

ABS Nopon tube diffuser system HKP 600

Tube diffusers with a porous plastic outer tube for reliable and energy-efficient finebubble aeration of any type of tank. Especially suitable for continuous or intermittent aeration systems where discs or membrane based tube diffuser cannot be used.

Major applications

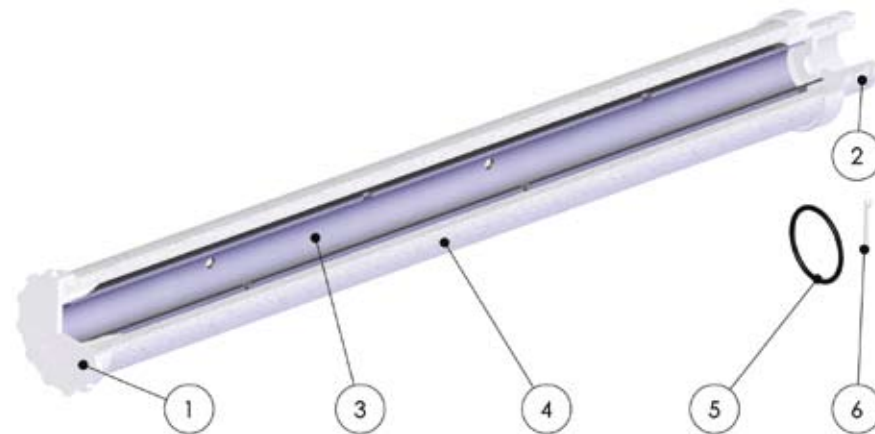
- Small treatment plants
- Aerated channels
- Narrow tanks designed for liftable systems
- Sludge aeration of small tanks
- Simple liftable systems
- Fish farming
- Sand removal

Diffuser design

The tube diffuser includes a connector, a perforated inner tube, a cap and a porous mantle over the inner tube. The mantle is forced tight into a ring-shaped groove in the connector by screwing the cap.



Components and materials



	Description	Material
1	End cap	PP (polypropylene)
2	Connector	PP
3	Inner tube	PP
4	Porous mantle	HDPE (High Density PolyEthylene) sintered
5	O-Ring	EPDM
6	Clip	Stainless steel

Model range

The diffuser can be attached by screwing it into a metal junction welded to the manifold. The thread on the junction should be BSP1. When this type of attachment is used, the diffuser model is HKP 600 S

Attaching can also be done by pushing the diffuser's connector into a plastic cross junction and locking it with a clip. For this type the diffuser model is HKP 600 SP.

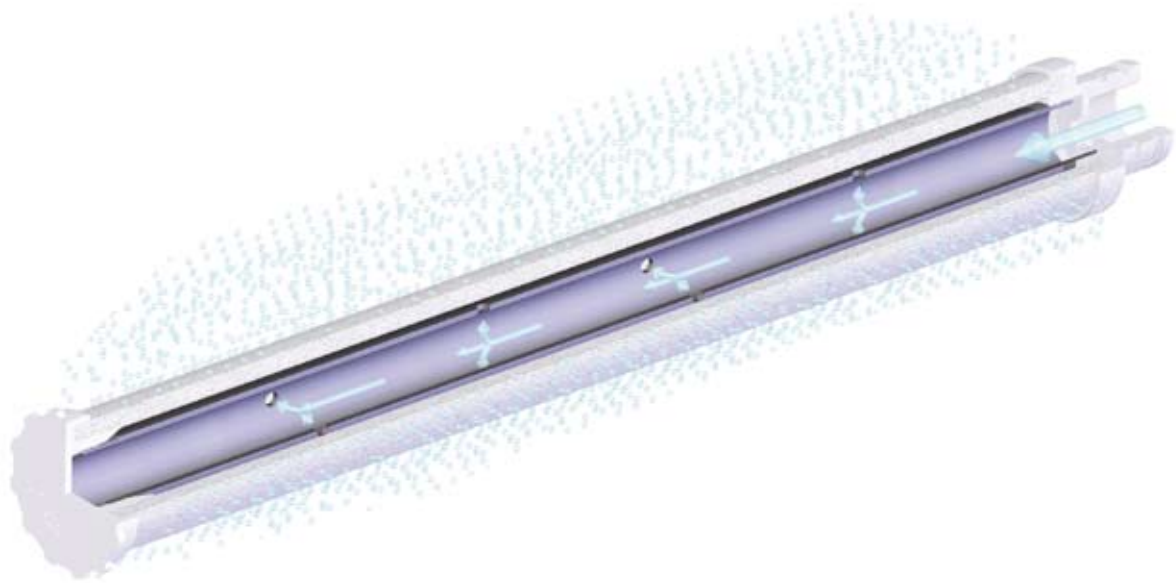
	HKP 600 S	HKP 600 SP
Fitting	Thread BSP 1	Thread BSP 1 / Push-in
End cap	HTP 67	HTP 67
Connector	HKK 67/1 BSP 1	HKK 67/1 BSP 1
Inner tube	HTU 583	HTU 583
Porous mantle	MPU 585	MPU 585
O-Ring	-	HOR 67
Clip	-	HSK 67

Working principle

The compressed air enters the diffuser through the connector. Besides passing air through to the mantle, the holes in the inner tube act as a choke to even out the air flow if the diffuser is not

complete horizontal.

The porous mantle contains pores. The air forms small bubbles, when released through the mantle surface.



Diffuser data

Design air flow range	3-20 m ³ /h/diffuser ^{lx} (+20 °C; 1 013 mbar)
Air temperature, max	+ 100°C
Max/min assembly depth	2 – 7 m (optimal) ^{lxx}
Diffuser length	630 mm
Effective length	585 mm
Mantle diameter	67 mm
Mantle surface area	0,119 m ²
Size of bubbles	1 - 3 mm
Diffuser weight	1,115 kg

^{xl} A peak value of 25 m³/h can be used for max. of 15 min only e.g. for cleaning the membrane.

^{xxl} Consult ABS on depths outside the range.