Low Flow Saves on Water and Chemicals

Alfa Laval TJ MultiMidget Rotary Spray Head

Application

The Toftejorg MultiMidget 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 MultiMidget's rotating head makes the device suitable for all industrial cleaning applications, including tanks, reactors, vessels and other containers ranging from 0.1 m^3 to 10 m^3, depending on dimensions and cleaning task.

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Working principle

The flow of the cleaning media causes the head of the Toftejorg MultiMidget 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. The MultiMidget are designed to be installed in any given angle.

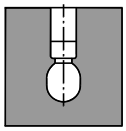
TECHNICAL DATA

Lubricant: . . . . . Self-lubricating with the cleaning fluid
Wetting radius: . . . . . Max. 3 m
Wetting radius: . . . . . Max. 10 ft
Impact cleaning radius: . . . . . Max. effective 1.4 m
Impact cleaning radius: . . . . . Max. effective 4 ft

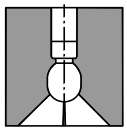
Pressure

Working pressure: . . . . . 1-3 bar
Working pressure: . . . . . 14.5 - 44 PSI
Recommended pressure: . . . . 2 bar
Recommended pressure: . . . . 29 PSI

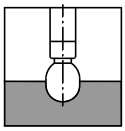
Spray Pattern



360°



270° up



180° down

Standard Design

As standard documentation, the Toftejorg MultiMidget can be supplied with a "Declaration of Conformity" for material specifications.

Certificates

2.1 material certificate.

PHYSICAL DATA

Materials

Inlet connections/Balls: . . . . .316 (UNS S31600)
Bearing race parts: . . . . . .Duplex steel (UNS S31803)
Head: . . . . . .316 (UNS S31603)
Standard Surface finish: . . . . .Ra 0.8µm exterior/ Ra 0.8µm internal
Standard Surface finish: . . . . .Ra 32µin outside / Ra 32µin inside

Temperature

Max. working temperature: . . .95°C
Max. working temperature: . . .203°F
Max. ambient temperature: . . .140°C
Max. ambient temperature: . . .284°F

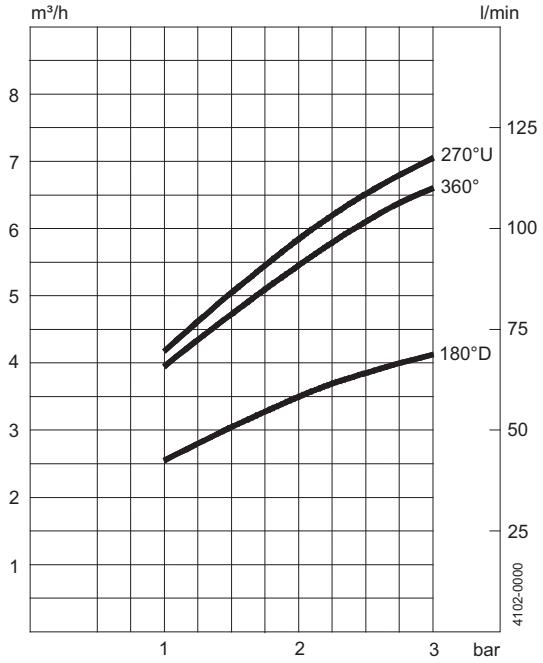
Weight

Thread: . . . . . .0.50 kg
Thread: . . . . . .1.1 lbs
On pipe: . . . . . .0.90 kg
On pipe: . . . . . .1.98 lbs

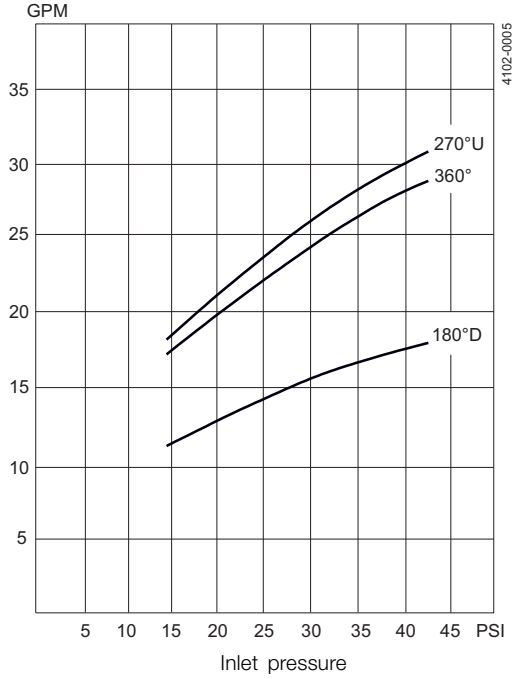
Connections

- Thread: 1/2" or 3/4" Rp (BSP) or NPT
- Weld-on: 1" ISO 2037 or DN25 DIN11850-R2
- Clip-on: 1" ISO 2037

Flow Rate



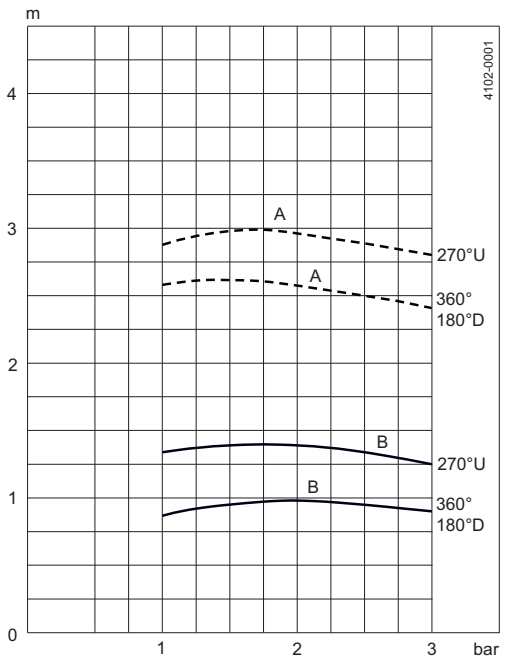
Flow rate



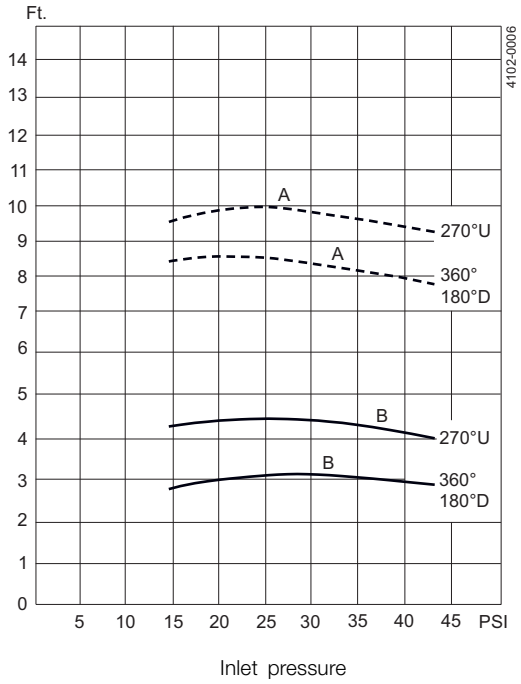
Inlet pressure

For clip-on models, the flow rate is increased by approx. 0.5m³/h.

Cleaning Radius



Throw length

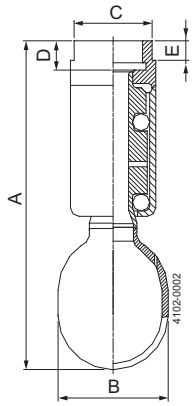


Inlet pressure

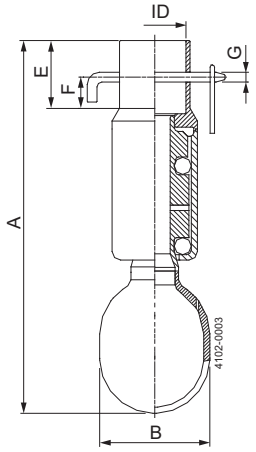
A: Wetting - B: Impact cleaning

For clip-on models, the flow rate is increased by approx. 0.65 yard³/h.

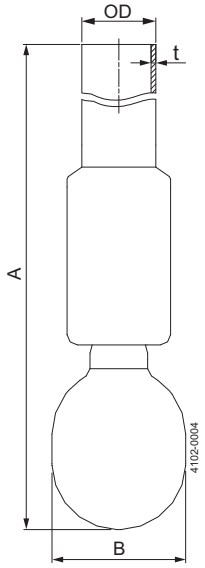
Thread



Clip-on



Weld-on



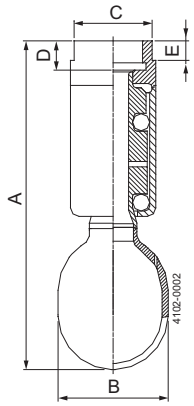
TH
1/2" Rp (BSP)
3/4" Rp (BSP)
1/2" NPT
3/4" NPT

ID
ISO : ø25.3 mm

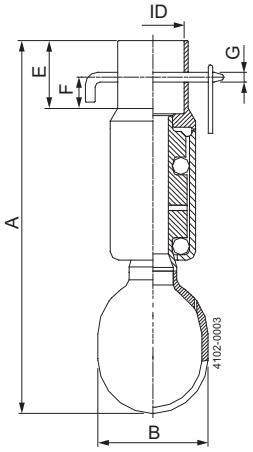
OD x t
Welded on pipe
ISO: ø25 x 1.6 mm
DIN Range 2: ø29 x 1.5 mm

Type	A	B	C	D	E	F	G
Tread	137(BSP), 150(NPT)	ø45	32	12(BSP) 25(NPT)	9(BSP) 22.5(NPT)		
Clip-on	155	ø45			30	15	ø4.2
Weld-on	500	ø45					

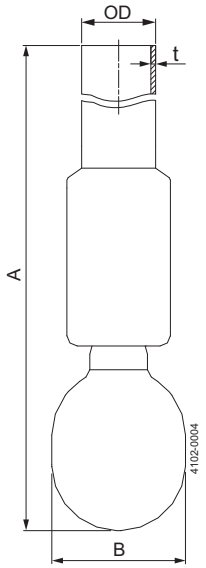
Thread



Clip-on



Weld-on



TH
1/2" Rp (BSP)
3/4" Rp (BSP)
1/2" NPT
3/4" NPT

ID
ISO : ø0.1 inch

OD x t
Welded on pipe
ISO: ø0.98 x 0.06 inch
DIN Range 2: ø1.14 x 0.06 inch

Type	A	B	C	D	E	F	G
Tread	5.39(BSP), 5.91(NPT)	ø1.77	1.26	0.47(BSP) 0.98(NPT)	0.35(BSP) 0.89(NPT)		
Clip-on	6.1	ø1.77			1.18	0.59	ø0.18
Weld-on	19.68	ø1.77					

ESE00330EN 1507

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