



## Product Data Sheet

Product : Rotating Spray Head  
Type : UBD

... Tank Cleaning Technology since 1925

The Butterworth UBD rotating spray head offers 360° coverage for the cleaning of the inside of small tanks, process vessels, pipes, and other small containers.

### Industries

The Butterworth UBD is designed to rinse vessels and tanks. As standard, made completely of high quality 316L stainless steel with a high polished finish. Typical industries are Food, Beverage, Fine Chemicals, Pharmaceutical, Paints and Coatings...as well as other applications where the stated output parameters are applicable.

### Operational

The Butterworth UBD rotary tank washing nozzles operate by liquid being injected under pressure through an annular series of holes and striking a specially designed disk-like free-spinning structure whose curvature is such that the impinging liquid causes the disk to rotate, flinging off drops in the process. The bearing surfaces are Teflon, which promotes long-term reliability.

The series of nozzles produces smaller drops and develops less impact than some other types of single-axis rotary nozzles (ie UBC). However, there are distinct advantages in applications where the cleaning does not involve hard-to-remove residues. The washing cycle is generally short compared to other designs so that liquid usage is minimized. Moreover, the orifices through which the liquid flows are quite large, minimizing clogging.



### General Specifications

#### Materials:

#### Race Housing:

- All : 316L Stainless Steel

#### Weight:

- See reference table below

#### Lubrication:

- Lubricated by fluid flowing through the device

#### Pressure:

- Range : 0-100 PSIG (0-13.79 bar)
- Optimal : 60 PSIG (4.13 bar) (Optimal will vary on the application)

#### Temperature:

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

#### Connection Types:

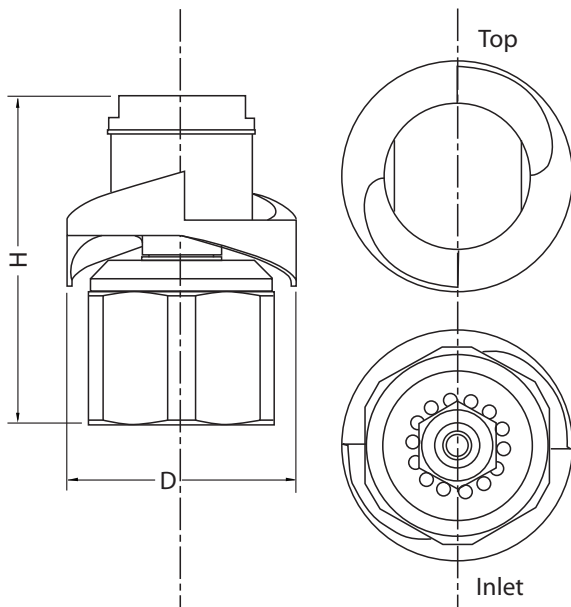
- See reference table below

#### Surface Finish:

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

#### Nominal Wetting Radius:

- UBD0090 : 8.20 Feet (2.59 meters)



### Type UBD - Standard Model Reference Table

(Custom configuration and other material on request)

Nozzle Code	RF	Flow rates (gpm at various pressures (psi))				Spray Pattern	Connection	Weight lbs./ (kg)	Dimensions			
		15	30	45	60				H		D	
									Inches	mm	Inches	mm
UBD 0090 B3 IEN	3/4"	13	19	23	27	360	0.750 N" NPT (F)	1.0 (.45)	2.250	57.10	1.500	38.100

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