



## Product Data Sheet

Product : Rotating Spray Head  
Type : UBC

... Tank Cleaning Technology since 1925

The Butterworth Type UBC rotating spray head projects sheets of water on a variety of spray patterns, using low volumes of water with considerably higher fluid impact values when compared to conventional static spray balls.

### In Application

The Type UBC device can be used in hygienic and non-hygienic applications. The device is 100% self-rinsing. A variety of connection types are available and typically are installed permanently in a given tank or vessel. The Type UBC device can also be used on a portable basis when desired.

### Typical Applications include but not limited to...

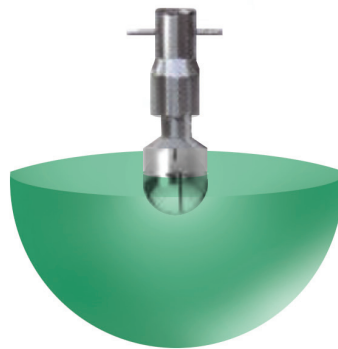
- Soup Kettles
- Yeast Propagation Tanks
- Batch Processing Vessels
- Fluid Bed Dryers
- Ink and Paint Mixing Vats
- Brew Kettles
- Storage Tanks
- Spray Dryers
- Commercial Ovens

### Operation

The flow of fluid through the Type UBC device will cause the projections of fluid through the fluid slots of the unit. This flow of fluid is at a slight angle to the radius of the ball and causes a transitional reaction. This reaction sets the ball in rotation. Rotation speed of the ball is relative to the fluid pressure exerted at the inlet of the device.



360°



180° Down



### General Specifications

#### Materials:

#### Race Housing:

- SAF2205 – Standard
- AISI 303 – Optional

#### Bearings:

- AISI 316 – Standard
- PTFE (Alternating) – Optional
- AISI 303 – Optional

#### Other Components:

- AISI 316 – Standard
- AISI 303 – Optional

See model number table for additional information on materials, or you may request a specification drawing from your Butterworth Sales Engineer for the selected model.

#### Weight:

- Clip-on : 0.68 lbs (0.309 kg)
- Threaded : 0.68 lbs (0.309 kg)

#### Lubrication:

- Lubricated by fluid flowing through the device

#### Pressure:

- Range : 0-105 PSI

#### Temperature:

- Maximum working : 205° F (96° C)
- Maximum static : 300° F (149° C)

#### Fluid Radius:

- Maximum effective : 11 feet (3.35 meters)

#### Connection Types:

- 1/2", 3/4", 1.00", 1.25" : NPT(F) threaded and clip-on

#### Surface Finish:

- Standard : 25-35 Ra  $\mu$
- Electropolished :  $\leq 20$  Ra  $\mu$

#### Certified Dimensional Drawing(s):

- DWG1636

Butterworth

### Butterworth, Inc.

16737 West Hardy Road, Houston TX 77060  
Phone: 281.821.7300 • Fax: 281.821.5550 • [www.butterworth.com](http://www.butterworth.com)



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### Type UBC - Part Number Designations

Nozzle Code	RF	Flow rates (gpm at various pressures (psi))				Angle AA	Max Throw MT	Weight W lbs.	Dimensions	
		30	45	75	105				L	DIA
UBC 2899 B3x	½"	19	24	31	43	360	80"	0.66	4 ½"	1 ¾"
UBC 2900 B3x	¾"	19	24	31	43	360	80"	0.66	4 ½"	1 ¾"
UBC 3120 B3x	1"	26	32	41	48	360	80"	1.3	4 ½"	1 ¾"
UBC 3300 B3x	1 ¼"	65	79	103	121	360	80"	1.5	5"	2 ⅜"

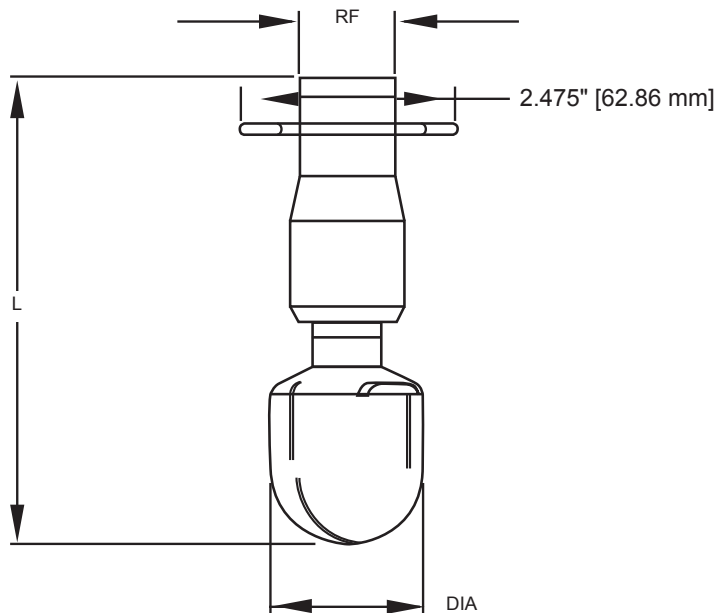
The UBC series is supplied either with a standard threaded female pipe connection or, for applications where frequent cleaning is required, a clip-on fitting, with a safety locking pin. To order the slip-on fitting, add the letter 'C' to the nozzle code shown in the table.

**Connection:** Female Thread  
(add 'N' to Nozzle code)  
Clip-on fitting  
(add 'C' to Nozzle code)

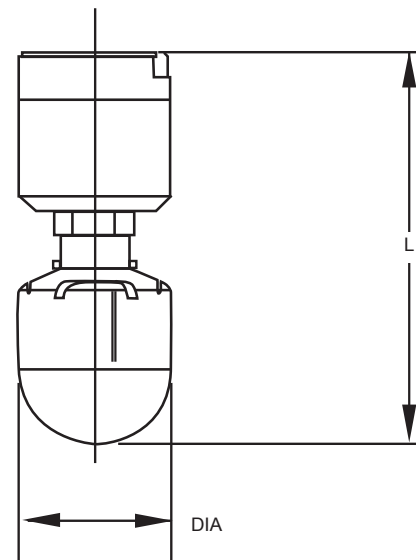
**Spray Angle:** 180° Down  
(add 'Z' to Nozzle code)  
360°  
(add 'S' to Nozzle code)

### General Dimensions - UBC Shown

Clip-On



Threaded



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