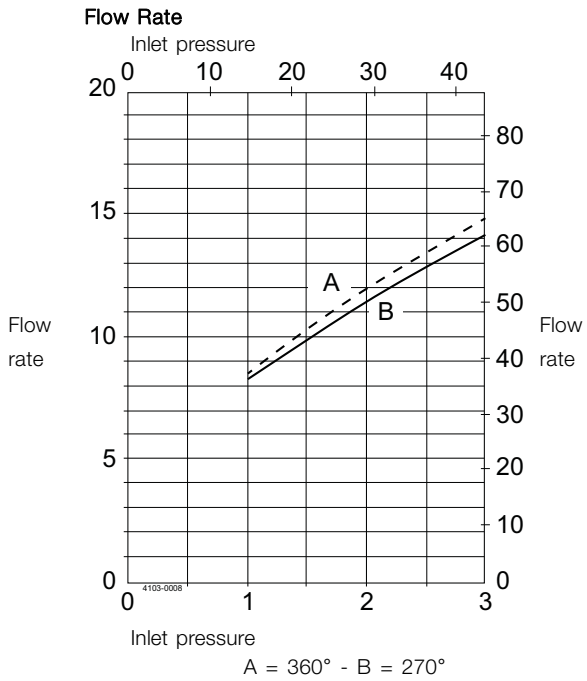
Clip needed for both clip-on and weld-on versions to assemble the machine.

Recommended tank size: 23-68 m³

Certificates

2.2 Material Certificate and EHEDG and 3-A
 As add-on: 3.1 Material Certificate and ATEX.

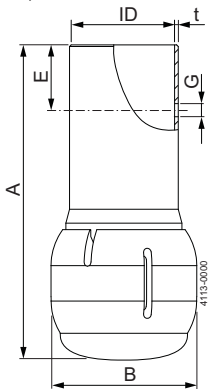




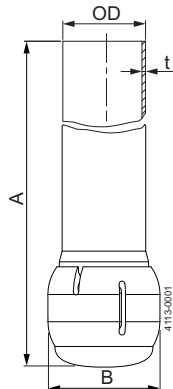
For Clip-on models, the flow rate is increased by approx. 1.5 m³/h.

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 78-01 if installed according to the user manual.

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.



Hygienic, Cleaning that meets 3-A standards

Alfa Laval TJ SaniMega SB/3-A Rotary Spray Head

Application

The Alfa Laval Toftejorg SaniMega 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 SaniMega 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 and high flow rate at equally low pressure.

Working principle

The flow of cleaning media causes the spray head of the Toftejorg SaniMega 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. 6 m
 Impact cleaning radius: Max. 3 m
 Steam or gas (air): Not supported – contact AL

Pressure

Working pressure: 1-4 bar
 Recommended pressure: 2-3 bar

Spray Pattern



360° 270° up

Standard Design

The Toftejorg SaniMega 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.

PHYSICAL DATA

Materials

Metallic parts: AISI 316L
 Non-metallic parts: PEEK 450G
 Surface finish: Ra 0.8µm

Temperature

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

Weight: 0.61 kg

Connections

Clip-on: 2" BPE US
 Weld-on: 2" BPE US*

Clip

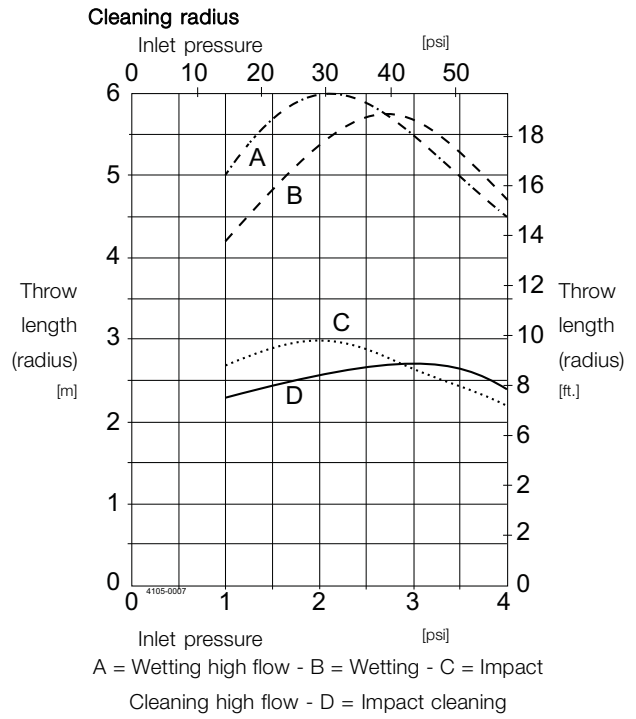
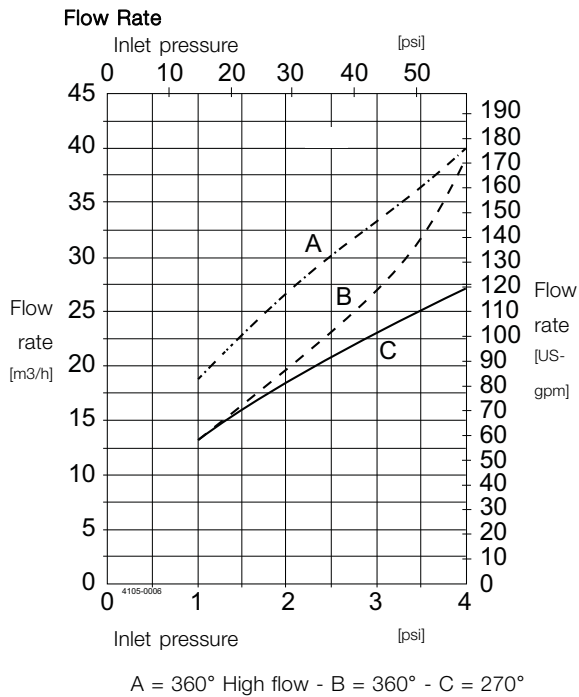
Easy-on/off clip (ø5.0 mm)
 Clip needed for both clip-on and weld-on versions to assemble the machine.

Recommended tank size: 68-227 m³

Certificates

2.2 Material Certificate and EHEDG and 3-A.
 As add-on: 3.1 Material Certificate and ATEX.
 Authorized to carry the 3A symbol

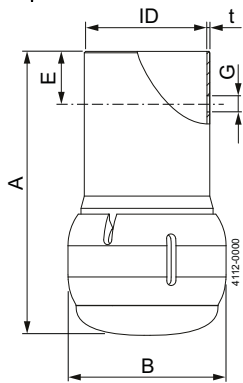




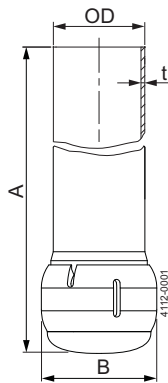
For Clip-on models, the flow rate is increased by approx. 2 m³/h.

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	G	E	ID	OD	t	Clip
Clip-on 2" BPE US	121	ø67.4	ø5.1	25.4	ø51.1			ø5.0
Weld-on** 2" BPE US	141.6	ø67.4				ø50.8	1.2	

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

Alfa Laval reserves the right to change specifications without prior notification. ALFA LAVAL is a trademark registered and owned by Alfa Laval Corporate AB.

ESE02215EN 1611

© Alfa Laval

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 TJ SaniMidget SB UltraPure Rotary Spray Head

UltraPure, Low-Flow Cleaning

Application

The Toftejorg SaniMidget SB UltraPure Rotary Spray Head is with its 3A approval, preliminary designed for the dairy 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 drawings are available. Contact Alfa Laval for recommendations.

Working Principles

The flow of cleaning media causes the head of the SaniMidget SB UltraPure 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 UltraPure is designed according to EHEDG and the design meets the requirements of 3-A standards.



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

Spray Pattern



360°



270° up

Standard Design

The SaniMidget SB UltraPure can be supplied with 3.1 certificates for metallic parts and FDA conformity and USP Class IV on non-metallic parts.

Certificates

2.2 material certificate and EHEDG
 As add-on: Q-doc, Q-doc incl. FAT & SAT and ATEX.

PHYSICAL DATA

Materials

Metallic parts: AISI 316L (UNS S31603)
 Non-metallic parts: PEEK MG

Surface finish Ra < 0.8µm
 Steam or gas (air): Not supported - Contact Alfa Laval

Temperature

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

Weight: 1": 0.20 kg

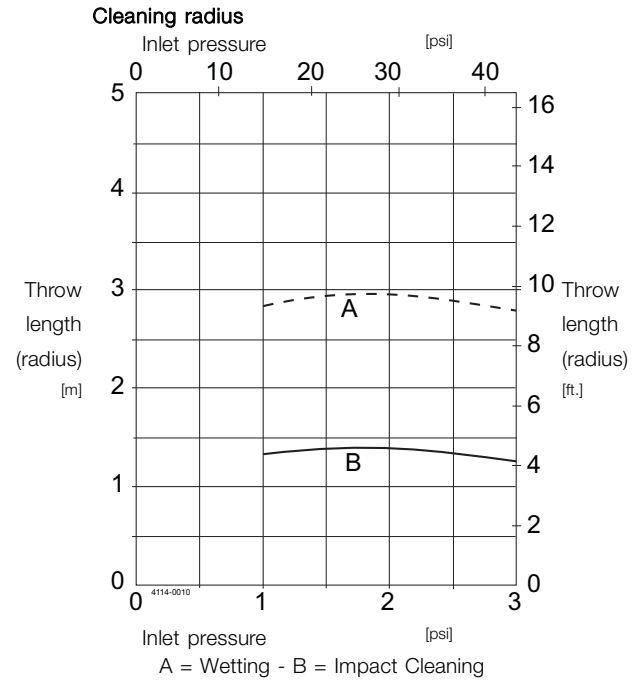
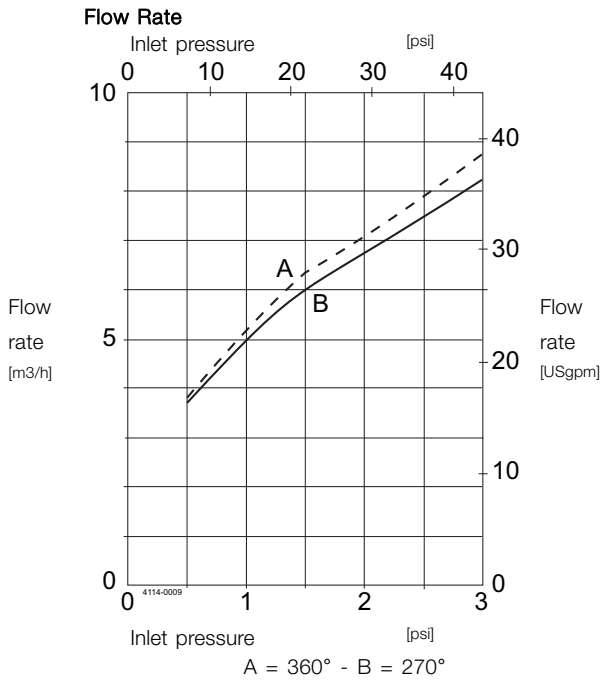
Connections

- Weld-on: 1" ISO 2037, or DN25 DIN11850-R1, or 1" BPE US
 - Clip-on: 1" 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)



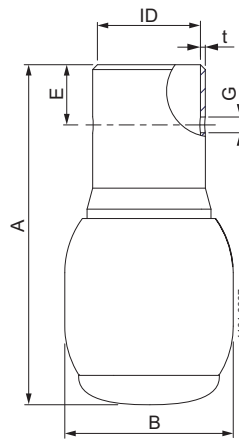


For Clip-on models, the flow rate is increased by approx. 0.5 m³/h.

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 mm	Weld-on 1" ISO 2037 mm	Weld-on 1" BPE US mm	Weld-on DN25 DIN R1 mm
ID	ø25.7	ø22.6	ø22.1	ø25.7
t	1.2	1.2	1.65	1.2
B	ø42.0	ø42.0	ø42.0	ø42.0
A	84.8	104.8	108.8	84.8
ø-clip	ø4.0	ø4.0	ø4.0	ø4.0
G	ø4.1	ø4.1	ø4.1	ø4.1
E	15.0			

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 TJ SaniMidget SB 3-A Rotary Spray Head

Hygienic, Low Flow cleaning that meets 3-A standards

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
 Impact cleaning radius: Max. effective 1.4 m

Pressure

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

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
 Steam or gas (air): Not supported - contact Alfa Laval

Weight: 1" : 0.20 kg / 1½" : 0.44 kg

Temperature

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

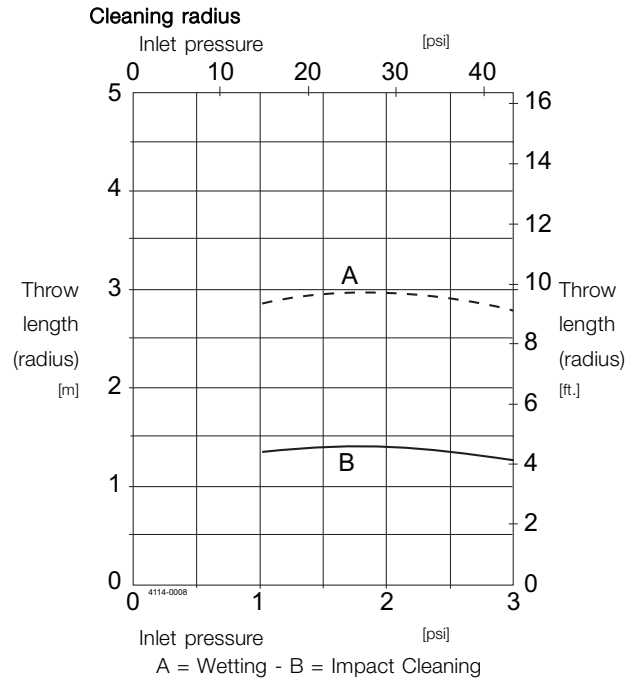
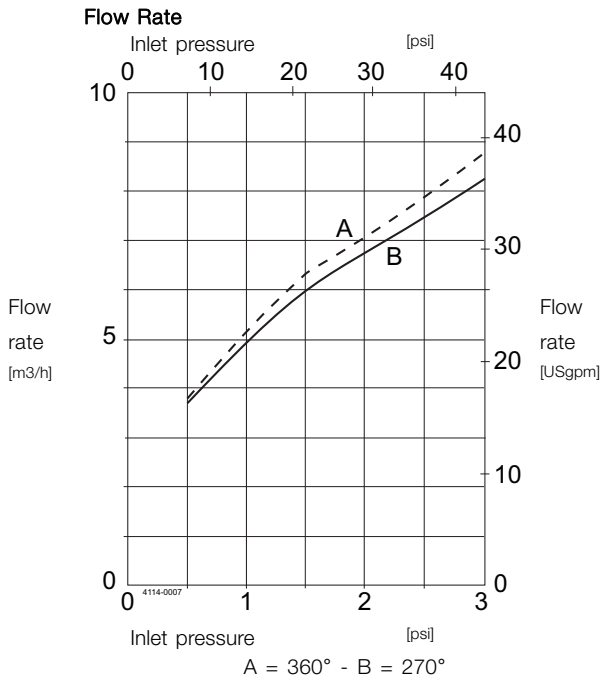
Connections

- 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.

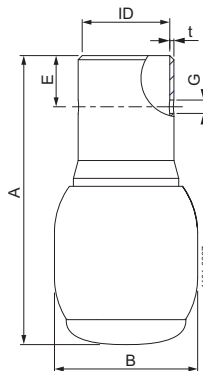




For Clip-on models, the flow rate is increased by approx. 0.5 m³/h.

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"	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 Hygienic Standard 78-01 if installed according to the user manual.

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

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.