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## 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

Lubricant: . . . . . Self-lubricating with the cleaning media  
Wetting radius: . . . . . Max. 3.5 m  
Impact cleaning radius: . . . . . Max. effective 1.7 m  
Air quality:  
Clean, filtered: . . . . . max. 40µm  
Dry, dew point: . . . . . max. 10°  
Installation: . . . . . Please contact Alfa Laval for installation of the tank cleaning machine

#### Pressure: Air/spring and Air/Air

Working pressure: . . . . . 1-5 bar  
Recommended pressure: . . . . . 3 bar  
Air supply pressure: . . . . . 2-5 bar

#### Pressure: Media/Spring

Working pressure: . . . . . 2½-5 bar  
Recommended pressure: . . . . . 3 bar

#### 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

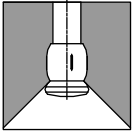
Weight: . . . . . See reverse page

##### 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

## Spray Pattern

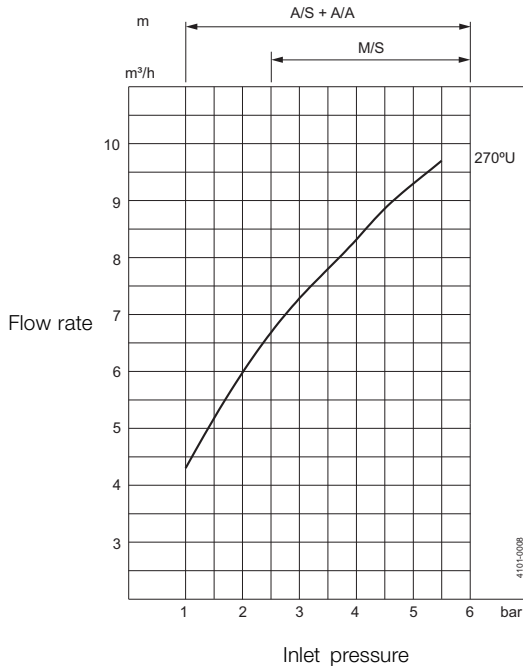


270° up

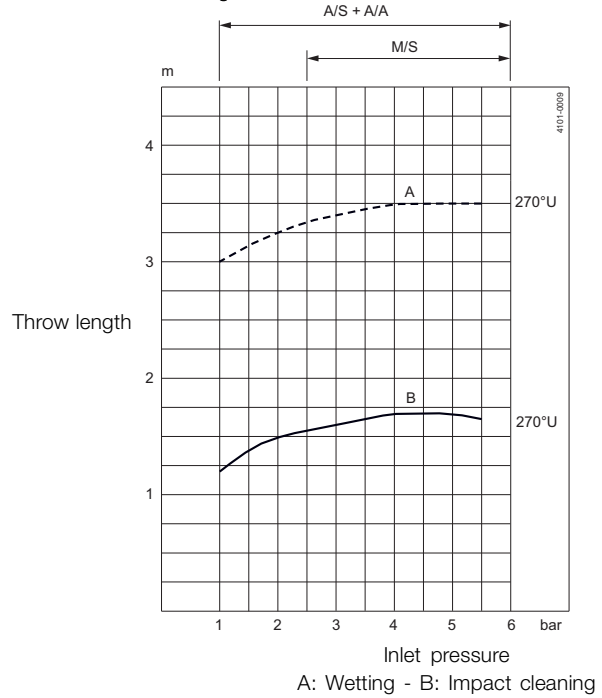
## Standard Design

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

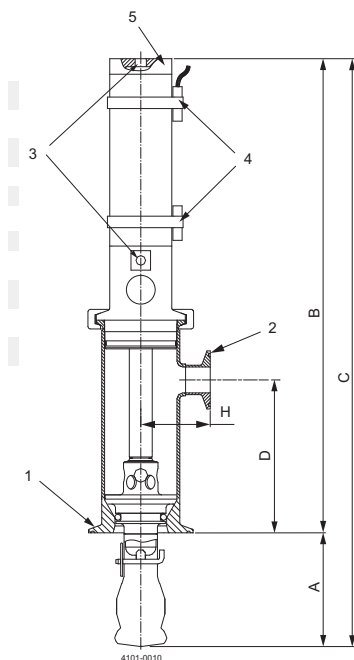


A/S = Air/spring version

A/A = Air/air version

M/S = Media/spring version

## Dimensions (mm)



### M/S & A/S

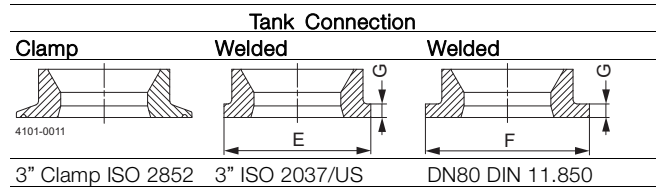
Stroke	A	B	C	D	E	F	G	H	Weight
100	100	505	605	133	∅76.1	∅85	7	60.5	5.0 kg
150	150	635	785	183	∅76.1	∅85	7	60.5	5.5 kg
250	250	895	1145	283	∅76.1	∅85	7	60.5	6.4 kg

### A/A

Stroke	A	B	C	D	E	F	G	H	Weight
100	100	435	535	133	∅76.1	∅85	7	60.5	5.6 kg
150	150	535	685	183	∅76.1	∅85	7	60.5	6.3 kg
250	250	735	985	283	∅76.1	∅85	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**



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