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RSD / RCD

HIGH PERFORMANCE FINE BUBBLE DISE DIFFUSER



APPLICATION

1. Aeration for SBR reaction basin, contact oxidation pond, and activated sludge aeration basin in sewage disposal plant;
2. Aeration for denitrification / dephosphorization aerobic processes;
3. Aeration for excreta and animal wastewater treatment plant;
4. Aeration of deep aeration basin;
5. Aeration for high concentration wastewater aeration basin, and aeration for regulating pond of wastewater treatment plant;
6. Aeration of fishpond and other applications.

FEATURES

1. High Oxygen Transmission Efficiency (OTE)The pores on the EPDM membrane are almost 100% even, tiny air bubbles of 1-3mm are formed (the air bubbles are petty and even with the sewage water is increased, so the oxygen transmission efficiency is high. Under the best ventilation capacity, the average oxygen transmission efficiency for every meter of water depth is up to more than 6%.
2. Good effect on saving in power, and low operating cost Because of the high oxygen transmission efficiency, low powered blower can satisfy the oxygen volume required by aeration process. As a result, power is saved, operating cost is decreased, and the cost is reduced.
3. Excellent counterflow prevention function The back stops are all equipped with valves to avoid counterflow when the air transmission is broken off, enabling the pores to shut smoothly and applicable to intermittent operation. Its unique and even air vents can lead the airflow effectively, and can prevent sewage water from flowing into the aerator pipeline effectively.
4. Long guaranteed life EPDM membrane is a special elastomeric polymer with high nondeformability and anti-tearing index. The membrane is made at even thickness with small pressure. Special processing technology is used to overspread 6000 micro-pores on the surface of the membrane. Under running condition the air bubbles rise with spiral whirlpool, giving self-purification ability to the membrane. The life of the membrane under normal use is guaranteed for 5 years, but usually it is necessary to use it together with the water removal system.
5. Unique ring seal The aeration head tightening ring provides tight sealing effect between the aeration head base and the membrane washer-the higher the air pressure, the better the sealing effect.
6. Easy installation PVC soft connector can be installed directly without any other auxiliary tools. The operation is easy and convenient.

PERFORMANCE PARAMETERS

TYPE	Dia. of Disc (mm/inch)	Bubble size (mm)	Air-flow (m ³ /inch)	Service Area (mm ²)	Operating Temp(Max) (°c)	Check Valve	Connection (mm/inch)	Weight (kg)
RCD 245	245 / 10"	1 - 3	1.0 - 7.2	0.05	95	Yes	20 (3/4")	0.75
RSD 245	245 / 10"	1 - 3	1.0 - 7.2	0.05	85	No	20 (3/4")	0.6
RSD 330	330 / 12"	1 - 3	1.0 - 12.0	0.08	95	No	20 (3/4")	0.85

MESTER PART PARAMETERS

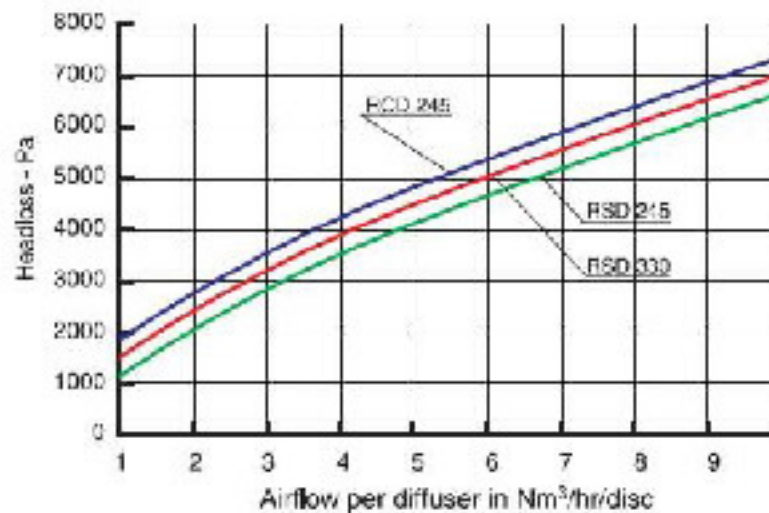
Membrane

1. Material: ethylene propylene diene monomer (EPDM)
2. Thickness: 2.0mm+0.15mm
3. Tensile strength: 13.9MPa(ASTM D412)
4. Maximum extensibility: 650% (ASTM D412)
5. Tearing toughness: 54kgf/cm² (ASTM D624 Die c)
6. Rigidity: 52 DUROMETER A (ASTM D2240)
7. Ultimate ethylene: 700%
8. Ozone resistance: Pass
9. Uv resistance: Pass

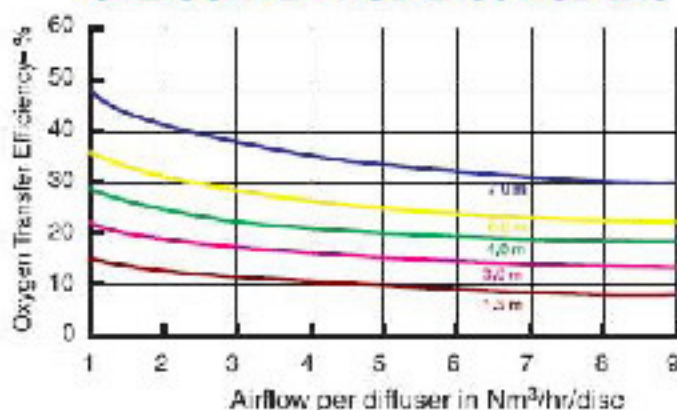
Disc Base

1. Material: propylene (PP)
2. Specific Gravity: 0.905
3. 120D Impact Strength: 15.5kg-m/cm
4. Tensile Strength: 27.89MPa (ASTM D412)
5. Tensile Elongation: 9%
6. Maximum Temperature: 100 °C

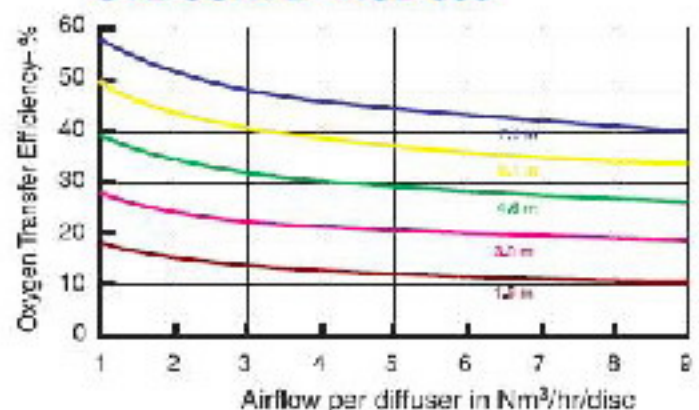
HEADLOSS CURVE



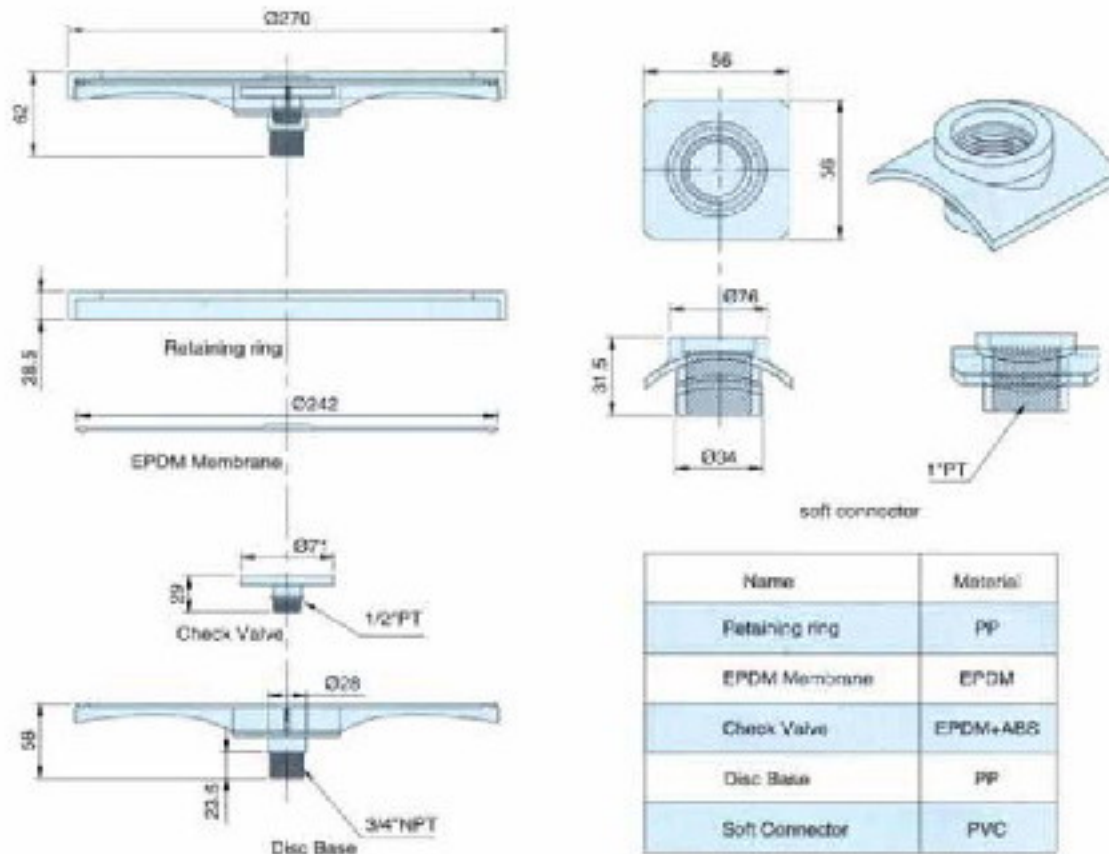
OTE CURVE - RCD 245 / RSD 245



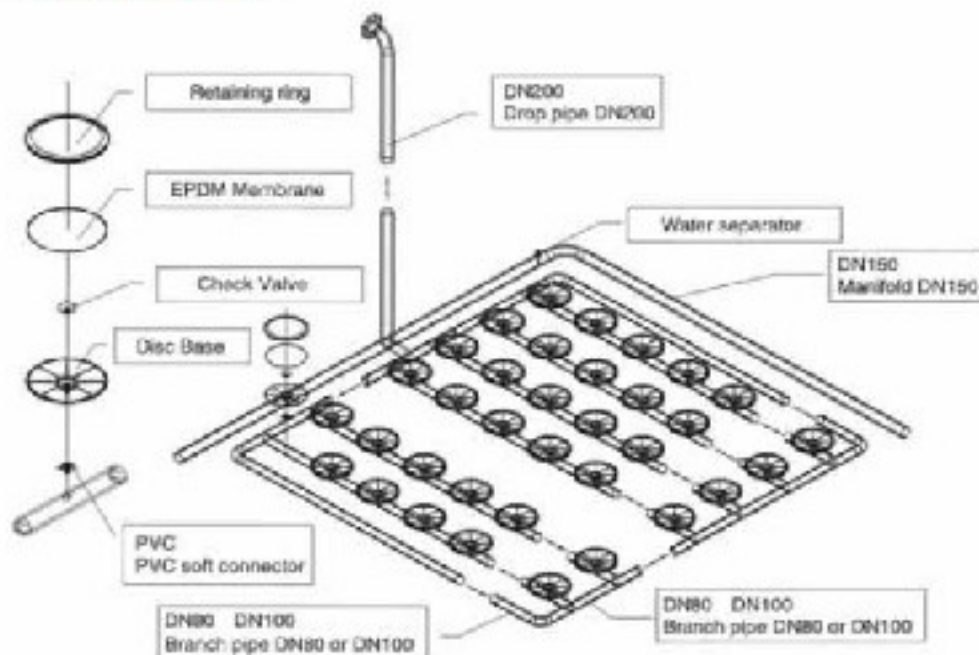
OTE CURVE - RSD 330



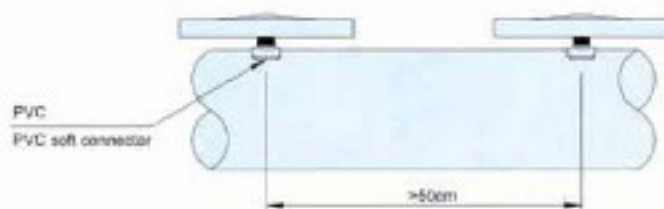
CONSTRUCTION (e.g. Model: RCD 245)



INSTALLATION



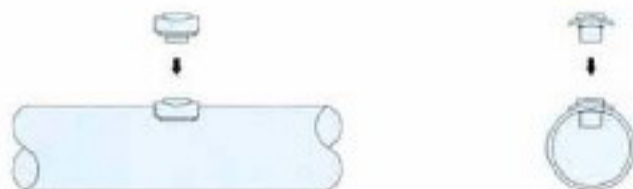
INSTALLATION



Ø 32mm Step one: drill holes of diameter of 32mm



PVC Step two: place the PVC soft connector



RCD-270 Step three: rotate and press RCD-270 in the PVC soft connector



Step four: wind it tight by hand or tools when it is 60% fully in.



MOISTURE PURGE SYSTEM

The temperature of the air will become very high after compressed by the blower of the blast aeration system (usually up to 50°C-90°C), and the water vapor and oil component in the hot air will condense and cumulate in the aerator pipeline. The water removal system can discharge the condensed water in the aerator pipeline and the waste water that has entered the pipeline through aerator when the blower shuts down, and avoid blockage of micro-pores

