

# Alfa Laval MultiMidget

## Rotary Spray Head

### Introduction

The Alfa Laval MultiMidget is a rotary spray head tank cleaning machine for hygienic environments. Designed to clean tanks from 1-10 m<sup>3</sup>.

The Alfa Laval MultiMidget minimizes the consumption of water and cleaning media. Easy to customize to meet customer requirements, the MultiMidget allows companies to spend less time cleaning and more time producing.

### Application

The Alfa Laval MultiMidget is designed for the removal of residues from hygienic tanks across the dairy, brewery, distillery, beverage, food, IBC (intermediate bulk container), personal care and many other industries.

### Benefits

- 40% faster cleaning = more time for production
- Saves up to 40% of your cleaning cost
- Dynamic cleaning performance and 360° full wetting
- Easy to retrofit traditional spray balls to a more economical solution
- Can be installed at any angle

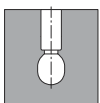
### Standard design

Different choice of spray pattern suitable for various applications and tank designs, ranging from simple tanks to more complex tanks with structure such as agitator and baffles. The MultiMidget is lubricated by the cleaning media.

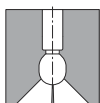
### Working principle

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

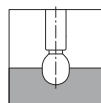
### Spray Pattern



360°



270° up



180° down



### Certificates

2.1 material certificate.



## TECHNICAL DATA

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

### Pressure

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

## PHYSICAL DATA

### Materials

|                          |  |
|--------------------------|--|
| Inlet connections/Balls: | 316 (UNS S31600)                       |
| Bearing race parts:      | Duplex steel (UNS S31803)              |
| Head:                    | 316 (UNS S31603)                       |
| Standard Surface finish: | Ra 0.8 µm exterior/ Ra 0.8 µm internal |

### Temperature

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

### Weight

|          |         |
|----------|---------|
| Thread:  | 0.50 kg |
| On pipe: | 0.90 kg |

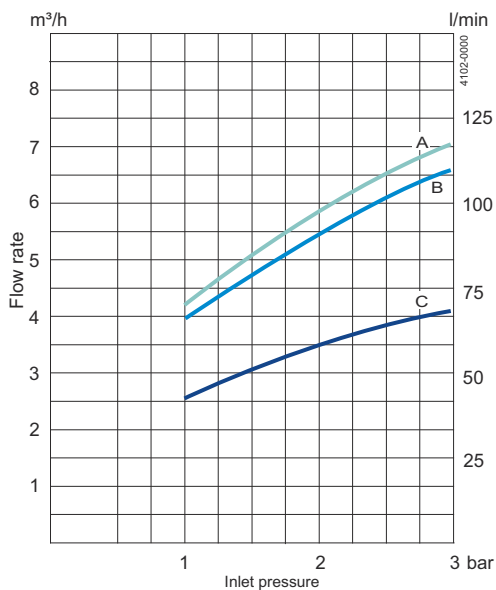
### Connections

- 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

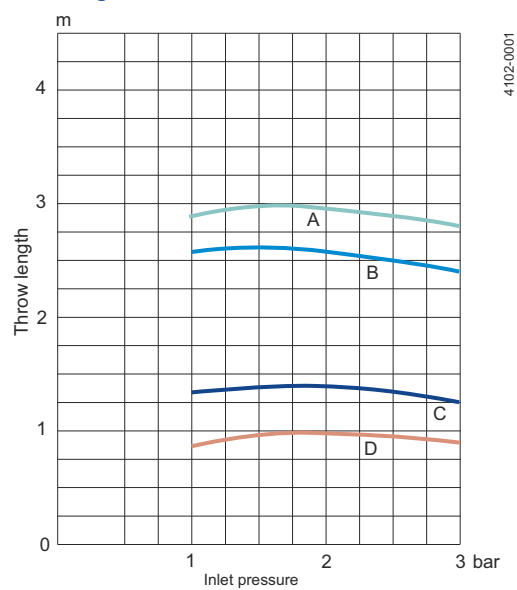
Avoid hydraulic shock, hard and abrasive particles in the cleaning liquid, as this can cause increased wear and/or damage of internal mechanisms. In general, a filter in the supply line is recommended. Do not use for gas evacuation or air dispersion. For steaming we refer to the manual.

## Flow Rate



A = 270° U  
B = 360°  
C = 180° D

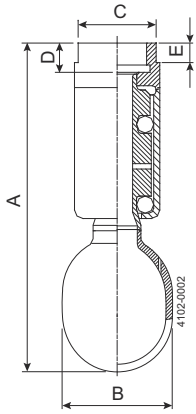
## Cleaning Radius



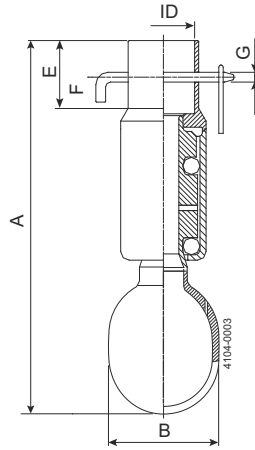
A = 270° U  
B = 360°  
180° D  
C = 270° U  
D = 360°  
180° D

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

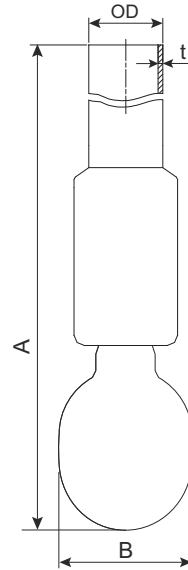
**Dimensions (mm)**



**Figure 1. Thread**



**Figure 2. Clip-on**



**Figure 3. 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 1.2 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 |    |                 |                  |    |      |

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