



Low Flow Saves on Water and Chemicals

Toftejorg SaniMicro Rotary Spray Head

ESE00331EN 0901

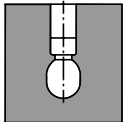
Application

The Toftejorg SaniMicro is a rotary spray head that uses cleaning media to provide coverage and impact. The device represents an effective alternative to traditional static spray balls because it uses low volumes of cleaning fluid at low pressure. The double ball bearing in the Toftejorg SaniMicro's rotating head makes the device suitable for all industrial cleaning applications, including tanks, reactors, vessels and other containers ranging from 0.05 to 1 m³ (10 - 250 US gallons), depending on dimensions and cleaning task.

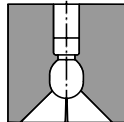
Working principle

The flow of the cleaning media causes the head of the Toftejorg SaniMicro to rotate, and the fan-shaped jets lay out a swirling pattern throughout the tank or reactor. This generates the impact needed for the efficient removal of residual product; the cascading flow covers all internal surfaces of the vessel.

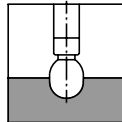
Spray Pattern



360°/360° Low Flow



270° up/270° up Low
Flow



180° down

Standard Design

As standard documentation, the Toftejorg SaniMicro can be supplied with a "Declaration of Conformity" for material specifications or 3.1.B certification for metallic parts. The device is available in an electropolished version as well as in hastelloy C22 (balls in hastelloy C276) with 3.1.B certification for metallic parts

ATEX approved, Category 1 for installation in zone 0/20

Qualification Documentation (Q-doc.)

In addition to the standard Declaration of Conformity per ISO 10474/2.2 (EN 10204/2.2), as optional we can offer a Pharma Qualification Documentation Package in accordance to ASME BPE 2007 consisting of:

1. Requirement Specification
2. Design Specification incl. Traceability Matrix
3. FAT, Factory Acceptance Test incl. QC Documentation, IQ & OQ
4. Declaration of Conformity per ISO 10474/3.1B (EN 10204/3.1)
5. FDA Declaration of Conformity per 21 CFR Part 177
6. Installation - Operation - & Maintenance Manual
7. SAT, Site Acceptance Test Protocols incl. IQ & OQ for End-Users Execution

Materials

Housing, Inlet connection, Head: 1.4404 (316L), Balls: 1.4404 (316L) + PTFE*



* FDA compliance 21CFR§177.

Technical Data

Weight:	.....	.75 g (0.2 lbs)
Lubricant:	.....	Self-lubricating with the cleaning fluid
Working pressure:	.....	.1 - 3 bar (14.5 - 44 psi)
Recommended pressure:	.....	.2 bar (29 psi)
Max. working temperature:	.....	.95 °C (203 °F)
Max. ambient temperature:	.....	.140 °C (287 °F)
Spray Pattern:	.....	.Cleaning pattern 360°, 360°LF, 270°, 270°LF, 180°D
Impact cleaning radius:	.....	.Max. radius 1m (3.28 ft)

Min. tank opening: 25 mm (1 inch) diameter (DN 25)
Connection: 3/8" Rp (BSP) or NPT thread, Clip-on or weld-on for pipe
Standard Surface finish: Ra0.5µm (20µ inch) exterior / Ra0.8µm (32µ inch) internal
Improved Surface finish: Ra0.5µm (20µ inch) exterior / Ra0.5µm (20µ inch) internal + Electro-polished

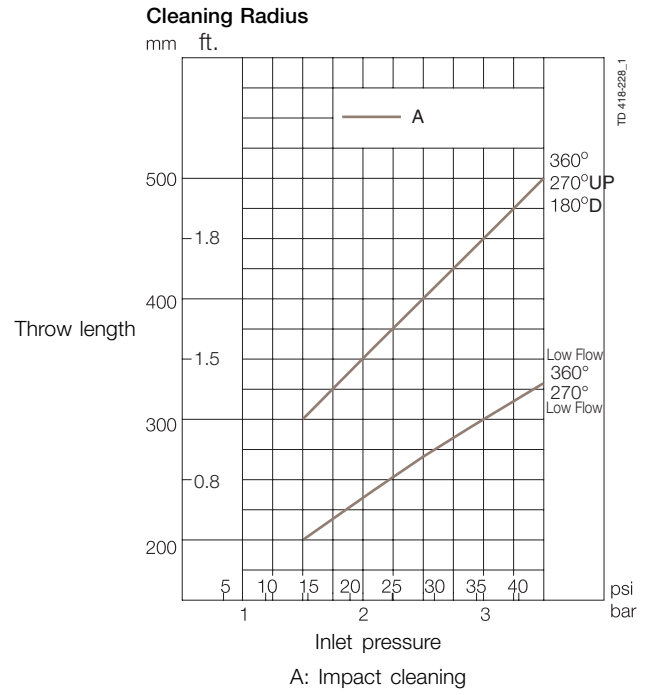
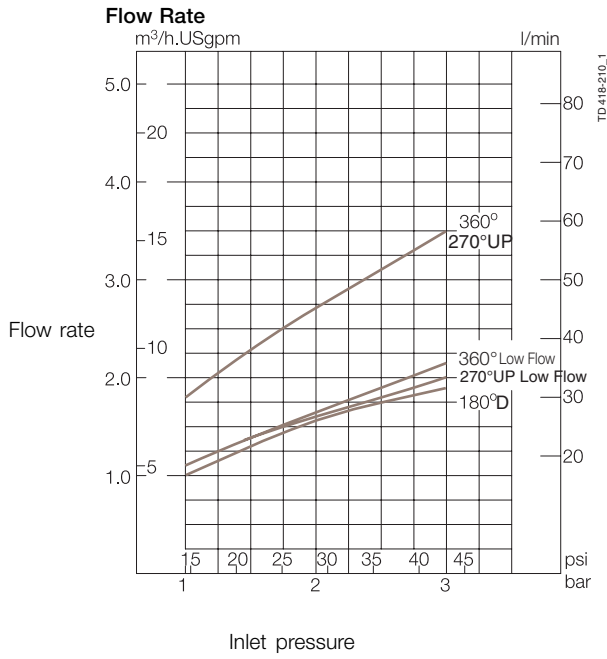
Ordering

Please specify desired spray pattern, required connections, material selection and type of certification required. Please also confirm the application suitability.

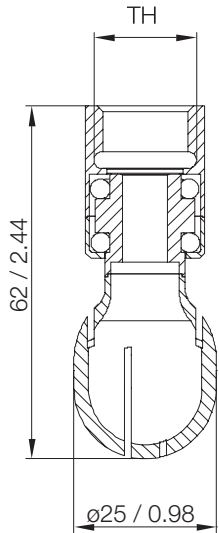
Sizing/selection and installation drawings are available in Alfa Laval's Selection Tools for Tank Cleaning Equipment.

Certificates

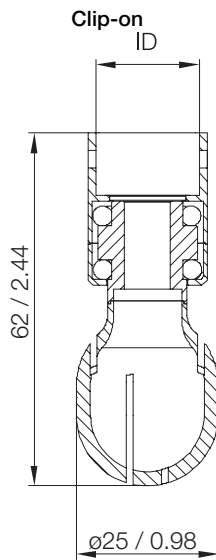
2.2 - 3.1.B - ATEX



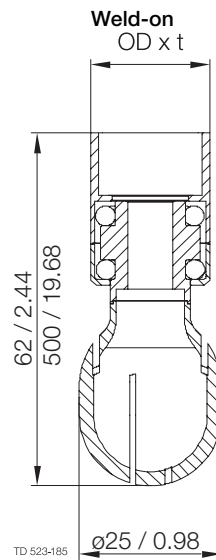
Dimensions (mm / inch)



TH
3/8" Rp
3/8" NPT



ID
ISO: ø17.4 mm
DIN Range 1: ø18.2 mm
BPE US / DIN Range 2 : ø19.2 mm (0.76 inch)



OD x t
ISO: ø17.2 x 1 mm
DIN Range 1: ø18 x 1 mm
DIN Range 2: ø19 x 1.5 mm
BPE US: ø19.05 x ø1.65 mm (0.75 x 0.065 inch)

ESE00331EN 0901

The information contained herein is correct at the time of issue,
but may be subject to change without prior notice.

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.