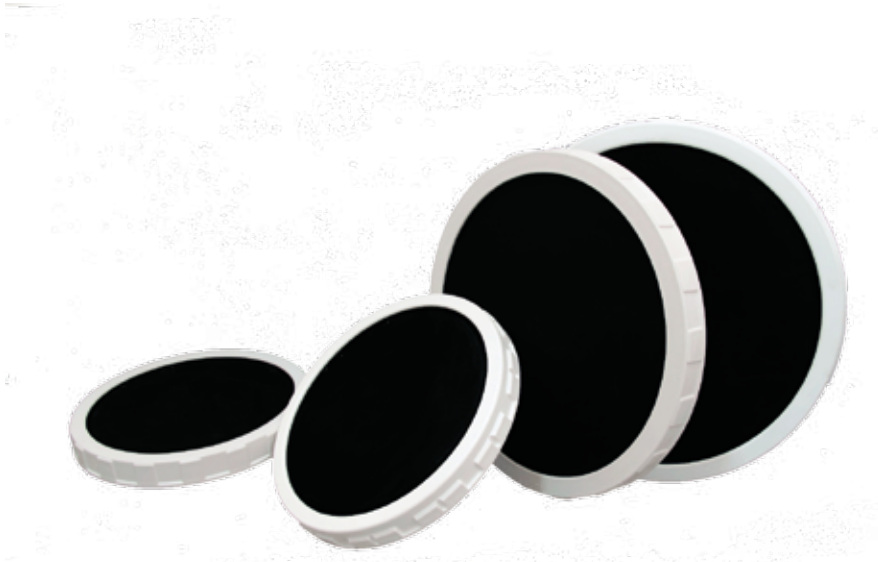
FLOWSHEN

RCD / RSD SERIES

FINE BUBBLE DISC DIFFUSER



FLOWSHEN

RCD / RSD

Fine Bubble Disc Diffuser

APPLICATION

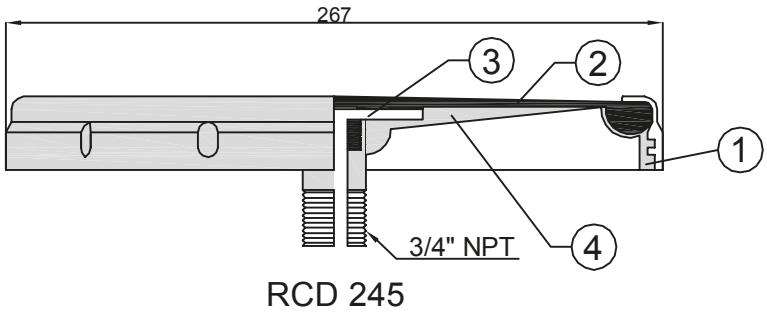
1. Aeration for SBR reaction basin contact oxidation pond. and activated sludge aeration basin in sewage disposal plant;
2. Aeration for denitrification / dephos-phorization aerobic processes;
3. Aeration for excreta and animal wastewater treatment plant;
4. Aeration of deep aeration basin;
5. Aeration 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 water is increased, so the oxygen transmission efficiency is high. Under the best ventilation capacity, the 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 aeration process. As a result, power s saved, operating cost is decreased, and the cost is reduced.
3. Excellent counter flow prevention function. The back stops are all equipped with valves to avoid counter flow 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 no deformability and anti-tearing index. The membrane is made at even thickness with small pressure. Special processing technology is used to overspread 6500 & 12500 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 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 (option)
   PVC soft connector can be installed directly without any other auxiliary tools. The operation is easy and convenient.

FLOWSHEN

RCD245



RCD 245

CONSTRUCTION

No.	NAME	MATERIAL	
1	Retaining ring	PP	Polypropylene
2	Membrane	EPDM	Ethylene propylene diene monomer
3	Check valve	EPDM+PP	Ethylene propylene diene monomer + Polypropylene
4	Disc	PP	Polypropylene

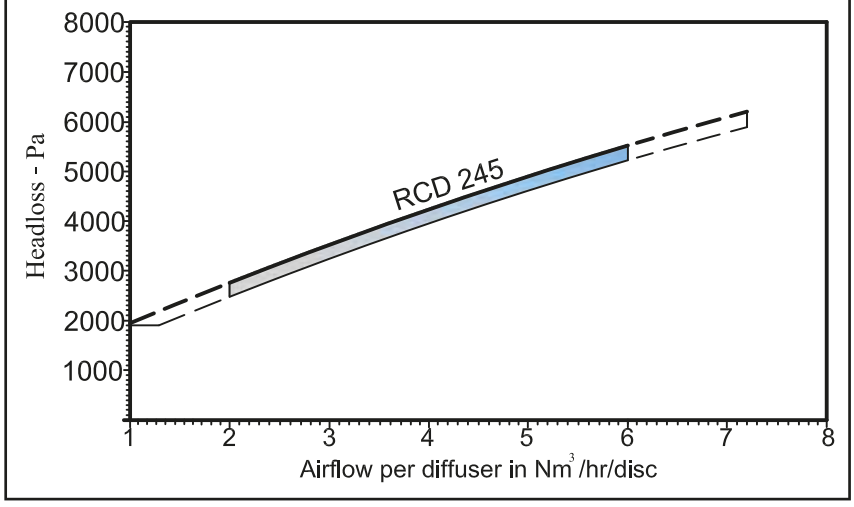
SPECIFICATION

MODEL :RCD245

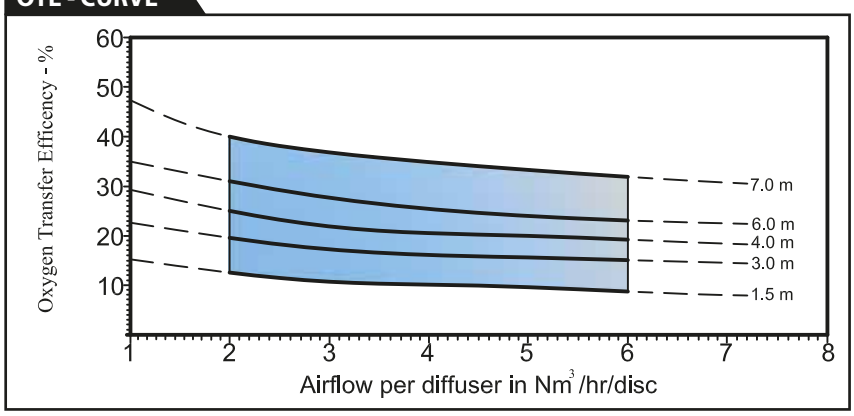
(CHECK VALVE TYPE)

FLOW RANGE	: 1 - 7.2 m^3/hr
DESIGN FLOW	: 2.0 - 6.0 m^3/hr
PRESSURE LOSS	: 2800 - 5500 Pa
RANGE DEPTH	: 1.5 - 7.0 m
SERVICE AREA	: 0.5 m^2
SLIT QUANTITY	: 6500
BUBBLE SIZE	: 1-3 mm
TEMPERATURE MAX	: 100 C°
CONNECTION	: ¾NPT
WEIGHT	: 750g

HEADLOSS-CURVE

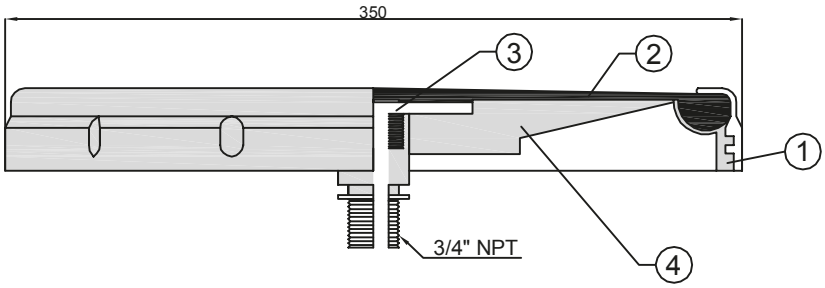


OTE - CURVE



FLOWSHEN

RCD 330



RCD 330

CONSTRUCTION

No.	NAME	MATERIAL	
1	Retaining ring	PP	Polypropylene
2	Membrane	EPDM	Ethylene propylene diene monomer
3	Check valve	EPDM+PP	Ethylene propylene diene monomer + Polypropylene
4	Disc	PP	Polypropylene

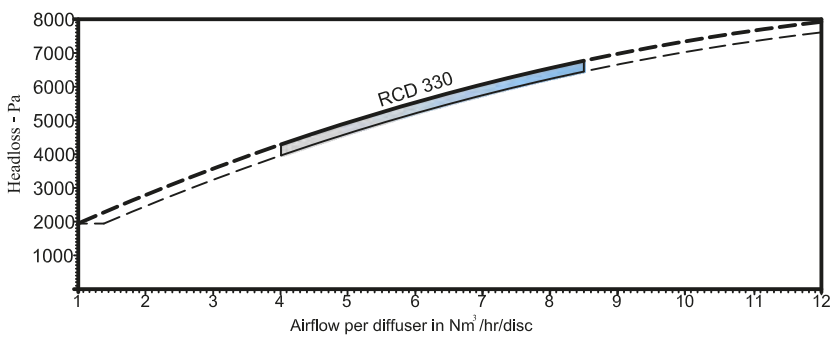
SPECIFICATION

MODEL : RCD330

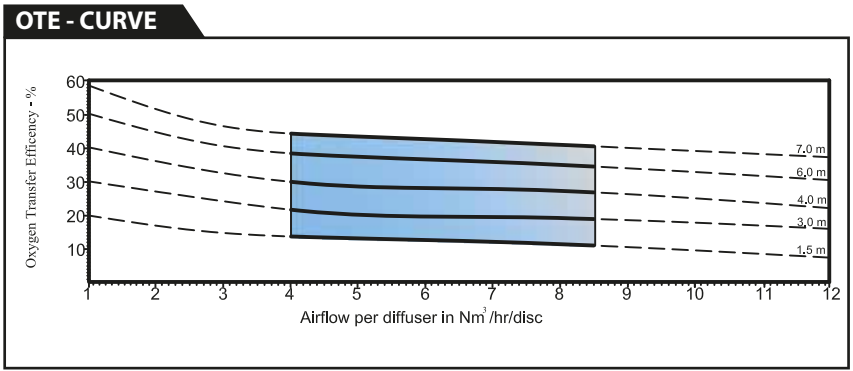
(CHECK VALVE TYPE)

FLOW RANGE	: 1 - 12 m^3/hr
DESIGN FLOW	: 4.0 - 8.5 m^3/hr
PRESSURE LOSS	: 4300 - 6800 Pa
RANGE DEPTH	: 1.5 - 7.0 m
SERVICE AREA	: 0.8 m^2
SLIT QUANTITY	: 12500
BUBBLE SIZE	: 1-3 mm
TEMPERATURE MAX	: 100 C°
CONNECTION	: ¾NPT
WEIGHT	: 950g

HEADLOSS-CURVE

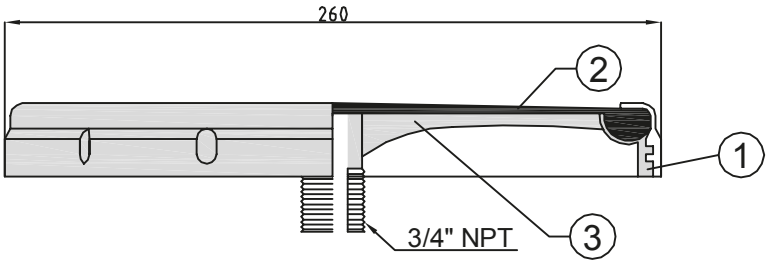


OTE - CURVE



FLOWSHEN

RSD245



RSD 245

CONSTRUCTION

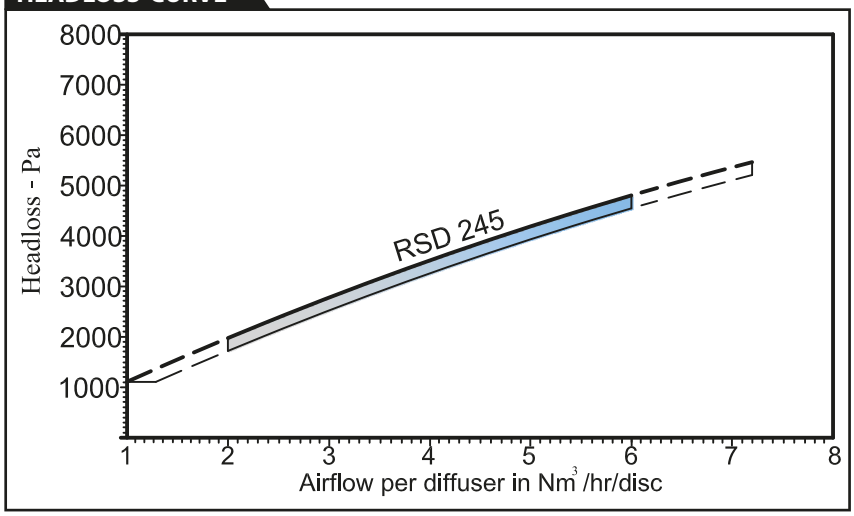
No.	NAME	MATERIAL	
1	Retaining ring	PP	Polypropylene
2	Membrane	EPDM	Ethylene propylene diene monomer
3	Disc	PP	Polypropylene

SPECIFICATION

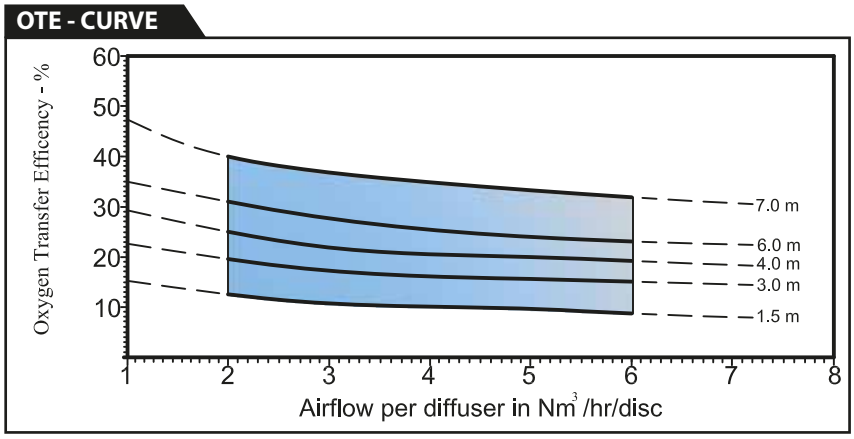
MODEL : RSD 245

FLOW RANGE	: 1 - 7.2 m^3/hr
DESIGN FLOW	: 2.0 - 6.0 m^3/hr
PRESSURE LOSS	: 2000 - 4800 Pa
RANGE DEPTH	: 1.5 - 7.0 m
SERVICE AREA	: 0.5 m^2
SLIT QUANTITY	: 6500
BUBBLE SIZE	: 1-3 mm
TEMPERATURE MAX	: 100 C°
CONNECTION	: ¾NPT
WEIGHT	: 600g

HEADLOSS-CURVE

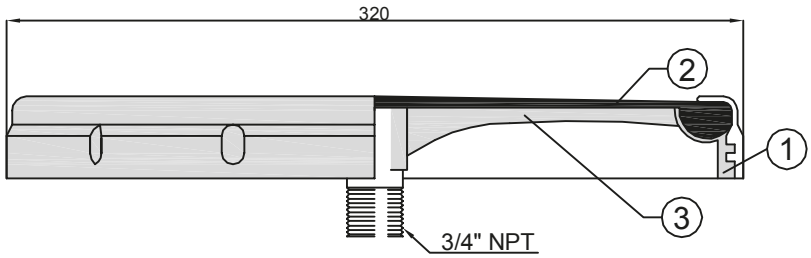


OTE - CURVE



FLOWSHEN

RSD 330



RSD 330

CONSTRUCTION

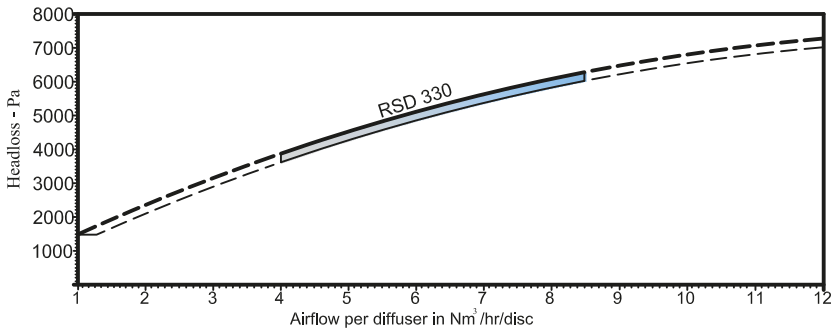
No.	NAME	MATERIAL	
1	Retaining ring	ABS	Acrylonitrile butadiene styrene
2	Membrane	EPDM	Ethylene propylene diene monomer
3	Disc	ABS	Acrylonitrile butadiene styrene

SPECIFICATION

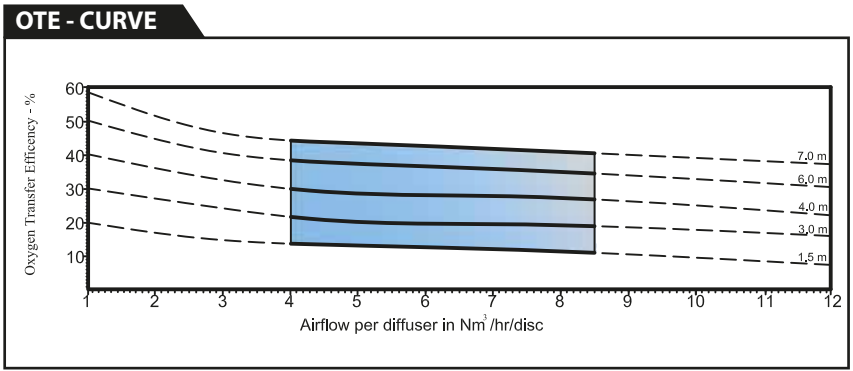
MODEL : RSD330

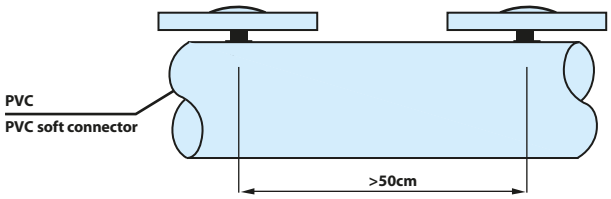
FLOW RANGE	: 1 - 12 m^3/hr
DESIGN FLOW	: 4.0 - 8.5 m^3/hr
PRESSURE LOSS	: 3800 - 6300 Pa
RANGE DEPTH	: 1.5 - 7.0 m
SERVICE AREA	: 0.8 m^2
SLIT QUANTITY	: 12500
BUBBLE SIZE	: 1-3 mm
TEMPERATURE MAX	: 100 C°
CONNECTION	: ¾NPT
WEIGHT	: 850g

HEADLOSS-CURVE

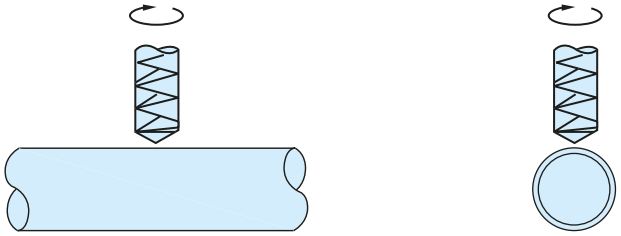


OTE - CURVE

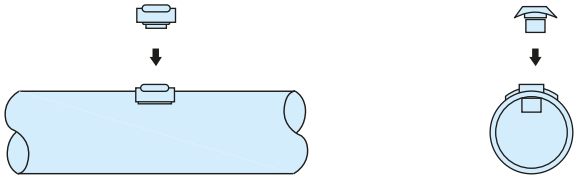




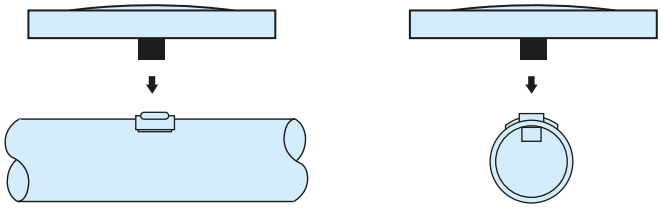
∅32mm Step one:drill holes of diameter of 32mm



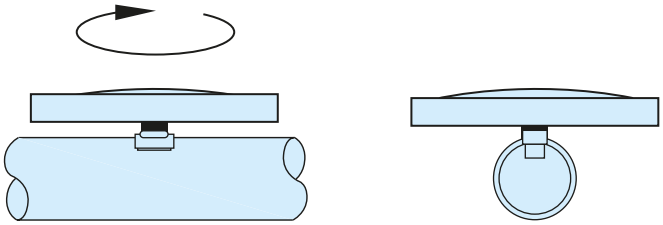
PVC Step two: place the PVC soft connector



RCD-245 Step three: rotate and press RCD-245 in the PVC soft connector



Step four: wind it tight by hand ortools when it is 80% 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 - 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

mk