



Alfa Laval SaniMidget Retractor

Does not interfere with production

Application

The Toftejorg SaniMidget Retractor is installed where fully automated and validated cleaning can assure higher productivity due to less cleaning time in e.g. spray drying applications within the food, ingredients and pharmaceutical industry. Larger ducts, channels, cyclones, chambers, complexed reactors, vent lines etc. can therefore be cleaned to the highest standards with no manual or semi automated interference, and avoiding any product carry over or hazardous incidents.

Working principle

The Toftejorg SaniMidget Retractor is available with two styles of retracting mechanisms: Pneumatic Driven, which uses air pressure to extend and retract the cleaning head, and Media Driven, which uses the pressure of the cleaning media to extend the cleaning head and an integrated spring to retract it. The Rotary Spray Head creates a fan of fluid in a swirling pattern. The distribution pattern of the cleaner head generates a vibrating impact as well as cascading flow coverage of all internal surfaces of the tank.

TECHNICAL DATA

Flow rate: 7.3 m³/h at 3 bar
Standard strokes: 100, 150 or 250 mm

Lubricant: Self lubricating with cleaning media
Wetting radius: Max. 3.5 m
Impact cleaning radius: Max. Effective 1.7 m

Air quality:

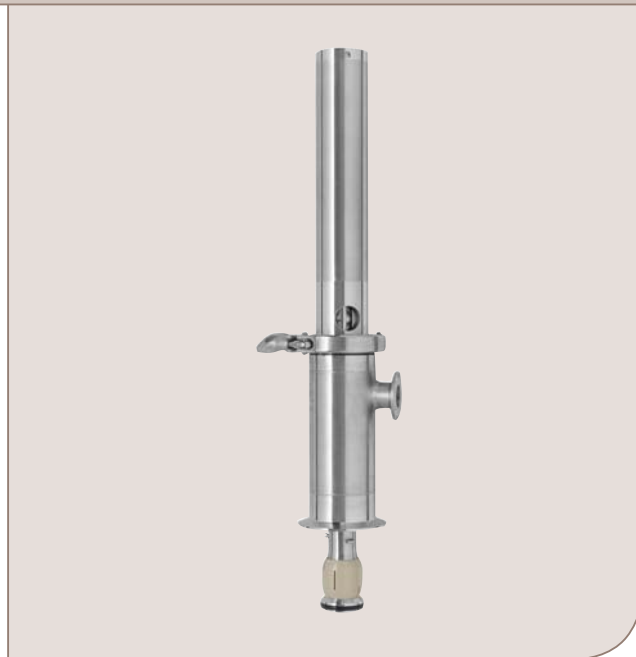
Clean, filtered: max. 40 µm
Dry, dew point: max. 10° C
Installation: Please contact Alfa Laval for installation of tank cleaning machine

Certificates

2.2 material certificate/Q-doc product contacted parts only, ATEX



* product contact parts only



PHYSICAL DATA

Materials

Product area: 316L (UNS S31603), PEEK*
Non-product area: 304 (UNS S30400), POM
Sealing: EPDM*

* FDA compliance 21CFR§177

Surface finish:

Product contact surfaces: . . . Ra 0.8µm
Non product contact parts . . . Ra 1.6µm

Temperature

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

Weight: See reverse page

Options - Materials

- A. Hastelloy C22 product contact part only!
- B. Alternative sealing component material, FPM*, FFKM*
- C. Positioning sensors, which generate digital signals at the fully retracted or fully extended positions
- D. 3.1. certificate for metallic parts available upon request

* FDA compliance 21CFR§177

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.

Pressure:

Recommended operating
 cleaning fluid pressure: 3 bar
 Cleaning fluid pressure when
 retracted: Pressureless
 Air supply pressure: 2-5 bar

Pressure: Air to Air (AA)

Cleaning fluid pressure: 1-5 bar
 Tank pressure: * No Pressure
 Air supply pressure: 2-5 bar
 Purging possible: Not supported - contact Alfa Laval

Pressure: Air to Spring (AS)

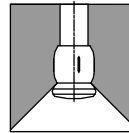
Cleaning fluid pressure: 1-5 bar
 Tank pressure: * No Pressure
 Air supply pressure: 2-5 bar
 Purging possible: Not supported - contact Alfa Laval

Pressure: Media to Spring (MS)

Cleaning fluid pressure: 2½-5 bar
 Tank pressure: * No Pressure
 Purging possible: Not supported - contact Alfa Laval

*For applications with other pressure, please contact Alfa Laval for support

Spray Pattern



270° up

Qualification Documentation (Q-doc)

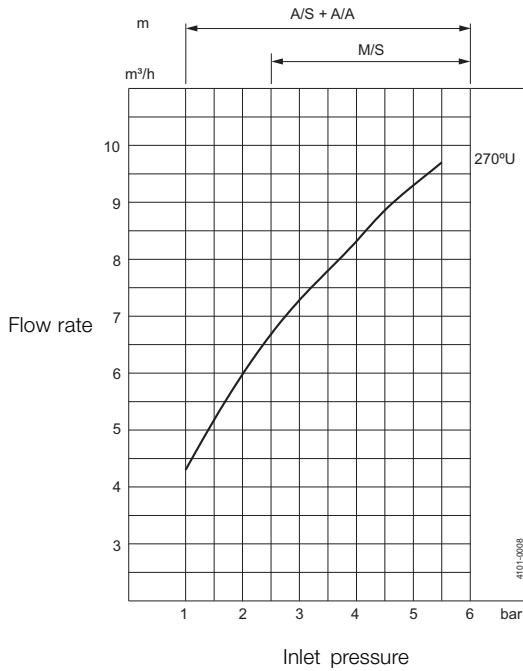
Documentation specification

- Equipment Documentation includes:
- EN 10204 type 3.1 Material Inspection certificate
 - Note! Product contacted parts only.
- Q-doc
- FDA Declaration of Conformity
 - ADI Declaration (TSE)
 - QC Declaration of Conformity

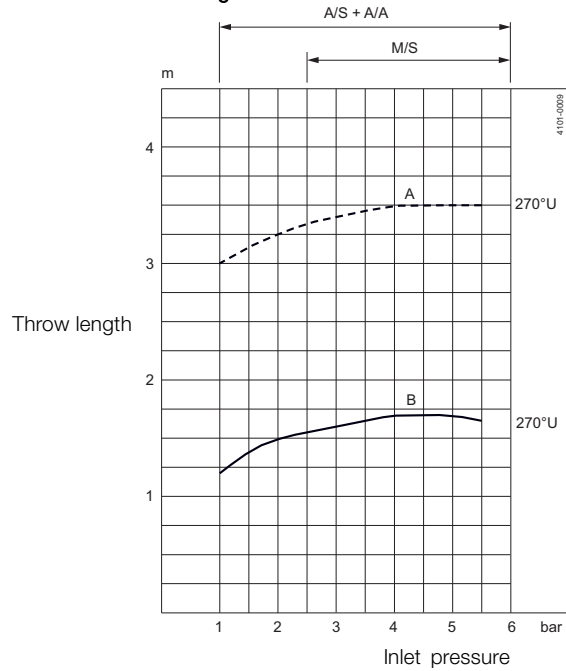
ATEX approved machine for use in explosive atmospheres.
 Category 1 for installation in zone 0/20 in accordance to
 Ex II 1 GD c T 188°C. Temp 0°C to 150°C

ATEX

Flow Rate



Cleaning Radius



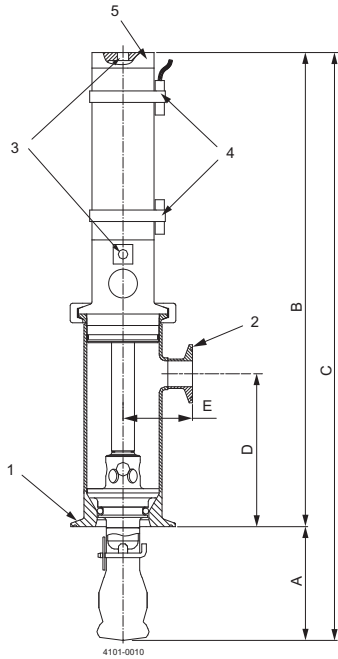
A: Wetting - B: Impact cleaning

A/S = Air/spring version

A/A = Air/air version

M/S = Media/spring version

Dimensions (mm)



Pneumatic driven

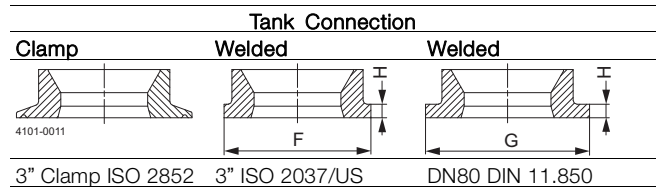
Stroke	A	B	C	D	E	F	G	H	Weight
100	100	409	509	133	58.5	∅76.1	∅85	7	5.6 kg
150	150	509	659	183	58.5	∅76.1	∅85	7	6.3 kg
250	250	709	959	283	58.5	∅76.1	∅85	7	7.4 kg

Media driven version + Pneumatic driven version with Spring return

Stroke	A	B	C	D	E	F	G	H	Weight
100	100	479	579	133	58.5	∅76.1	∅85	7	5.6 kg
150	150	609	759	183	58.5	∅76.1	∅85	7	6.3 kg
250	250	869	1119	283	58.5	∅76.1	∅85	7	7.4 kg

Connections

1. Tank connections
2. Cleaning media
1" Clamp ISO 2852
3. Air supply - pneumatic driven only
ISO 228-G 1/8
4. Option
Magnetic sensor
5. Adjustable valve - media driven only



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.