

# FINE BUBBLE DISC DIFFUSER

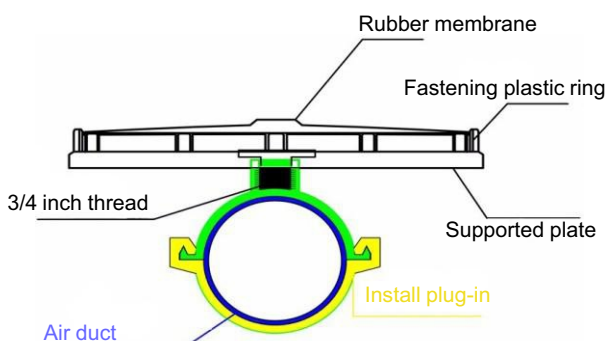
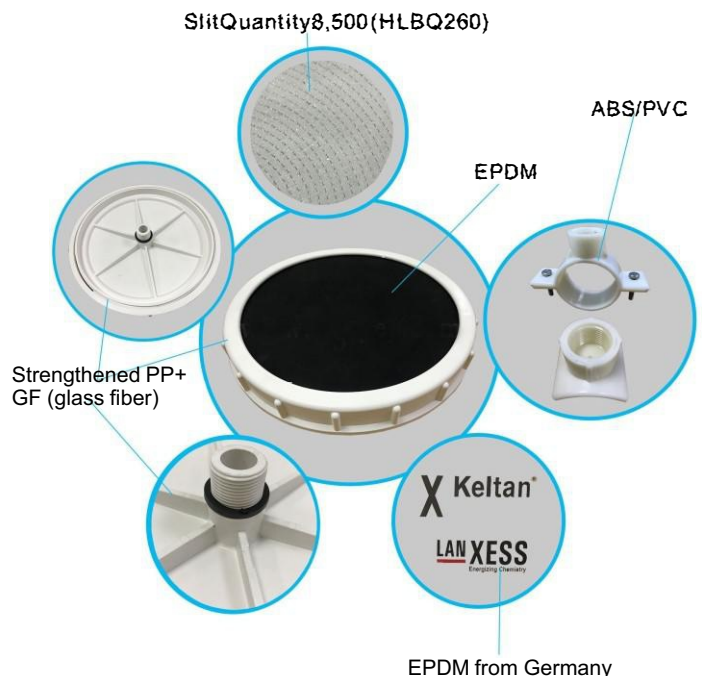
## Product Introduction

Fine BubbleDisc Diffuser features a unique split pattern and slit shapes, which can disperse for high oxygen transfer efficiency. A much highly effective and integrated check valve enables the aeration zones to be easily shut down for air-on/air-off applications. The membrane disc diffuser can be operated over wide range of airflows with minimum maintenance for long term performance.



## Features

- Low resistance loss
- Highly Tear Resistant
- Anti-clogging, anti-backflow
- Ageing-resistant, anti-corrosion
- High efficiency, energy-saving



Schematic diagram of aeration installation

### Different Membrane Material of Diffuser

#### 1. EPDM

Epdm can resist heat, light, oxygen, especially ozone. Epdm is essentially non-polarity, polarity solution and chemical resistant, bibulous is low, it has good insulating properties.

#### 2. Silicon

Insoluble in water and any solvent, non-toxic and tasteless, chemical properties stable, except strong alkali, hydrofluoric acid not react with any material.

#### 3. PTFE

- High and low temperature resistant, working temperature can be 250°C, good mechanical toughness; even if temperature drops to -196°C also can keep 5% elongation.
- Corrosion - resistance to most chemical and solvents, showing inertia, strong acid resistance,
- water and various organic solvents.  
High lubrication - the lowest friction coefficient in solid materials.
- Non- adhesion - is the smallest surface tension in a solid material and does not adhere to any substance.

### Technical parameters

Model	HLBQ170	HLBQ215	HLBQ260	HLBQ350
Picture				
Bubble Type	Coarse bubble	Fine bubble	Fine bubble	Fine bubble
Size	6 inch	8 inch	9 inch	12 inch
Bubble Size	4-5mm	1-2mm	1-2mm	1-2mm
MOC (Material of construction)	EPDM/Silicon/PTFE membrane ABS carrier plate	EPDM/Silicon/PTFE membrane Strengthened PP+GF (Glass Fiber) carrier plate	EPDM/Silicon/PTFE membrane Strengthened PP+GF (Glass Fiber) carrier plate	EPDM/Silicon/PTFE membrane ABS carrier plate
Connector	3/4" NPT male thread	3/4" NPT male thread	3/4" NPT male thread	3/4" NPT male thread
Design Flow	1-5m³/h	1.5-2.5m³/h	3-4m³/h	5-6m³/h
Flow Range	6-9m³/h	1-6m³/h	1-8m³/h	1-12m³/h
SOTE (Standard Oxygen Transfer Efficiency)	≥10 % (6M Submerged)	≥38 % (6M Submerged)	≥38 % (6M Submerged)	≥38 % (6M Submerged)
SOTR (Standard Oxygen Transfer Rate)	≥0.21kg O <sub>2</sub> /h	≥0.31kg O <sub>2</sub> /h	≥0.42kg O <sub>2</sub> /h	≥0.75kg O <sub>2</sub> /h
SAE (Standard Aeration Efficiency)	≥7.5kg O <sub>2</sub> /kW.h	≥8.9kg O <sub>2</sub> /kW.h	≥8.9kg O <sub>2</sub> /kW.h	≥8.9kg O <sub>2</sub> /kW.h
Headloss	2000-3000Pa	2000-4500Pa	2000-4300Pa	2000-4200Pa
Service Area	0.5-0.8m²/pcs	0.2-0.64m²/pcs	0.25-1.0m²/pcs	0.4-1.5m²/pcs
Service Life	> 5 years	> 5 years	> 5 years	> 5 years