



Low Flow Saves on Water and Chemicals

Toftejorg SaniMicro Rotary Spray Head

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, 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.

Qualification Documentation (Q-doc)

Designed for the BioPharm and Personal Care industry for qualification of hygienic Tank Cleaning Machines. Developed in accordance with the ISPE V-model and GDP, Good Documentation Practice, and includes: RS (Requirement Specification); DS (Design Specification incl. Traceability Matrix); FAT (Factory Acceptance Test incl. IQ & OQ); 3.1 and USP Class VI Certificates; FDA Declaration of Conformity; TSE Declaration; QC Declaration of Conformity; SAT (Site Acceptance Test Protocol incl. IQ & OQ) for End-User Execution.

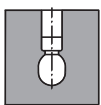
TECHNICAL DATA

Lubricant: Self-lubricating with the cleaning fluid
Wetting radius Max. 2.5 m
Impact cleaning radius: Max. effective 0.6 m

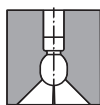
Pressure

Working pressure: 1-3 bar
Recommended pressure: 2 bar

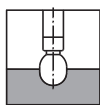
Spray Pattern



360°



270° up



180° down

Standard Design

As standard documentation, the Toftejorg SaniMicro can be supplied with a "Declaration of Conformity" for material specifications or 3.1 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 certification for metallic parts.

Certificates

2.2 material certificate, Q-doc, Q-doc incl. FAT & SAT and ATEX.



PHYSICAL DATA

Materials

AISI 316L (UNS S31603). PTFE*

* FDA compliance 21CFR§177.

Min. tank opening: 25 mm diameter (DN25)

Standard Surface finish:

exterior: Ra 0.5µm

internal: Ra 0.8µm

Improved Surface finish:

exterior: Ra 0.5µm

internal + Electro polished: Ra 0.5µm

Temperature

Max. working temperature: 95°C

Max. ambient temperature: 140°C

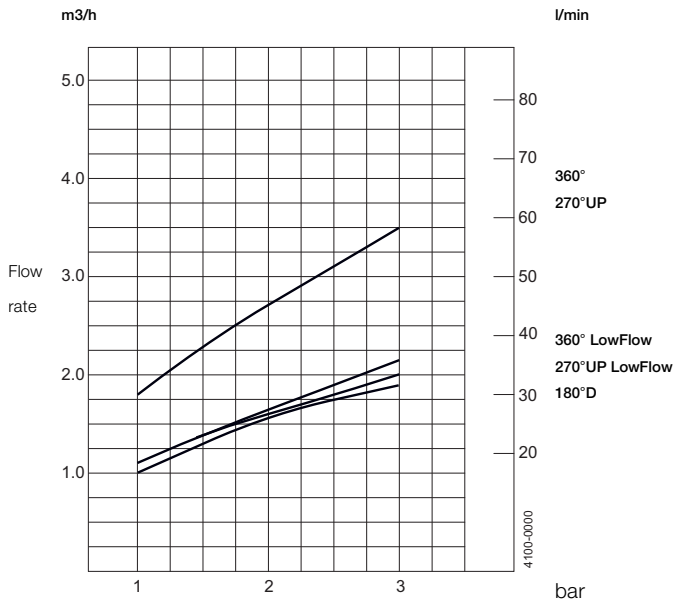
Weight: 75 g

Connections

- Thread: 3/8" Rp (BSP), or 3/8" NPT
- Weld-on: 3/4" ISO 2037, or DN15 DIN11850-R1 or R2, or 3/4" BPE US
- Clip-on: 3/4" ISO 2037, or DN15 DIN11850-R1 or R2, or 3/4" BPE US



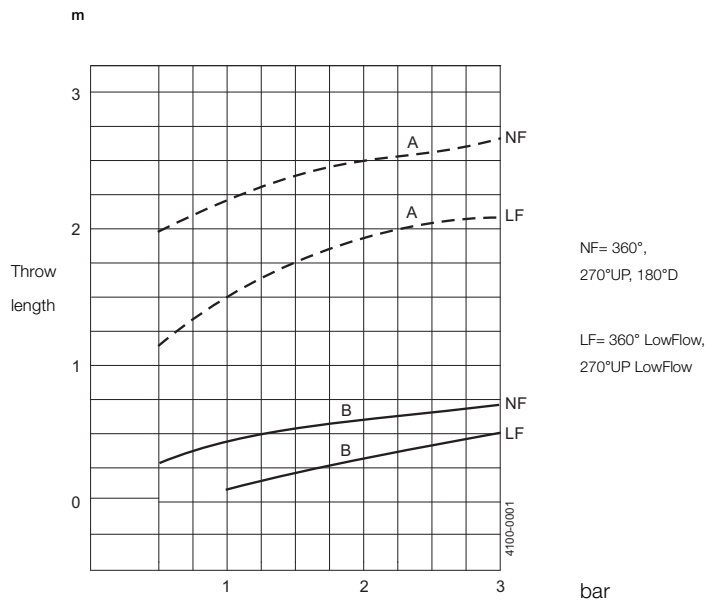
Flow Rate



Inlet pressure

For Clip-on models, the flow rate is increased by approx. 0.2 m³/h

Cleaning Radius

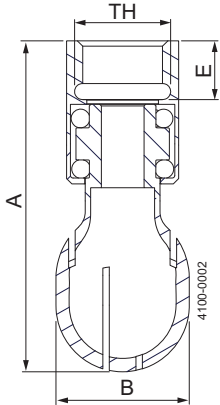


Inlet pressure

A: Wetting - B: Impact cleaning

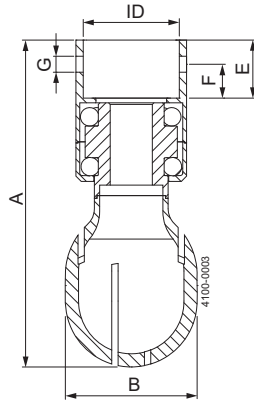
Dimensions (mm)

Thread



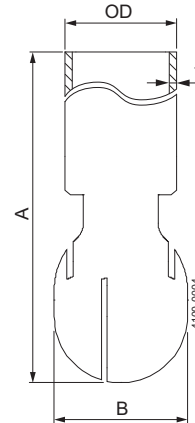
TH
3/8" Rp (BSP)
3/8" NPT

Clip-on



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

Weld-on



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

| Type | A | B | E | F | G |
|---------|--------|-----|----|-----|------|
| Tread | 62 | ø25 | 11 | | |
| Clip-on | 62 | ø25 | 11 | 5.9 | ø3.6 |
| Weld-on | 77.500 | ø25 | | | |

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