VIVAMIX
WASTEWATER SOLUTIONS

Focus on providing high quality and cost-effective Wastewater Solutions

VIVAMIX®

+86 15037320403（WhatsApp/WeChat）

info@ecowatertechs.com

www.vivamixer.com/www.eco-watertechs.com

VIVAMIX Tech Nanjing Co., Ltd.

• Introduction

VIVAMIX Tech Nanjing Co., Ltd. is a membership of Henan Eco Group, factory located in a famous historic city——Nanjing, Jiangsu Province, specialize in manufacturing submersible mixers , vertical mixers and aeration mechanical & devices for wastewater treatment applications.

•Concept and Advantages

Guided by our corporate philosophy of "Technology Leads, Quality Survival," we continually study and research cutting-edge technologies and innovative processes from top domestic and international products. By integrating these advancements with working site experiences, we have developed a unique series of products that stand out in the wastewater treatment field.

•Innovative and Talents

On the technical front, our company attracts elite professionals—60% of our staff have over ten years of experience in mechanical design, manufacturing processes, and operational services with renowned companies both domestically and internationally.

•Service and Commitment

Equally important is our commitment to exceptional service. We have built a robust service system featuring dedicated technical experts and a comprehensive after-sales network. Our service team provides personalized technical support, prompt maintenance, and customized solutions to ensure that our products operate at peak performance. This commitment to service not only safeguards our products but also guarantees client satisfaction and long-term partnerships.

•Products and Applications

Our core product range includes energy-saving submersible mixers& recirculation pumps, standard submersible mixers & recirculation pumps , mixers designed specifically for MBBR fillers, hyperbolic mixer& other paddle type vertical mixers, submersible(jet) aerators and various membrane type air diffuser along with installation kits. All our products have been verified by authoritative national testing agencies. Over the past decade, our equipment has been widely deployed in municipal sewage treatment plants and industrial wastewater projects across various sectors, proving its durability and market reliability. We have exported our product to to over 100 countries and regions and enjoy a good reputation among our customers.

•Certificates and Achievements

To date, our company has been awarded four invention patents and twenty-five utility model patents, with certifications of ISO quality management system, ISO environmental management system, ISO occupational health and safety management system.

•Wish

Dedicated to continuous self-improvement and product optimization, We looking forward to walking the path of environmental protection with you!

• Product catalog

VM Submersible Mixer

VML Submersible Mixer

VMM Submersible Mixer

VM-W Sludge Recirculation Pump

VM-H Hyperboloid Mixer

VM-JB Vertical Agitator

VM-FB Surface Aerator

VM-QXB Submersible Aerator

VM-QSB Submersible Jet Aerator

VM-BP Disc Diffuser &VM-BG Tube Diffuser

VM- TS Aeration Column

MBBR Carrier Media

• VM-Submersible Mixer

The VM series of submersible mixers is used in municipal sewage treatment plants and industrial wastewater treatment plants to produce low tangential flow with force. They can also be used to create a flow for circulation, nitrification, denitrification, and phosphorus removal.

◎Features

Compact structure

Self-cleaning blade

Class F insulation of motor winding

Motor protection grade IP68

Two rows of independent mechanical seal, longer service life

◎Working conditions

Liquid temperature:≤60℃

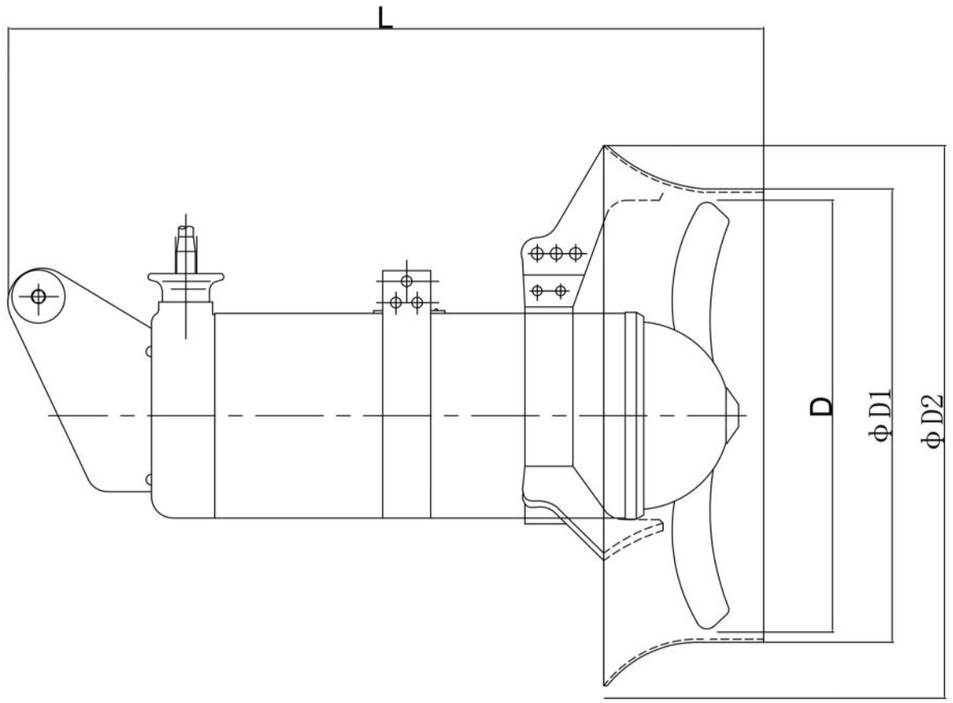
PH:5-9

Liquid density:≤1150kg/m³

Motor :IP 68

7/24 Continuous working

• Dimensions



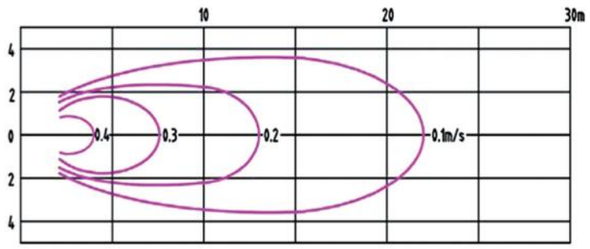
Model	L (mm)	ϕD (mm)	ϕD1 (mm)	ϕD2 (mm)
VM-220	500	220	250	300
VM-260	560	260	280	350
VM-400	700	440	420	500
VM-620	950	620	630	720

• Technical Parameters

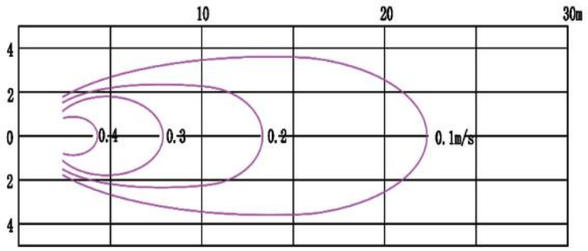
Model	Performance			Motor				Material						
	Impeller diameter (DN)	Thrust (N)	Speed (r/min)	Power (kW)	Polar	Rated current (A)	Protection grade	Insulation class	Propeller	Motor housing	Motor shaft	Seal Ring	Guide loop (optinal)	Mechnical Seal
VM-220	220	138	960	0.37	6	1.3	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	220	145	960	0.55	6	1.6	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	220	145	960	0.75	6	1.6	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
VM-260	260	180	740	0.85	8	4	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	260	260	960	1.5	6	4	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
VM-400	400	600	740	1.5	8	5.8	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	400	800	740	2.5	8	9	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	400	920	740	3	8	11	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	400	1200	960	4	6	12	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
VM-620	620	1400	480	4	12	14.2	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	620	1800	480	5	12	18.2	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	620	2600	480	7.5	12	28	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	620	3300	480	10	12	32	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	620	4000	480	15	12	43	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	620	4400	480	18.5	12	51	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic
	620	5300	480	22	12	60	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic

• Flow Field Diagram

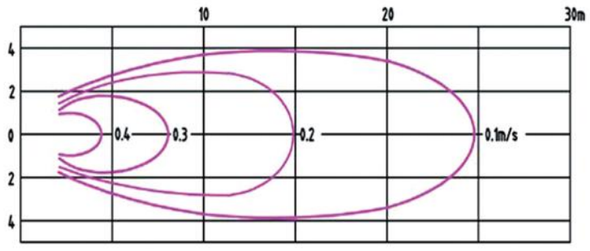
The flow velocity field is the boundary flow velocity V=0.1m/s in clear water



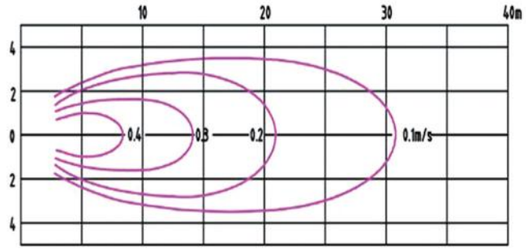
VM-220/0.37kW VM-220/0.55kW



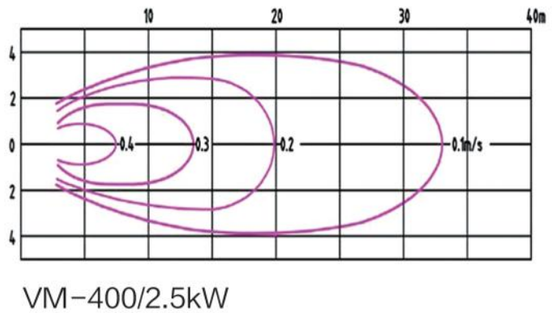
VM-220/0.75kW



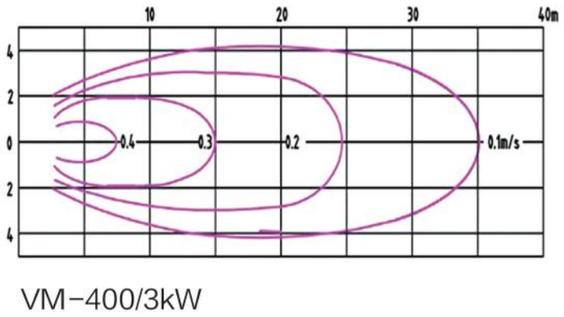
VM-260/0.85kW VM-260/1.5kW



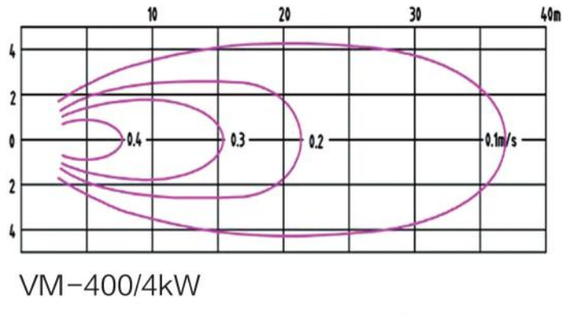
VM-400/1.5kW



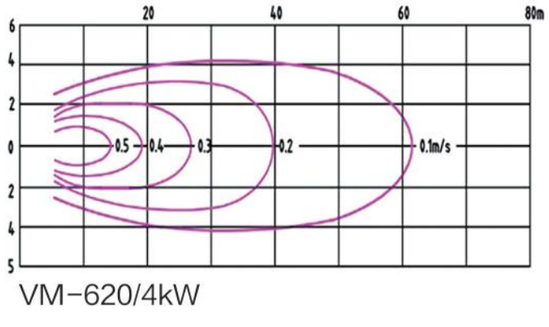
VM-400/2.5kW



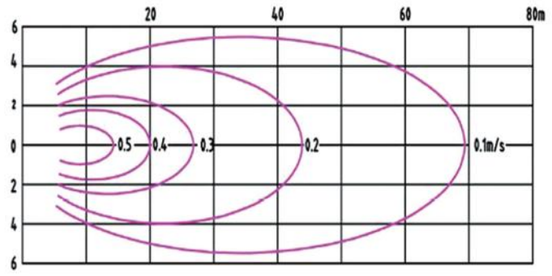
VM-400/3kW



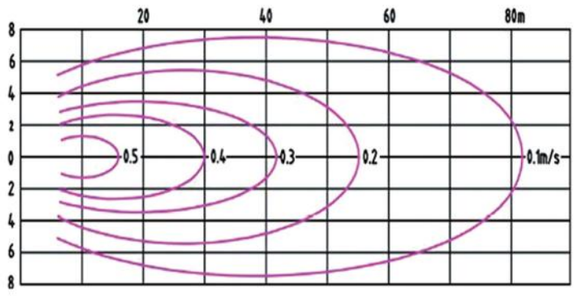
VM-400/4kW



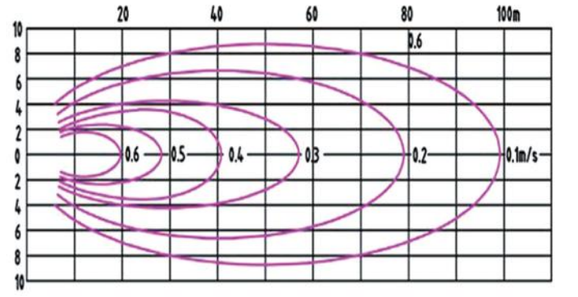
VM-620/4kW



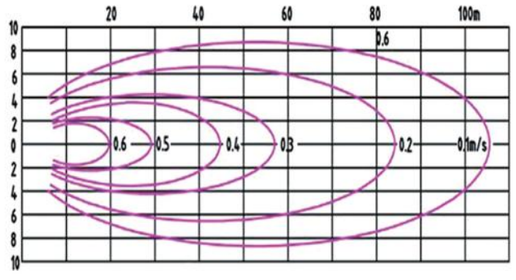
VM-620/5kW



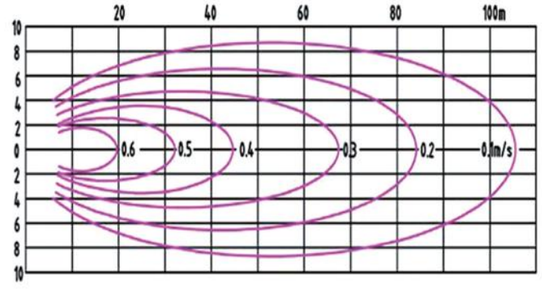
VM-620/7.5kW



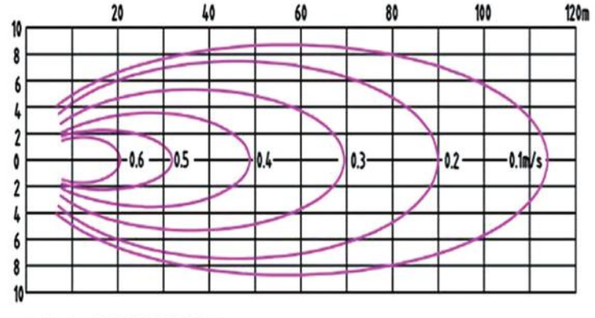
VM-620/10kW



VM-620/15kW

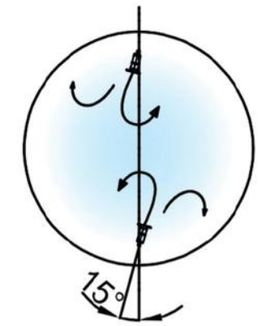


VM-620/18.5kW

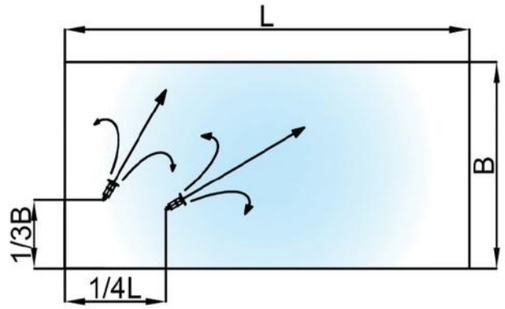


VM-620/22kW

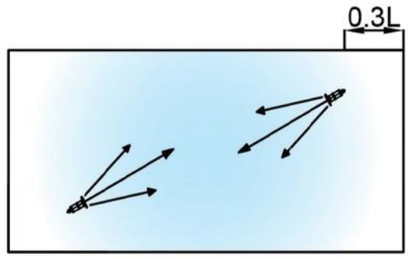
• Layout Reference



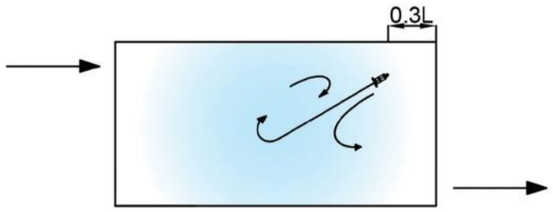
Circular Tank Ⅰ



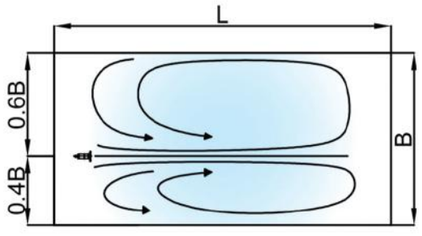
Rectangular Tank Ⅰ



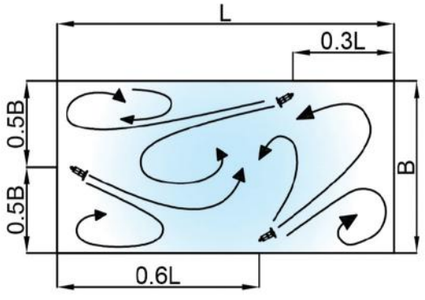
Rectangular Tank Ⅱ



Rectangular Tank Ⅲ

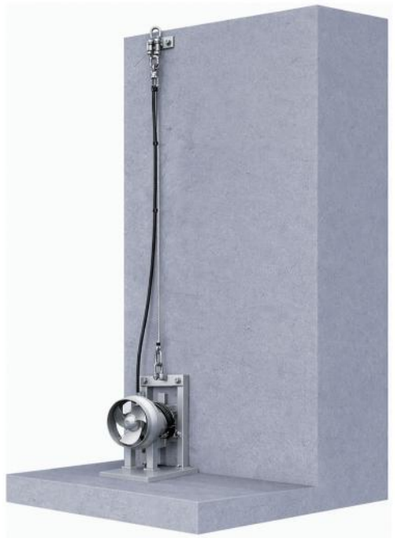


Rectangular Tank Ⅳ



Rectangular Tank Ⅴ

• Installation Reference



Base-mounted

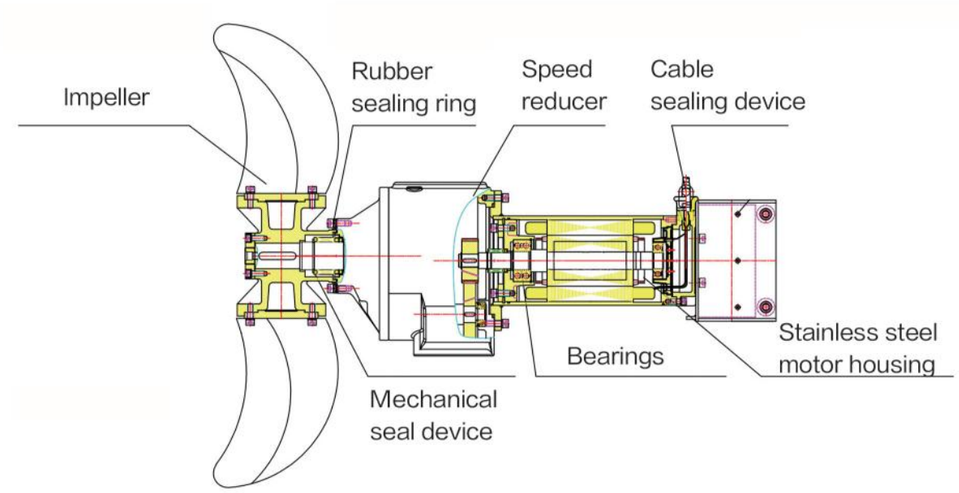
Suspended-mounted

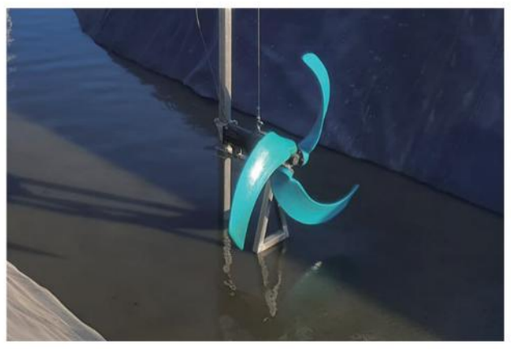
Guide rail mounted

Wall-mounted

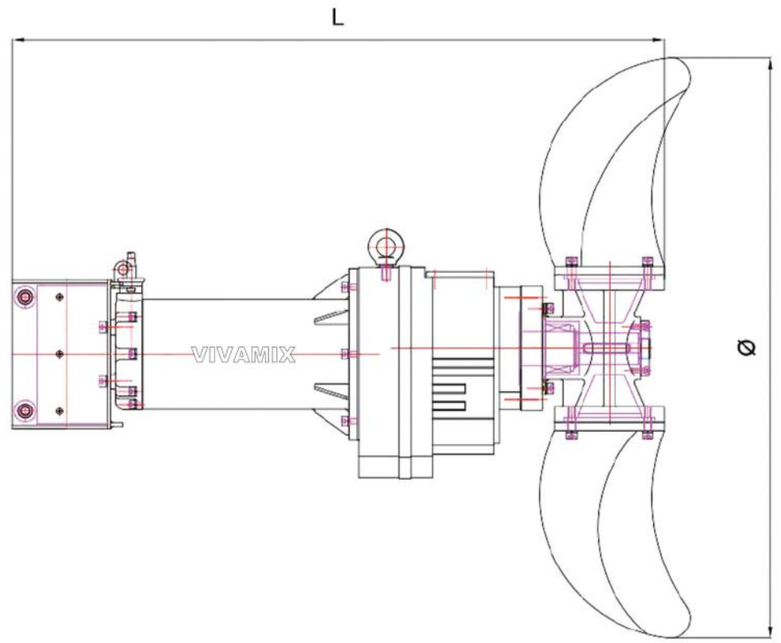
• VML-Submersible mixer

VML series of Submersible mixer is low speed mixer which is suitable for various types of wastewater tanks and oxidation ditch. It produces a strong flow with low tangential, adopts a more optimized modular, which further im-proves the performance, making it more suitable for large-capacity gentle mixing and biological treatment,chemical flocculation,homogenization tanks,antifreeze and other occasions.





• Dimensions



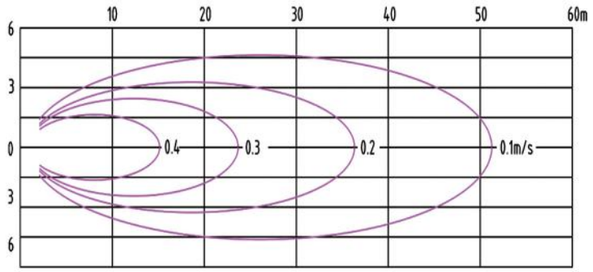
Model	L (mm)	ϕ (mm)
VML-1100	1030	1100
VML-1400	1030	1400
VML-1600	1030	1600
VML-1800	1030	1800
VML-2200	1130	2200
VML-2500	1130	2500

• Technical Parameters

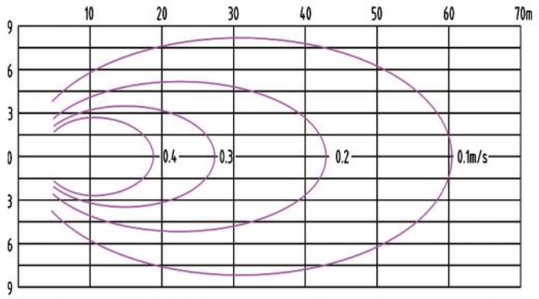
Model	Performance			Motor				Material				
	Impeller diameter (DN)	Thrust (N)	Speed (r/min)	Power (kW)	Rated current (A)	Protection grade	Insulation class	Propeller	Motor and gearbox	Motor shaft	Seal Ring	Mechnical Seal
VML-1100	1100	1100	65	1.5	4	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1100	1970	96	2.2	6	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1100	2410	115	3	8	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1100	2930	135	4	9	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
VML-1400	1400	1640	63	2.2	6	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1400	2180	65	3	8	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1400	2340	115	4	9	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
VML-1600	1600	1850	56	2.2	6	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1600	2140	48	3	8	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1600	2520	65	4	9	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
VML-1800	1800	1880	38	2.2	6	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1800	2360	42	3	8	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	1800	2750	56	4	9	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
VML-2200	2200	1810	32	2.2	6	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	2200	2140	38	3	8	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	2200	2780	42	4	9	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	2200	2960	48	5	13	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
VML-2500	2500	2090	32	3	8	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	2500	2850	42	4	9	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	2500	3090	42	5	13	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic
	2500	3980	42	7.5	17	IP68	F	FRP/PU	Cast iron	S.S 420	Nitrile rubber	Sic Vs Sic

• Flow Field Diagram

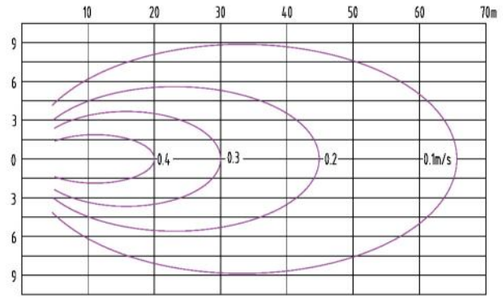
The flow velocity field is the boundary flow velocity V=0.1m/s in clear water



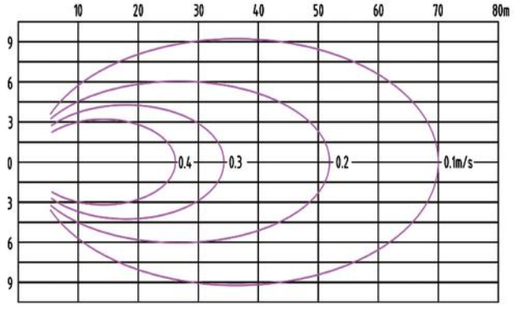
VML-1100/1.5kW



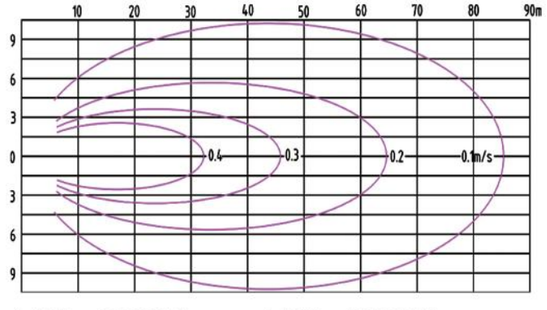
VML-1100/2.2kW VML-1400/2.2kW
VML-1600/2.2kW VML-1800/2.2kW
VML-2200/2.2kW



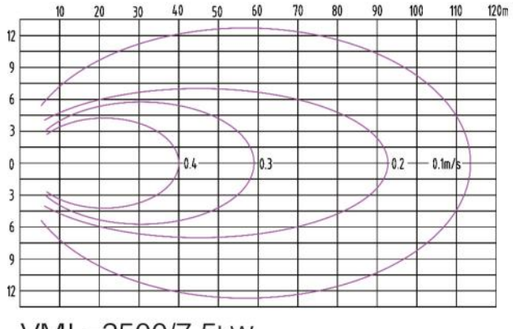
VML-1100/3kW VML-1400/3kW
VML-1600/3kW VML-1800/3kW
VML-2200/3kW VML-2500/3kW



VML-1100/4kW VML-1400/4kW
VML-1600/4kW VML-1800/4kW
VML-2200/4kW VML-2500/4kW

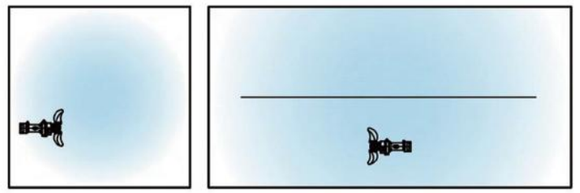


VML-2200/5kW VML-2500/5kW

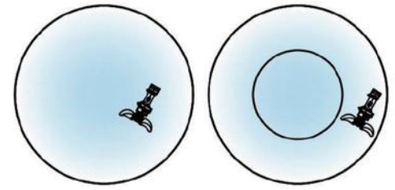


VML-2500/7.5kW

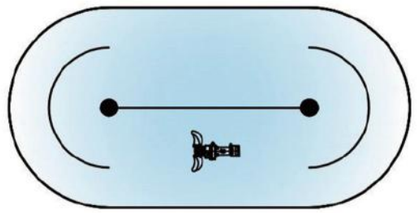
• Layout and Installation Reference



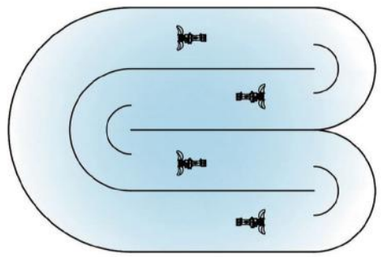
Square Tank Rectangulai Tank



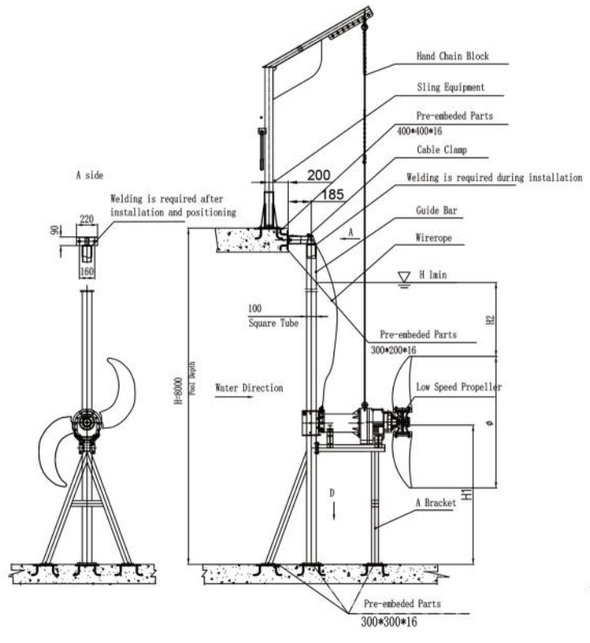
Circular Tank Ring-shaped Tank



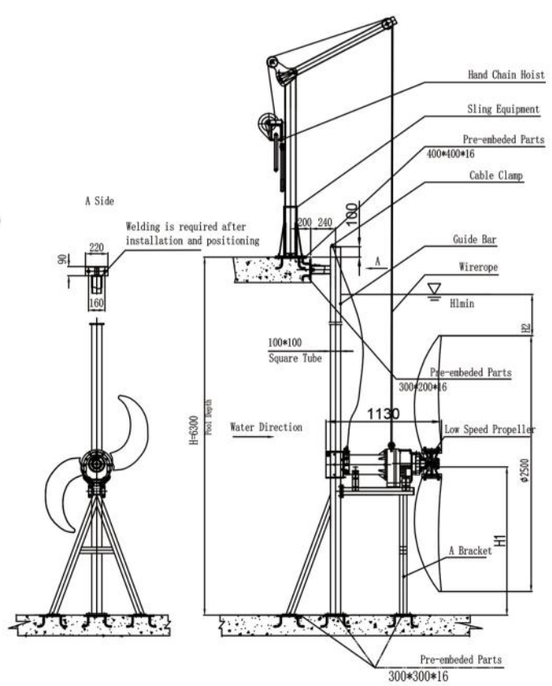
Road-shaped Tank



S-shaped Tank



Wall mountdel(chain lift)



Wall mountdel(cable lift)

• VMM- Submersible mixer

VMM- Submersible Mixers is applied for mixing livestock effluents in tanks, as well as fermentation residues in anaerobic digesters, and MBBR tanks.
The particular shape of the stainless-steel propeller guarantees high mixing efficiency evenwith effluents with a high solids content.
Each agitator model is modular with different propeller shapes and sizes to maximise the ratio between performance and energy consumption.
Equipped with an adjustable stainless steel bracket, VMM- Submersible Mixer enablequick installation on a vertical pipe.

◎Features

High efficiency with very low energycon-sumption thanks to modern, innovative-propeller design

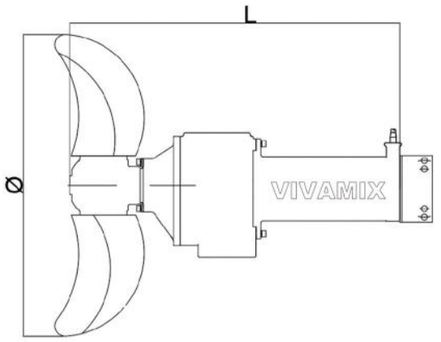
Wide power spectrum according to speed-selection, drive power and propeller diam-eter

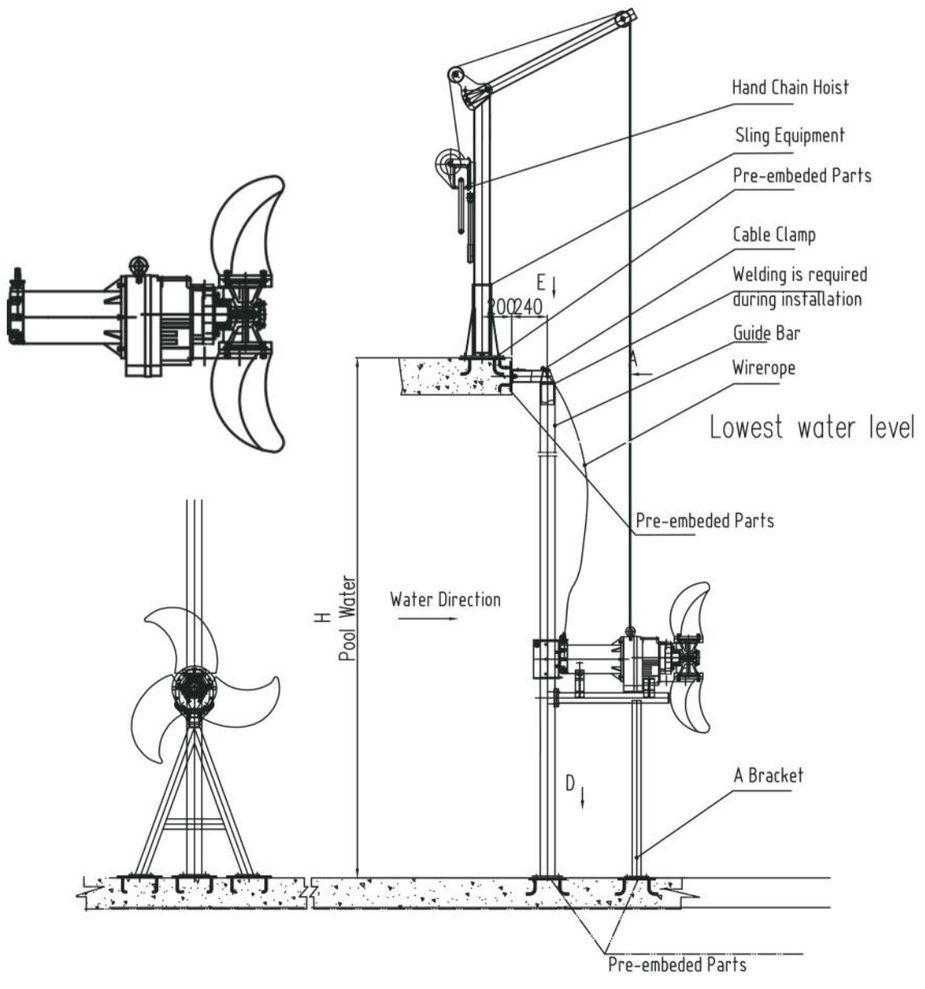
Engineered 3-blade propeller with high mixingeffect

Easy maintenance thanks to modularde-sign

• Dimensions and Installation Reference

Model	L (mm)	ϕ (mm)
VMM-850	870	850
VMM-960	870	960
VMM-1080	870	1080
VMM-1200	870	1200





• Technical Parameters

Model	Performance			Motor				Material				
	Impeller diameter (DN)	Thrust (N)	Speed (r/min)	Power (kW)	Rated current (A)	Protection grade	Insulation class	Propeller	Motor and gearbox	Motor shaft	Seal ring	Mechnical Seal
VMM-850	850	1652	85-275	1.5	3.1	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
	850	2422	85-275	2.2	4.6	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
VMM-960	960	2674	85-275	3	6	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
	960	3565	85-275	4	8.4	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
VMM-1080	1080	3550	85-275	5.5	11	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
	1080	4841	85-275	7.5	15.7	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
	1080	5565	85-275	11	23.1	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
	1080	7588	85-275	15	31	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
VMM-1200	1200	6296	85-275	18.5	39	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic
	1200	7487	85-275	22	46	IP68	F	S.S/PU	Cast iron	S.S 420	Nitrile rubber	Seal - Sic Vs Sic

• VM-W Sludge Recirculation Pump

VM-W Sludge Recirculation Pump is designed based on submersible mixer technology. It is used for mixed liquor circulation, denitrification, and nitrogen removal in wastewater treatment plants, and is suitable for applications requiring low head and large flow in water supply or drainage projects.

◎Features

Compact design with high flow capacity.

Stainless steel structure for high efficiency.

Integrated design for easy underwater installation.

Double mechanical seal ensures reliable operation.

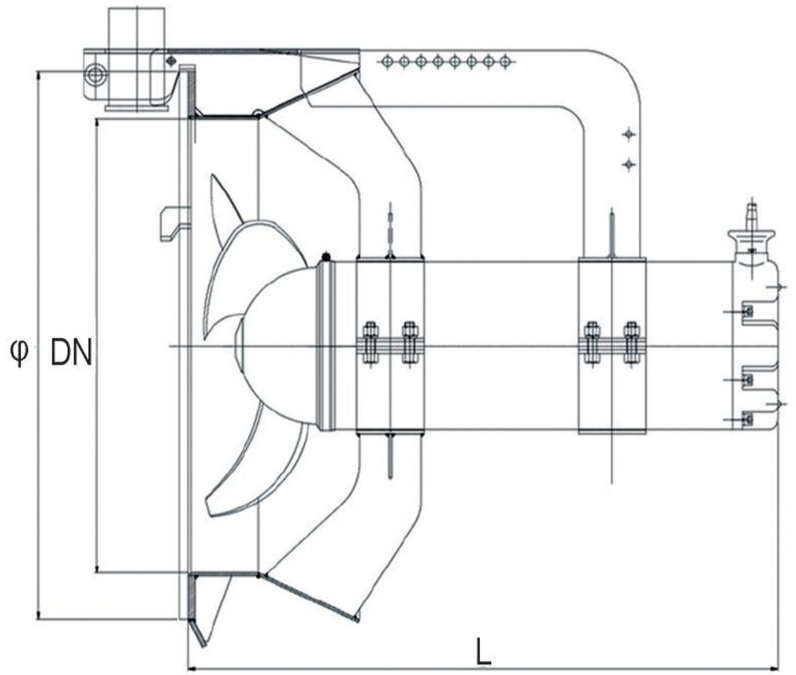
◎Working conditions

Medium temperature ≤ 40 ° C.

pH range: 5 - 9.

Maximum submersion depth: 10 m.

• Dimensions



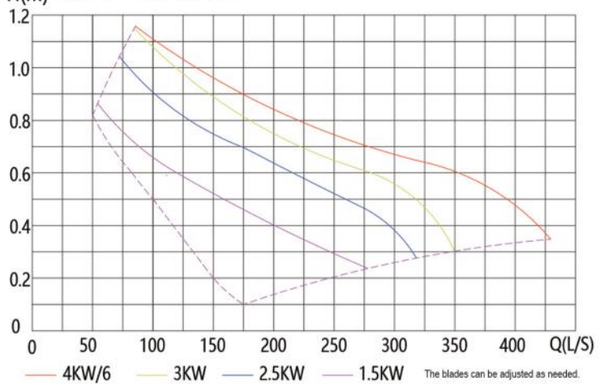
Model	L (mm)	DN (mm)	ϕ (mm)	Mounting hole size range (mm)
VM-W400	600	400	480	1200*1200
VM-W600	1050	600	720	1800*1800
VM-W800	1050	800	975	1800*1800

• Technical Parameters

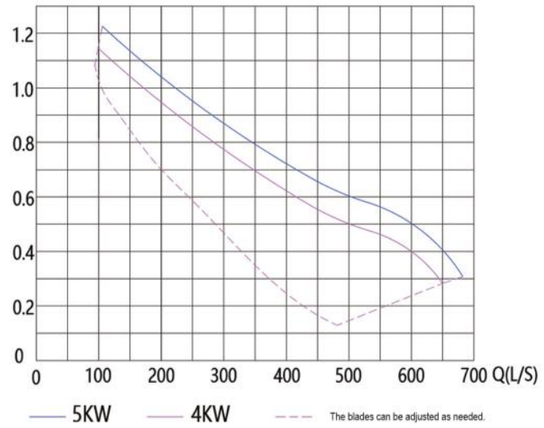
Model	Performance					Motor				Material						
	Discharge Diameter (DN)	Flow (m³/h)	Flow (L/S)	Lift (m)	Speed (r/min)	Power (kW)	Rated current (A)	Protection grade	Insulation class	Impeller	Motor housing	Motor shaft	Seal Ring	Bracket &Guide loop	Mechnical Seal	Weight (Kg)
VM-W400	400	180-990	50-275	0.25-0.86	740	1.5	5.8	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	130
	400	270-1116	75-310	0.3-1.02	740	2.5	9	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	135
	400	325-1260	90-350	0.3-1.15	740	3	11	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	140
	400	340-1650	94-458	0.35-1.2	960	4	12	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	160
VM-W600	600	360-2340	100-650	0.26-1.15	480	4	14.2	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	230
	600	415-2450	115-680	0.28-1.26	480	5	18.2	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	236
	600	485-2735	135-760	0.35-1.46	480	7.5	28	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	295
	600	666-3000	185-833	0.42-1.76	480	10	32	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	300
	600	954-5364	265-1490	0.4-1.78	480	15	43	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	315
VM-W800	800	954-5364	265-1490	0.4-1.78	480	15	43	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	330
	800	994-5670	276-1575	0.43-1.82	480	18.5	51	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	350
	800	1044-6048	290-1680	0.44-2.00	480	22	60	IP68	F	S.S 304	S.S 304	S.S 420	Nitrile rubber	S.S 304	Sic Vs Sic	380

• Performance Curve

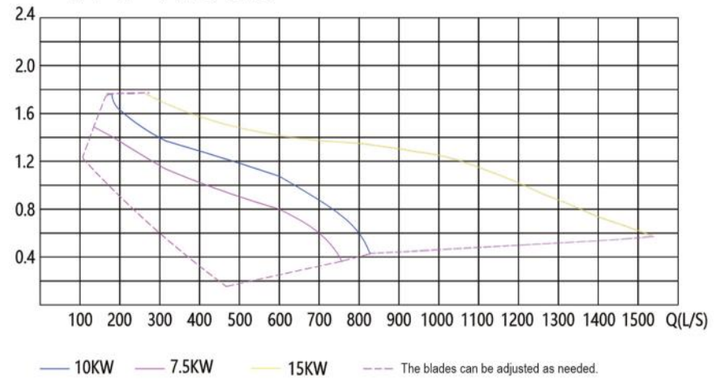
VM-W400



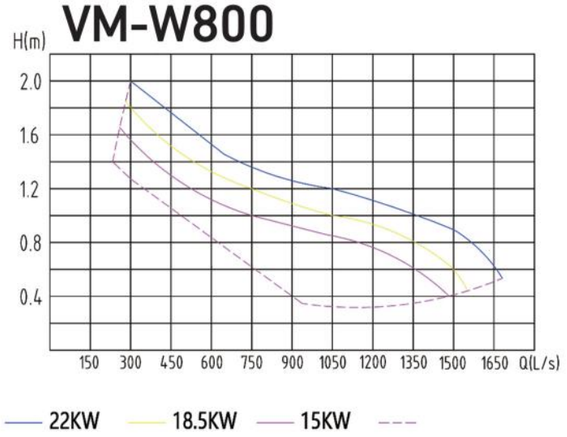
VM-W600



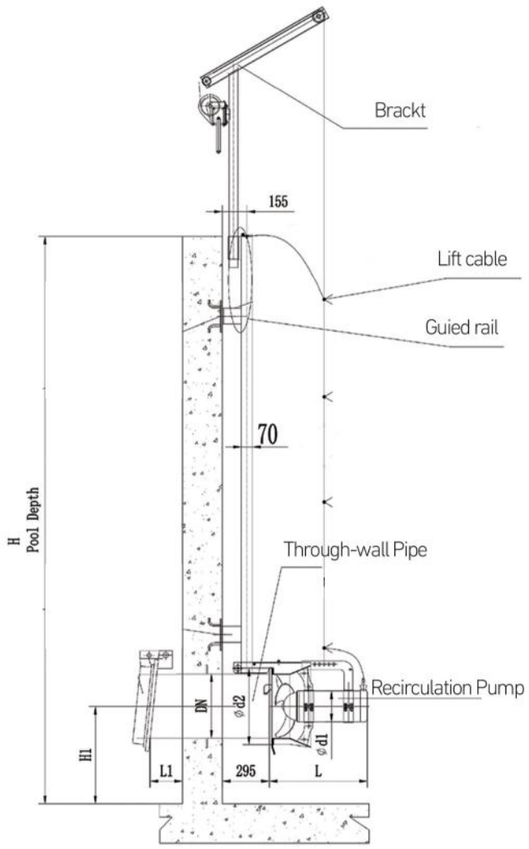
VM-W600



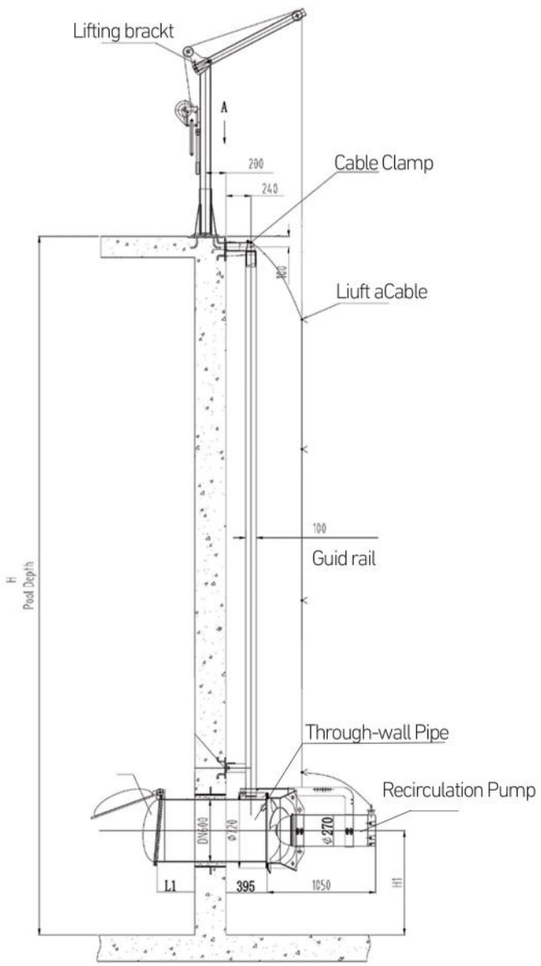
VM-W800



•Installation Reference



Guide rail mounted



Wall-mounted

• VM-H Hyperboloid mixer

VM-H series of Hyperboloid mixer is widely applied for environmental protection, chemical, energy, and other industries which solid, liquid and gas mixing are required, especially in coagulation tanks, regulating tanks, anaerobic Pool, nitrification and denitrification tanks of sewage treatment plant.

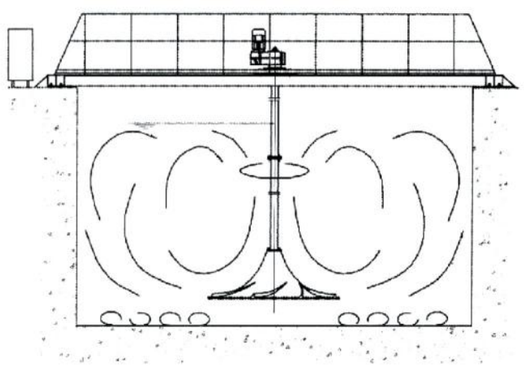
◎Features

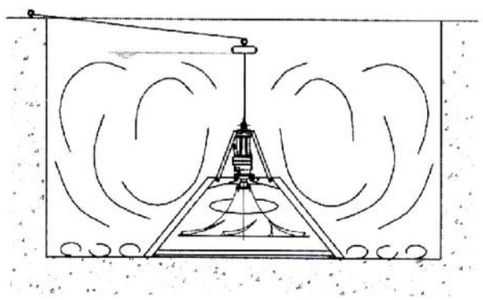
Delivers complete agitation with zero dead zones and maintains a smooth, consistent flow.

Large surface area impeller maximizes efficiency—achieving high performance with minimal power.

Modular design allows quick setup and hassle free servicing.

◎Flow Pattern Diagram





• Installation Reference

Fig.1: Direct lifting by truck-mounted crane.

Fig.2: Manual hoist installation from the walkway bridge.

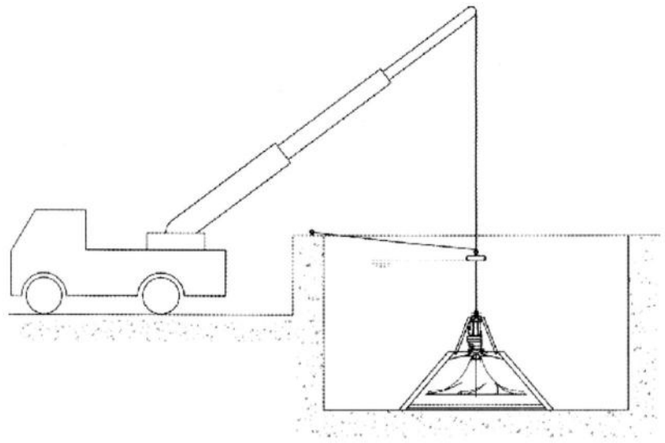


Figure 1

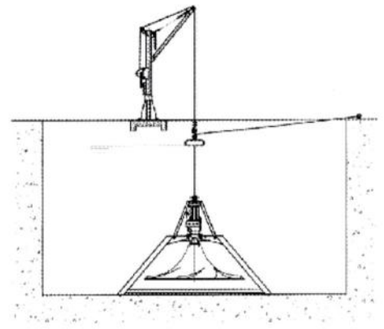
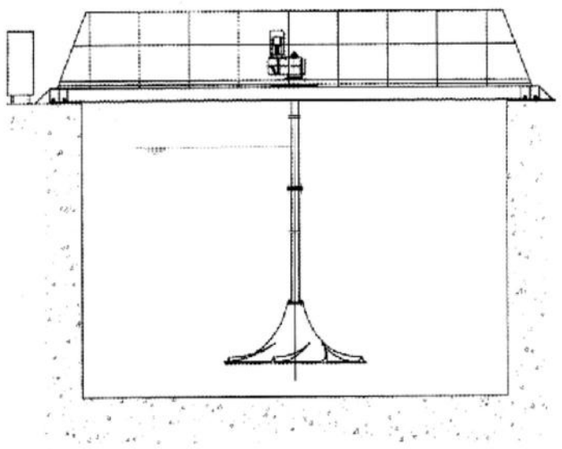
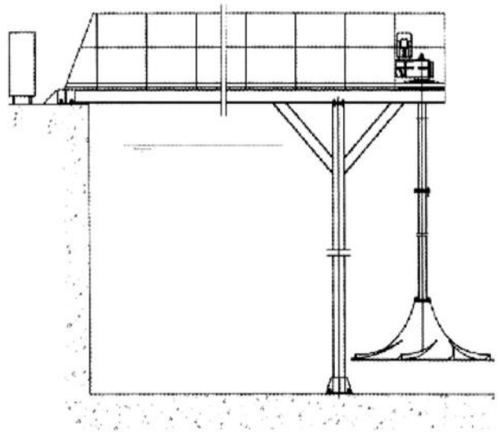


Figure 2



Full Bridge Installation



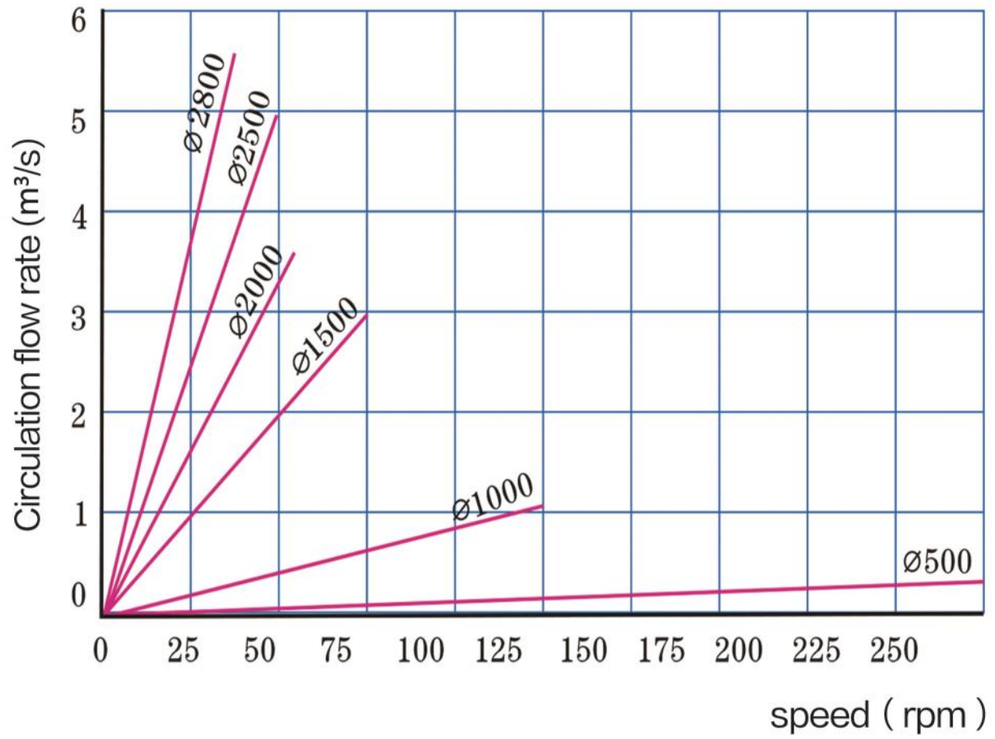
Half Bridge Installation

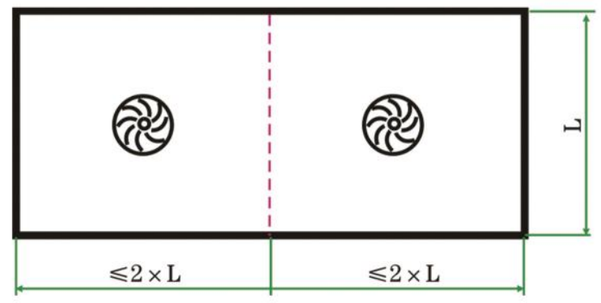
• Technical Parameters

Model	Performance			Drive unit				Material	
	Impeller diameter (DN)	Speed (r/min)	Service area (L/S)	Power (kW)	Drive Type	Protection grade	Efficiency	Propeller	Shaft
VM-H500	500	40-500	65	0.5-1.5	Moter+Gearbox	IP55	IE3	FRP/S.S 304	S.S 304/S.S 316
VM-H1000	1000	30-80	65	1.1-2.2	Moter+Gearbox	IP55	IE3	FRP/S.S 304	S.S 304/S.S 316
VM-H1500	1500	30-60	65	1.5-3	Moter+Gearbox	IP55	IE3	FRP/S.S 304	S.S 304/S.S 316
VM-H2000	2000	20-42	65	2.2-3	Moter+Gearbox	IP55	IE3	FRP/S.S 304	S.S 304/S.S 316
VM-H2500	2500	20-40	65	3-5.5	Moter+Gearbox	IP55	IE3	FRP/S.S 304	S.S 304/S.S 316
VM-H2800	2800	20-30	65	4-7.5	Moter+Gearbox	IP55	IE3	FRP/S.S 304	S.S 304/S.S 316

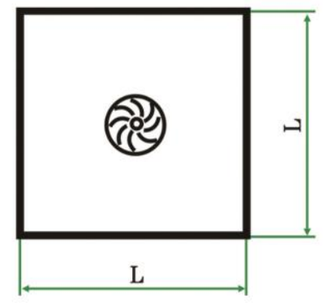
• Performance and Layout

◎**Speed vs. Circulation Flow Rate Curve**





Rectangular Tank



Square Tank

• VM-JB Vertical Agitator

VM- JB Series of Vertical Mixer is a key device for wastewater treatment,designed for mixing polymer with water and flash mixing in coagulation and flocculation process .its vertical structure saves space while ensuring efficient wastewater and chemical blending.Available in carbon steel,stainless,or anti-corrosion coatings,it operates stably and ensures uniform mixing.

◎Application

Wastewat equalization tank
Polymer dosing tank
Coagulation and flocculation tank
Sludge holding tank

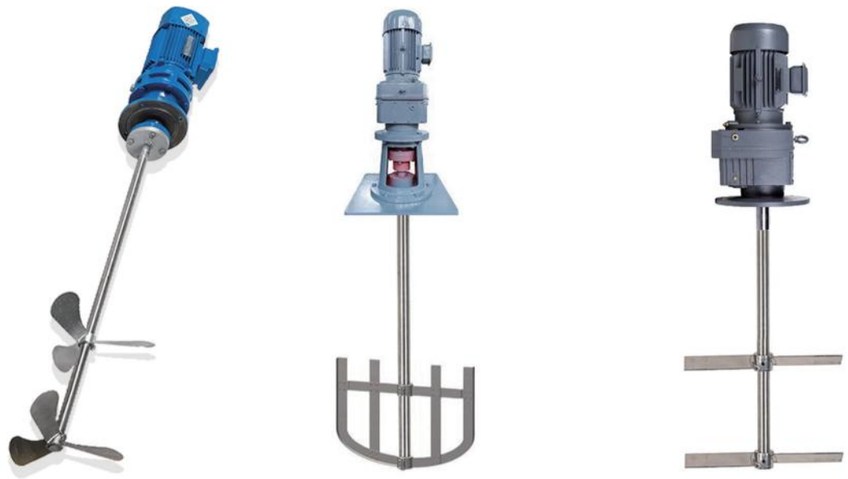
◎Product Features

Vertical structure design
Customizable impeller
Durable materials
High-efficiency drive unit
Fully customized as requirement tank

◎Material

S.S304
S.S316
C.S+Teflon coating
C.S+plastic coating

• Impeller Selection



• VM-FB Surface Aerator

The VIVAMIX series VM-FB Surface Aerator is specially designed by our technical team for wastewater oxygen transfer and mixing. The equipment pumps wastewater to form high-speed jets, significantly enhancing the inte-gration of water and oxygen, driving the water flow in the tank, and ensuring uniform mixing and sufficient aeration of the wastewater.

◎Features

Easy installation

Wide application

Efficient oxygen dissolution

Efficient mixing

Low operating cost

◎Application areas

Municipal sewage treatment plant

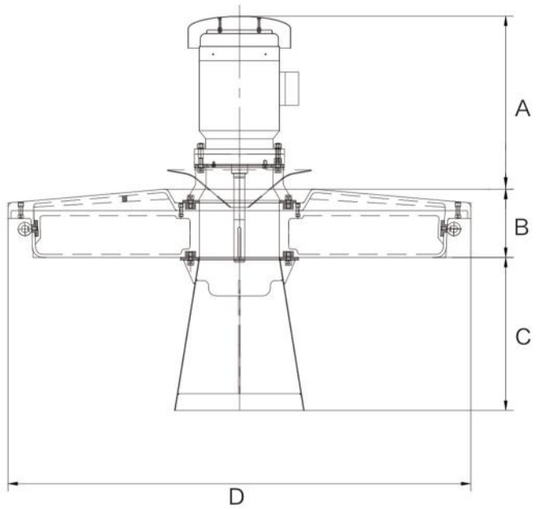
Industrial wastewater treatment

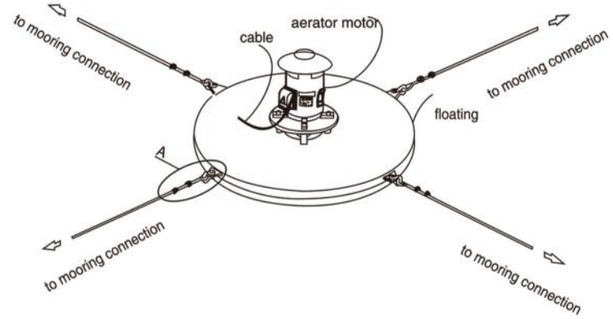
River and lake management

Aquaculture water oxygenation

Emergency water treatment

• Installation Dimensions





Model	Dimensions(mm)			
	A	B	C	D
VM-FB 4	710	265	550	1600
VM-FB 5.5	710	265	550	1600
VM-FB 7.5	710	265	550	1600
VM-FB 11	710	320	600	1900
VM-FB 15	760	320	600	1900
VM-FB 18.5	790	320	600	1900
VM-FB 22	830	320	600	1900

• Technical Parameters

Model	Performance				Motor			Material			
	Pumping Rate (m³/min)	Diameter of Spray	Tank Depdh (D)	Oxgen Reah Kg O2/h	Power (kW)	Protection grade	Speed (r/min)	Float	Motor shaft	Propeller	Water suction cylinder and spray unit
VM-FB 4	11	3	3-4	3	4	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316
VM-FB 5.5	11	5	3-4	4.5	5.5	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316
VM-FB 7.5	19	5.5	3-4	6.6	7.5	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316
VM-FB 11	24	6	3-4	9.6	11	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316
VM-FB 15	29	6	3-4	11.5	15	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316
VM-FB 18.5	33	7.5	3-4	14	18.5	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316
VM-FB 22	37	7.5	3-4	16.5	22	IP65	1450	FRP/S.S 304	S.S 420	S.S 304/S.S 316	S.S 304/S.S 316

• VM-QXB Submersible Aerator

VM-QXB series of submersible aeratoris a highly efficient oxygenation equipment widely used in sewage treatment. It fully mixes air and water through the high-speed rotation of the impeller to form micro bubbles, increase the oxygen dissolution rate, and promote biochemical reactions.

Centrifugal submersible aerator uses the motor to directly drive the rotation ofthe impeller to generate the centrifugal force. So that the nearby low pressureis sucked into the water stream, at th e same time, the vacuum is also createdin the inlet of impeller to suck fresh air into aeration cham ber. After the waterand air is mixed, it is rapidly discharged by the centrifugal force. Since the waterjet is extremely strong, it will form an effective convection cycle, and divide theair into numerous small bubbles.

◎Features

Easy andquick installation without emptying the tank

No aerosol effect and no sedimentation on the bottom of the basin.

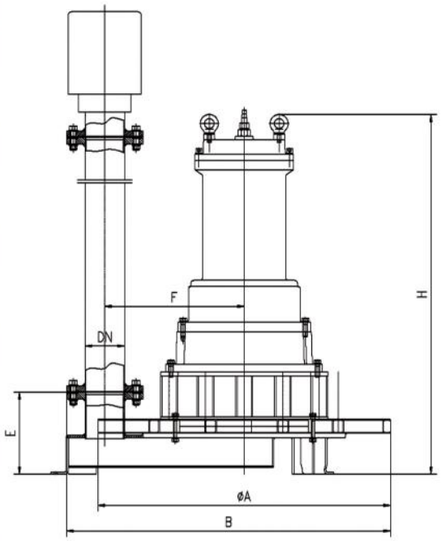
Good oxygen transfer (SOTR)and aeration efficiency values(SAE)

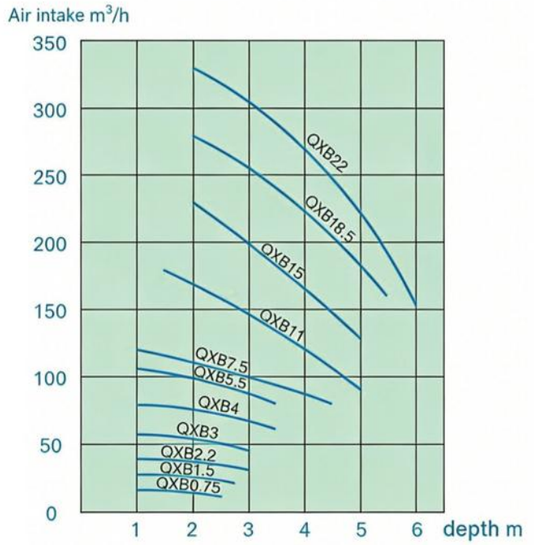
Self-deaning system.

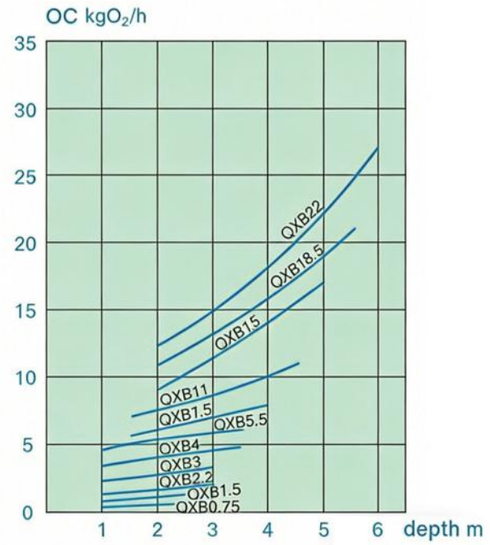
Replaceable wear parts

• Dimensions

Model	A	DN	B	E	F	H
VM-QXB 0.75	390	DN40	405	65	165	485
VM-QXB 1.5	420	DN50	535	200	240	550
VM-QXB 2.2	420	DN50	535	200	240	615
VM-QXB 3	500	DN50	635	205	300	615
VM-QXB 4	500	DN50	635	205	300	740
VM-QXB 5.5	690	DN80	765	210	320	815
VM-QXB 7.5	690	DN80	765	210	320	815
VM-QXB 11	720	DN100	870	240	400	1045
VM-QXB 15	720	DN100	870	240	400	1045
VM-QXB 18.5	840	DN125	1050	240	500	1045
VM-QXB 22	840	DN125	1050	240	500	1045







• Technical Parameters

Model	Motor			Performance				Material		
	Power (kW)	Motor Speed (rpm)	Current (A)	Air Supply (m³/h)	OC Kg O_2/h	Duty diameter (m)	Max. Working depth (m)	Motor Casing	Diffusing unit	Air pipe
VM-QXB 0.75	0.75	2850	5.65/2.2	10	0.37	6	1.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 1.5	1.5	1470	4	22	1	14	2	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 2.2	2.2	1470	6	35	1.8	20	3	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 3	3	1470	7.8	50	2.75	27	3.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 4	4	1470	8.8	75	3.8	35	4	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 5.5	5.5	1470	13	85	5.3	48.75	4.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 7.5	7.5	1470	20	100	8.2	63	5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 11	11	1470	24	160	13	80	5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 15	15	1470	32	220	17	99	5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 18.5	18.5	1470	40	260	19	120	5.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QXB 22	22	1470	45	320	24	143	6	Cast iron	S.S/carbon steel	S.S/carbon steel

• VM-QSB Submersible Jet Aerator

VM QSB series submersible jet aerator combines a submersible pump with a Venturi jet diffuser to deliver self aspirating aeration. Water drawn through the submerged pump creates a vacuum at the nozzle, pulling air down from the surface. The Venturi injector then thoroughly mixes the aspirated air with the water before forcefully ejecting the mixture through the diffuser. This high velocity, directional jet both agitates a wide area of the pond and injects oxygen efficiently, promoting uniform circulation and significantly boosting dissolved oxygen levels.

◎Features

The aerator is composed of submersible electric pump, nozzle, intake pipe, diffusion pipe, etc. The electricpump impeller is open and is not easy to block;

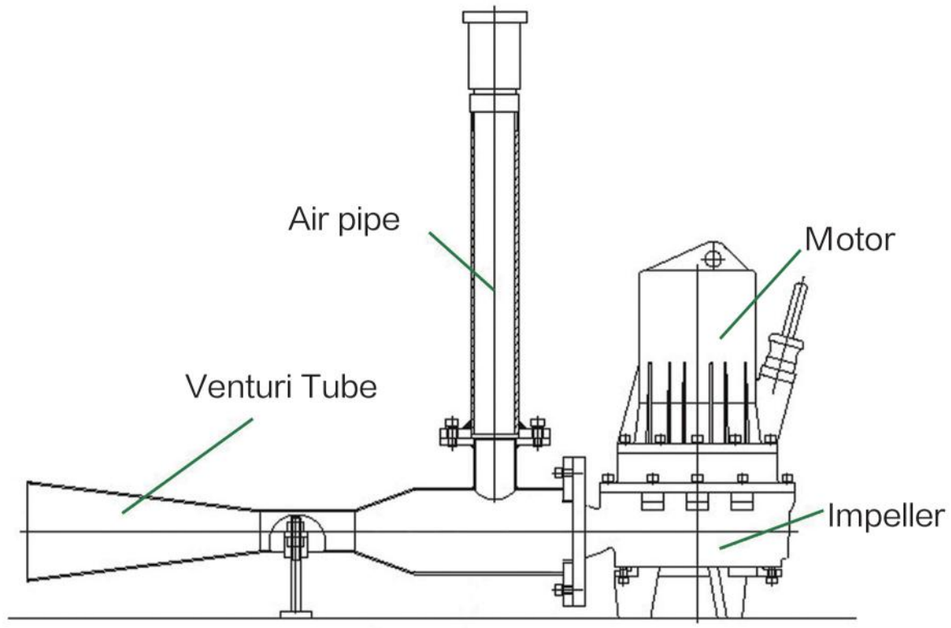
The selection of the pump designed for the aerator, the use of no blocking, dirty type efficient impeller, long life;

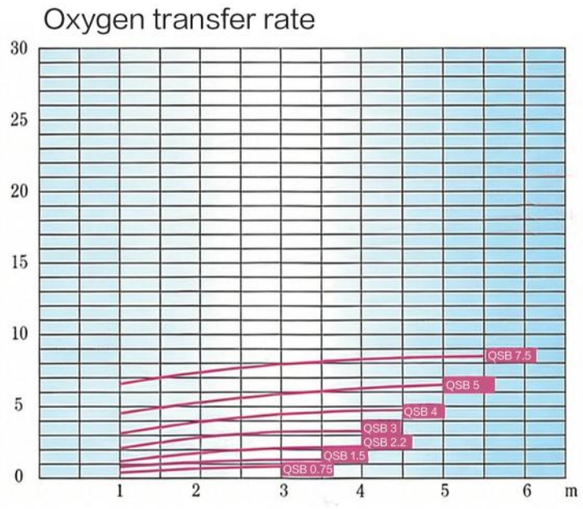
The pump with high-quality lubricated bearings, long-term and reliable operation, without replacement;

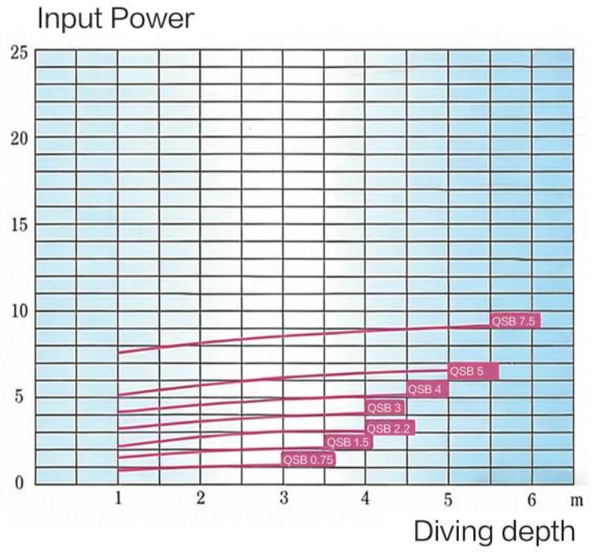
The pump with high-quality mechanical seal, reliable seal;

Aerator provides two installation methods, self-coupling installation and mobile in-stallation, convenient installation and maintenance.

• Structure and performance







• Technical Parameters

Model	Motor			Performance			Material		
	Power (kW)	Motor Speed (rpm)	Current (A)	Air Supply (m³/h)	Duty diameter (m)	Max. Working depth (m)	Motor Casing	Diffusing unit	Air pipe
VM-QSB 0.75	0.75	2900	2.4	2.8	6	1.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QSB 1.5	1.5	2900	4	3.5	14	2	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QSB 2.2	2.2	2900	5.8	4.8	20	3.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QSB 3	3	2900	7.8	5.8	27	4	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QSB 4	4	2900	9.8	6.6	35	4.5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QSB 5.5	5.5	1470	12.4	8	48.75	5	Cast iron	S.S/carbon steel	S.S/carbon steel
VM-QSB 7.5	7.5	1470	17	10	63	5	Cast iron	S.S/carbon steel	S.S/carbon steel

• VM-BG Diffuser Tube

VM-BG series Microporous Membrane Air Diffuser Tube is developed for enhancing the efficiency and operating models of the activated sludge processes for wastewater biological treatment. The design of the membrane sleeve prohibits clogging of the aeration pores which are self closing when air flow/pressure is interrupted.Installed with clamp saddle, most existing diffused air systems can be easily retrofitted.

◎Features

High oxygen transfer efficiency.

High EPDM membrane tenacity.

Low pressure loss.

Simple construction, Light weight and easy to install.

Larger surface with higher treatment function.

Wide space between filters, no blockage.

• Technical Parameters

VM-BG Diffuser Tube ABS+EPDM

VM-BG Diffuser Tube ABS+Silicone

Material	Model	Inner tube diameter (mm)	Membrane diameter (mm)	Membrane thickness (mm)	Bubble diameters (mm)	Air flow range (Nm3/h)	Oxygen utilization at 5m (%)	Max. Working temperature (℃)
ABS+ EPDM	D65-500	63	65	2	0.8-2	1.7-6.8	23-32	80
	D65-750	63	65	2	0.8-2	3.4-13.6	23-32	80
	D65-1000	63	65	2	0.8-2	3.4-17	23-32	80
	D90-1000	88	90	2	0.8-2	6.5-32.6	23-32	80
ABS+ Silicone	D65-500	63	65	2	0.8-2	1.7-6.8	23-32	100
	D65-750	63	65	2	0.8-2	3.4-13.6	23-32	100
	D65-1000	63	65	2	0.8-2	3.4-17	23-32	100
	D90-1000	88	90	2	0.8-2	6.5-32.6	23-32	100

• VM-BP Diffuser Disc

VM-BP EPDM/Silicone Microporous Membrane Air Diffuser Disc is used for aeration in biological treatment processes to supply oxygen for contaminant degradation, featuring high oxygen transfer efficiency. The body is made of ABS engineering plastic and covered with EPDM or silicone microporous membrane. The micro-holes expand when air enters and close when air stops, preventing clogging. A non-return design prevents liquid from entering the pipeline, ensuring stable operation without special air filtration.

◎Main features

Reverse folding structure prevents membrane detachment and improves sealing.

Non-return design with thick, unperforated center blocks liquid backflow when air supply stops.

EPDM membrane: Resistant to aging, corrosion, and acids/alkalis.

Fine bubbles reduce shear on sludge particles.

Stronger connector between diffuser disc and air pipeline prevents loosening from vibration.

• Technical Parameters

VM-BP Disc Diffuser ABS+EPDM

VM-BP Disc Diffuser ABS+Silicone

Material	Model	Outer diameter (mm)	Membrane diameter (mm)	Membrane thickness (mm)	Hole diameter (μm)	Bubble diameters (mm)	Air flow range (Nm3/h)	Average air flow at 4m (Nm3/h)	Max. Working temperature (℃)
ABS+ EPDM	D200	215	192	2	80-100	1-3	1-2.5	1.8	80
	D260	280	255	2	80-100	1-3	1-4	2.5	80
	D300	330	300	2	80-100	1-3	1-6	4	80
ABS+ Silicone	D200	215	192	2	80-100	1-3	1-3	1.8	100
	D260	280	255	2	80-100	1-3	1-3	2.5	100
	D300	330	300	2	80-100	1-3	1-3	4	100

• VM-TS Aeration Column

VM- diffusing cylinder is a stainless steel fine-bubble aerator, and the fixed diffuser is specially developed for the aeration of activated sludge tanks. It has no moving parts, and the air blown to the bottom passes through the aerator along with the water. Mixed with each other to become ultra-fine bubbles, continuously oxidized, effectively adsorb and degas the upper and lower fluid materials.

◎Features

No trouble:There is not stopped up

The introduction construction is easy

High and stable oxygen absorption ratio

The sludge doesn't pile up in the tank bottom

Considerable reduction of electric expenses

Maintenance free:The regular cleaning is unnecessary

• Technical Parameters

Material	SUS304+Polethylene
Ventilation(m3/min)	0.6-0.9
Resistance(kPa)	0-1.5
Oxygenation Capacity(kg/h)	2.2-3.2
EA	22-25%
Service area(m2)	6-8
Pwer efficiency(kgO2/kw.h)	〉5.0
Working depth(m)	〉3

• VM-MBBR Carrier Media

MBBR (moving bed biofilm reactor) filler is a biofilm carrier used in sewage treatment, which mainly provides a suitable growth environment for microorganisms. Its core principle is to fill a large number of fine suspended fillers in the reactor to provide an attachment surface for microorganisms, thereby efficiently degrading organic matter in sewage.

◎Features

High specific surface area

Stable material and long service life

Stable operation

Easy installation and maintenance

◎Application areas

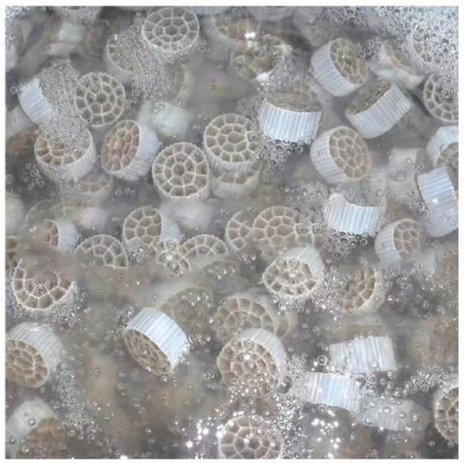
Municipal sewage treatment, urban sewage treatment plants.

Industrial wastewater treatment

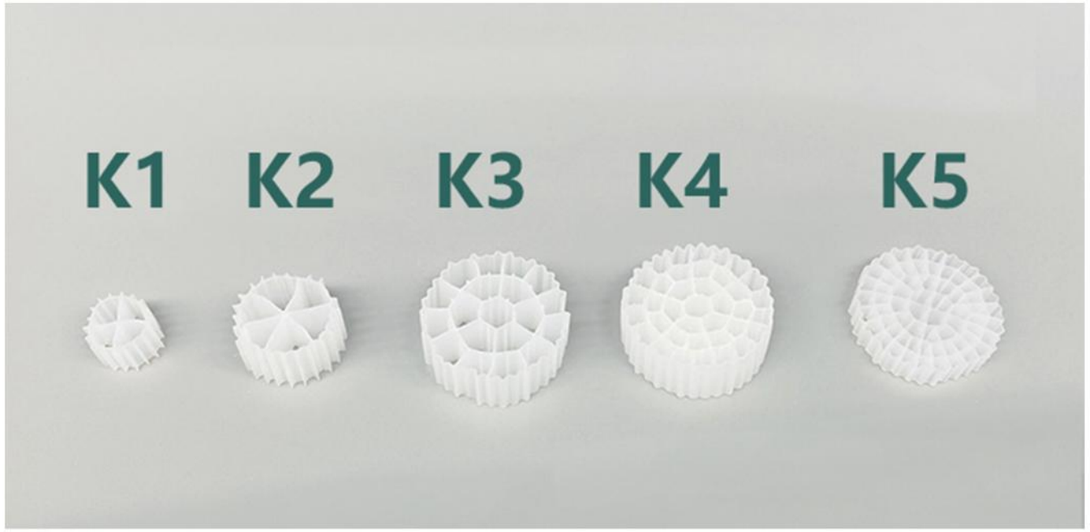
Sewage upgrading and transformation

Nitrogen removal and phosphorus removal

Small sewage treatment system.



• Technical Parameters



Model	K1	K2	K3	K4	K5
Model	Φ10*10mm	Φ15*10mm	Φ25*10mm	Φ25*10mm	Φ25*10mm
Number of holes	4/5	6	19	37	64
Effective surface area	>800	>800	>900	>1000	>1000
Proportion	0.96 G/cm³	0.96 G/cm³	0.96 G/cm³	0.96 G/cm³	0.96 G/cm³
Porosity	>85	>85	>90	>90	>90
Recommended Batching Rate	15–67%	15–67%	15–67%	15–67%	15–67%
Hanging membrane time	3–15 Days	3–15 Days	3–15 Days	3–15 Days	3–15 Days
Nitrification efficiency	400–1200	400–1200	400–1200	400–1200	400–1200
BOD oxidation efficiency	2000–10000	2000–10000	2000–10000	2000–10000	2000–10000
COD oxidation efficiency	2000–10000	2000–10000	2000–10000	2000–10000	2000–10000
Applicable temperature	5–60℃	5–60℃	5–60℃	5–60℃	5–60℃
Service life	>15 Years	>15 Years	>15 Years	>15 Years	>15 Years

VIVAMIX®

WASTEWATER SOLUTIONS