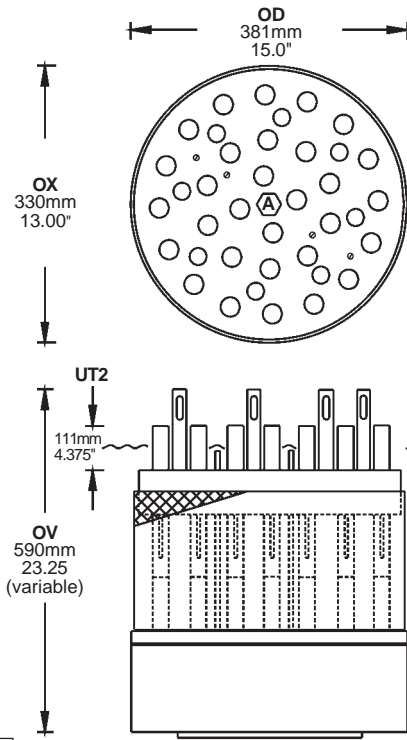


# PEM 107A

## FOAM COLUMN SPRAYHEAD

#505-9100



**DIMENSIONS:**

OX	330mm\13.000"
OV	590mm\23.250(Variable)
OD	381mm\15.000"
UT	432mm\17.000"
UT2	111mm\4.375"
SS	8mm\0.325"
T	4" or 6" (see below)

**PEM107A**  
**505-9110 / 107A-1:** 4" NPS/BSP  
**505-9120 / 107A-2:** 4" ASA/BSP Flange  
**505-9130 / 107A-3:** 6" ASA/BSP Flange  
 Suggested feed pipe size  
 for sprayheights:  
 Below 4.5m/15Ft: 4"  
 Above 4.5m/15Ft: 6"

See back of catalog for strainer sizing. This fountain head must only be operated with proper suction straining (SS).

**PEM 107A Foam Column Sprayhead** produces a massive 'White Water' column with a 'Mushroom Top'. This foam column is waterlevel dependent and must only be installed into pools, that are specially designed and built to prevent surge action of the water in the pool.

A surge wall with an approximate inside diameter of 75% of the spray height of the jet, terminating approximately 12mm/0.50" below waterlevel, must surround the perimeter of the falling spray to prevent it from oscillating due to surging. The surge wall must have small openings at the base to permit the balancing of waterlevels. The depth of the pool outside of the surge wall does not influence the sprayhead.

Installation depth of pool for this sprayhead must be not less than appr. 1.0m or 3 feet. The sprayhead must be securely mounted upon a metal pipe, the weight of the sprayhead is app. 100 kg\220lbs to which must be added the back thrust of the jets. The suction intake of the pump operating the sprayhead must be protected from falling spray introducing air into the suction flow (Use greatest possible waterdepth plus anti vortex cover over suction intake!).

**PERFORMANCES:**

V	FL	MC
m	L	m
2.0	1340	11.0
3.0	1500	21.0
4.0	1670	28.0
5.0	1820	34.0
6.0	1990	38.0
8.0	2190	46.0
10.0	2410	52.0
12.0	2580	58.0
15.0	3100	66.0
Ft	G	Ft
8	375	50
10	397	69
12	426	89
15	468	102
20	526	125
30	600	161
40	682	194
50	793	217

The use of a PEM 08 Series Adjustment Flange 4" or 6" in riser pipe is recommended for perfect vertical alignment of sprayhead.

A built in, after installation, adjustment (A) permits the adjustment of dimension **UT2** that controls the water to air ratio of the foam produced.

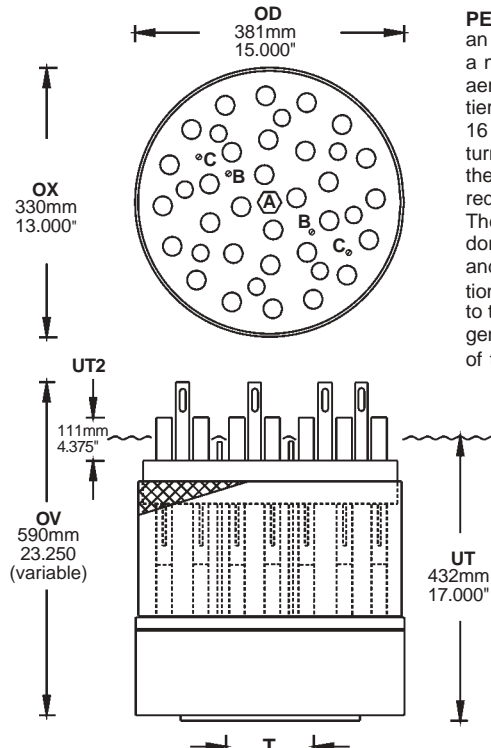
The spray effect can be adjusted to an app. 50% higher by increasing **UT2** and lighter spray effect or to a 50% heavier and lower spray effect by decreasing **UT2**.

Performances can be highly variable due to air/water ratio adjustment

# PEM 107B

## FOAM PINNACLE SPRAYHEAD

#505-9210



**DIMENSIONS:**

OX	330mm\13.000"
OV	590mm\23.250(Variable)
OD	381mm\15.000"
UT	432mm\17.000"
UT2	111mm\4.375"
SS	8mm\0.325"
T	4" BSP/NPS

See back of catalog for strainer sizing. This fountain head must only be operated with proper suction straining (SS).

**PEM 107B Foam Pinnacle Sprayhead** was designed to create an impressive, white water sculpture effect for confined areas with a minimum of noise and splash. The spray effect consists of 30 aerating jets arranged in a three tier spray effect with the center tier of 4 jets, an intermediate ring of 10 jets and an outer ring of 16 jets. The center tier drops into the intermediate tier which in turn drops into the bottom tier, reducing the actual fall height of the spray to 1/3 or less of its overall height with consequent reduction of splash and noise.

The sprayhead is shipped without tiers adjusted, which must be done after installation to suit requirements. The intermediate and peripheral rings of jets are height adjustable after installation (**B**) & (**C**), the center effect is supply controlled. In addition to the flow adjustments of the rings, the air/water ratio of the foam generated by the sprayhead can be altered by raising or lowering of the air chamber (**A**).

Suggested minimum water depth for installation = 0.8m / 31 inches, the sprayhead weighs appr. 100 kg \ 220 lbs, it has to be securely mounted on metal pipe. For perfect vertical alignment use **PEM 08-9**, 4" ADJUSTMENT FLANGE in the pipe under the jet.

The pool into which the **PEM 107B** is to be installed must have a constant waterlevel, fluctuating not more than 12mm / 0.5 inch. Use PEM water make up controls to maintain a constant waterlevel.

**PERFORMANCES:**

V	FL	MC
m	L	m
3.0	850	11
3.0	1000	21
4.0	1440	29
5.0	1650	34
6.0	1800	38
Ft	G	Ft
8	230	50
10	265	69
12	349	86
15	410	102
20	476	125

Performances (1991) are for the shown **UT2** airbox immersion and highly variable due to height as well as air/water ratio adjustments.

Adjustment (**A**) varies dimension **UT2**, by increasing it, the spray effect will be lighter and higher, by decreasing it, the spray effect will be heavier and lower.

Adjustment (**B**) varies the sprayheight of the middle and peripheral tiers.

Adjustment (**C**) varies the sprayheight of the peripheral tier.