

# Alfa Laval MultiMidget

# Low Flow Saves on Water and Chemicals

# 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<sup>3</sup> to 10 m<sup>3</sup>, depending on dimensions and cleaning task.

#### 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

Impact cleaning radius: .... Max. effective 1.4 m

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

#### Spray Pattern









270° un

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)

Standard Surface finish: . . . . . Ra 0.8  $\mu$ m exterior/ Ra 0.8  $\mu$ m internal

FDA compliant

#### Temperature

Max. working temperature: ...95°C Max. ambient temperature: ...140°C

Weight

On pipe: . . . . . . . . . . . . . . . . . 0.90 kg

#### Connections

- Thread: 1/2" or 3/4" Rp (BSP) or NPT

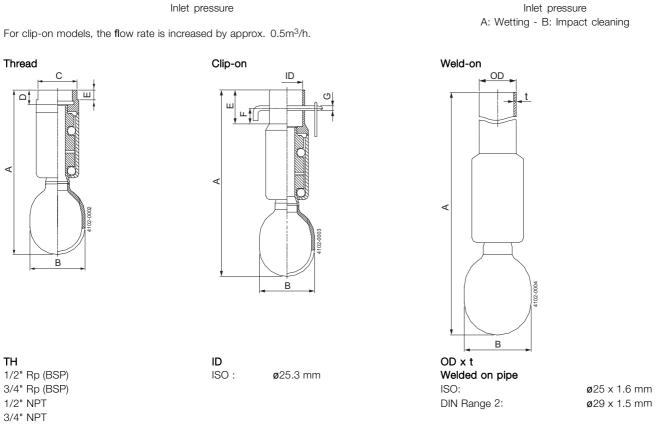
Weld-on: 1" ISO 2037 or DN25 DIN11850-R2

Clip-on: 1" ISO 2037

# Caution

Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

#### Flow Rate Cleaning Radius m³/h l/min 8 4 125 270°U 7 360° Α 100 3 6 270°U 360° 180°D 5 75 Flow rate Throw length 180°D 2 50 3 270°U 2 360° 180°D 25 1 4102-0000 0 2 3 bar 2 3 bar Inlet pressure Inlet pressure



Type	Α	В	С	D	E	F	G
Tread	137(BSP), 150(NPT)	<b>ø</b> 45	32	12(BSP) 25(NPT)	9(BSP) 22.5(NPT)		
Clip-on	155	<b>ø</b> 45			30	15	<b>ø</b> 4.2
Weld-on	500	<b>ø</b> 45					