Does not interfere with production

Alfa Laval TJ SaniMidget Retractor, A Retractable Rotary Spray Head
Application
The Toftejorg SanMidget 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 SanMidget 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. 11 ft
Impact cleaning radius: .... Max. effective 5 ft
Air quality:
Clean, filtered: ........... max. 1575µin
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: ....... 14.5-73 PSI
Recommended pressure: .... 43.5 PSI
Air supply pressure: ........ 29-73 PSI

Pressure: Media/ spring
Working pressure: ........ 36.3-73 PSI
Recommended pressure: .... 43.5 PSI

Spray Pattern

270° up

Standard Design
The Toftejorg SanMidget Retractor is available in three stroke lengths: 3.94 inch, 5.91 inch and 9.84 inch, in either pneumatic- or media-driven versions.

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 32µin
Non product contact parts: .... Ra 64µin

Temperature
Max. working temperature: . . . 203°F
Max. ambient temperature: .... 304°F

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
Flow Rate

<table>
<thead>
<tr>
<th>Flow rate (GPM)</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet pressure (PSI)</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
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</table>

Cleaning Radius

<table>
<thead>
<tr>
<th>Throw length (Ft.)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet pressure (PSI)</td>
<td>50</td>
<td>60</td>
<td>70</td>
<td>80</td>
<td>90</td>
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</table>

Dimensions (inch)

<table>
<thead>
<tr>
<th>Stroke</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>3.9</td>
<td>19.0</td>
<td>23.8</td>
<td>5.2</td>
<td>3</td>
<td>3.35</td>
<td>0.28</td>
<td>2.4</td>
<td>11.0 lbs</td>
</tr>
<tr>
<td>150</td>
<td>5.9</td>
<td>25.0</td>
<td>30.9</td>
<td>7.2</td>
<td>3</td>
<td>3.35</td>
<td>0.28</td>
<td>2.4</td>
<td>12.1 lbs</td>
</tr>
<tr>
<td>250</td>
<td>9.8</td>
<td>35.2</td>
<td>45.1</td>
<td>11.1</td>
<td>3</td>
<td>3.35</td>
<td>0.28</td>
<td>2.4</td>
<td>14.1 lbs</td>
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</tbody>
</table>

A/A

<table>
<thead>
<tr>
<th>Stroke</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Weight</th>
</tr>
</thead>
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<td>100</td>
<td>3.9</td>
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<td>27.0</td>
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<td>3</td>
<td>3.35</td>
<td>0.28</td>
<td>2.4</td>
<td>12.4 lbs</td>
</tr>
<tr>
<td>150</td>
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<td>21.1</td>
<td>27.0</td>
<td>7.2</td>
<td>3</td>
<td>3.35</td>
<td>0.28</td>
<td>2.4</td>
<td>13.9 lbs</td>
</tr>
<tr>
<td>250</td>
<td>9.8</td>
<td>28.9</td>
<td>36.8</td>
<td>11.1</td>
<td>3</td>
<td>3.35</td>
<td>0.28</td>
<td>2.4</td>
<td>16.3 lbs</td>
</tr>
</tbody>
</table>

Connections

1. Tank connections
2. Cleaning media
   1" Clamp ISO 2562
3. Air supply - pneumatic driven only
   ISO 228-G 1/8
4. Option
   Magnetic sensor
5. Adjustable valve - media driven only

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