Does not interfere with production

Alfa Laval TJ SaniMidget Retractor, A Retractable Rotary Spray Head

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 or 3.1 material certificate or ATEX.

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

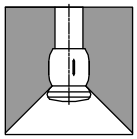
Pressure:
Recommended operating
cleaning fluid pressure: . . . . . 3 bar
Cleaning fluid pressure when
retracted: . . . . . Pressureless
Air supply pressure: . . . . . 2-5 bar

Pressure: Air to Air (AA)
Cleaning fluid pressure: . . . . . 1-5 bar
Tank pressure: . . . . . Vaccum to 10 bar
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: . . . . . Atm. to 10 bar
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: . . . . . Atm. to 10 bar
Purging possible: . . . . . Not supported - contact Alfa Laval

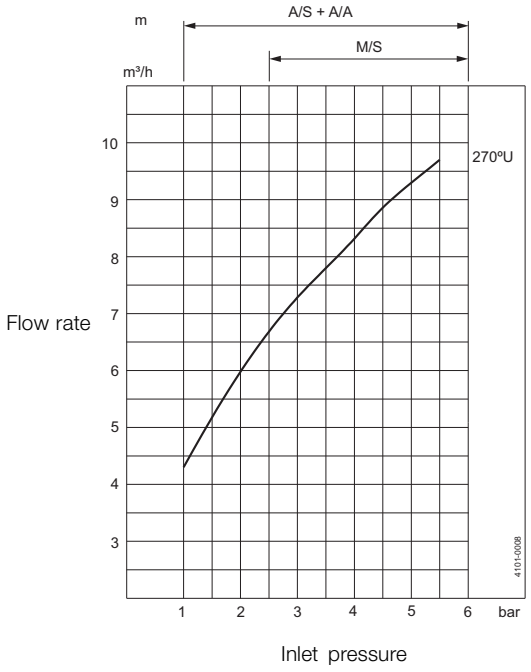
Spray Pattern



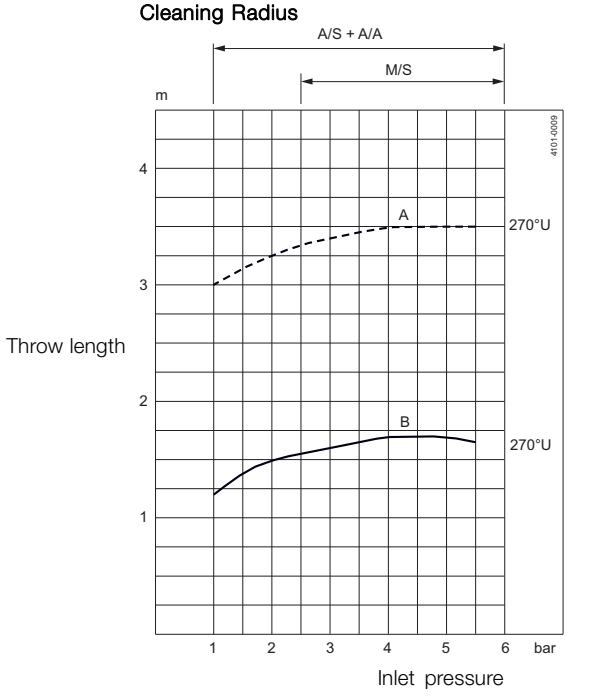
270° up

Standard Design
The Toftejorg SaniMidget Retractor is available in three stroke lengths: 100 mm, 150 mm and 250 mm, in either pneumatic- or media-driven versions.

Flow Rate



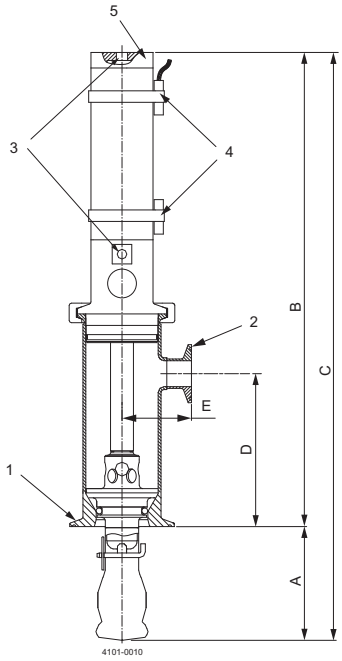
Cleaning Radius



A: Wetting - B: Impact cleaning

A/S = Air/spring version
A/A = Air/air version
M/S = Media/spring version

Dimensions (mm)



M/S & A/S

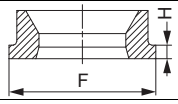
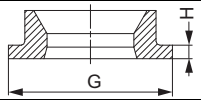
Stroke	A	B	C	D	E	F	G	H	Weight
100	100	505	605	133	ø76.1	ø85	7	60.5	5.0 kg
150	150	635	785	183	ø76.1	ø85	7	60.5	5.5 kg
250	250	895	1145	283	ø76.1	ø85	7	60.5	6.4 kg

A/A

Stroke	A	B	C	D	E	F	G	H	Weight
100	100	435	535	133	ø76.1	ø85	7	60.5	5.6 kg
150	150	535	685	183	ø76.1	ø85	7	60.5	6.3 kg
250	250	735	985	283	ø76.1	ø85	7	60.5	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

Tank Connection		
Clamp	Welded	Welded
		
3” Clamp ISO 2852	3” ISO 2037/US	DN80 DIN 11.850

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Contact details for all countries
are continually updated on our website.
Please visit www.alfalaval.com to
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