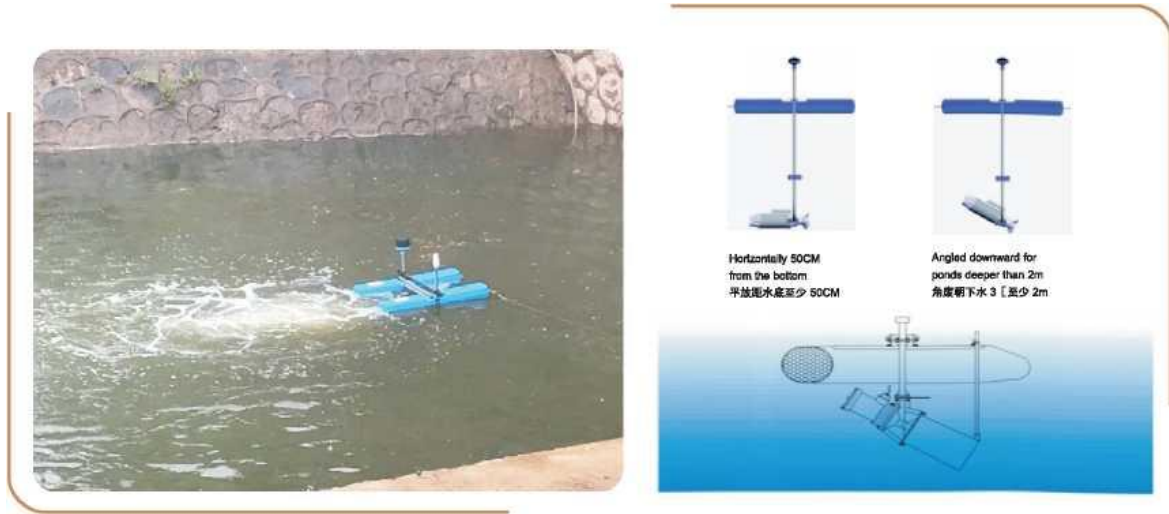


LJ-PSA 推流曝气机

LJ-PSA Push Flow Aerator



LJ-PSA 系列推流曝气机应用

Application field of LJ-PSA Push Flow Aerator

LJ-PSA 系列推流曝气机应用:潜水推流曝气机具有很强的适应性,广泛适用于水景住宅、人工湖、人工河 的增氧、混合及推流,激发水体生态功能,保持水体自净能力。

LJ-PSA series push flow aerator application: submersible push flow aerator has strong adaptability and is widely used in waterscape houses, artificial lakes, artificial rivers for aeration, mixing and push flow, stimulate the ecological function of water body, maintain Water self-purification ability.

推流曝气机特点:

Features of LJ-PSA Push Flow Aerator

推流式曝气机由主机、固定支架、进气管及推流曝气叶轮四部分组成。曝气叶轮把极微小的气泡吹入 底,有效地循环增氧,广泛应用于小型景观水治理领域,有效的减少基础投资,运行管理方便。

推流式曝气机有以下特点:采用潜水式电机静音运转,对环境影响小;具有曝气、混合、推流等多重作用;主体采用不锈钢和高强度工程塑料,耐酸、碱及部分有机溶剂腐蚀;具有阴极保护块,适用范围更广泛;安装喷射角可在上下 60° 范围内调整;安装水深可自由调节,适合不同深度水体;设备多级组合使用,使水

体富氧鲜活，流水不腐。

The push flow aerator is composed of four parts: the main engine, the fixed bracket, the intake pipe and the push flow aeration impeller. The aeration impeller blows tiny air bubbles into the bottom to effectively circulate and increase oxygen. It is widely used in the field of small landscape water treatment, effectively reducing basic investment and convenient operation and management.

The push-flow aerator has the following characteristics: it adopts a submersible motor for silent operation, which has little impact on the environment; it has multiple functions such as aeration, mixing, and pushing flow; the main body is made of stainless steel and high-strength engineering plastics, which are resistant to acid, alkali and some organic solvents. Corrosion; with cathodic protection block, wider application range; installation spray angle can be adjusted within the range of 60° up and down; installation water depth can be adjusted freely, suitable for water bodies of different depths; multi-stage combination of equipment makes the water body rich in oxygen and fresh, and the flowing water is not rot.

LJ-PSA 系列推流曝气机原理

Principle of LJ-PSA Push Flow Aerator

推流曝气机是一种多用途曝气增氧设备，叶轮旋转将水推走形成的空隙，利用水与空气比重不同，空气率先补充空缺，形成混合汽水，经过“帆”型叶轮高速运转搅拌剪切形成溶气水，并推动水体向前运动，达到曝气、混合及推流的目的。三至六片“帆”型叶片高速转动时在叶轮前端形成数股强大剪切水流，将气体剪切成直径均匀的细微气泡，叶轮旋转的轴向推力将气、水混合物强力注入水中产生二次切割，使气泡的粒径变得更小，平均粒径为 1.5mm，汽水混合物在水中形成长距离的气、水混合扩散柱，从而延长了气水接触时间，大大提高氧的利用率。

The push-flow aerator is a multi-purpose aeration and oxygenation equipment. The impeller rotates to push the water away from the gap formed. Using the different proportions of water and air, the air first fills the gap to form mixed soda water, which runs at high speed through the "sail" type impeller. Stir and shear to form dissolved air water, and push the water body to move forward to achieve the purpose of aeration, mixing and push flow.

When three to six "sail" blades rotate at high speed, several strong shearing water flows are formed at the front end of the impeller, which shears the gas into fine bubbles of uniform diameter. The second cutting makes the particle size of the bubbles smaller, the average particle size is 1.5mm, and the soda-water mixture forms a long-distance gas-water mixed diffusion column in the water, thereby prolonging the contact time of the gas-water and greatly improving the utilization rate of oxygen.

设备参数及选型

Equipment parameters and selection

LJ-PSA 系列推流曝气机选型前，首先必须明确水体的需氧量、水体平面大小以及深度结构。

Before selecting the LJ-PSA push flow Aerator, the oxygen demand of the water body, the plane size of the water body and the depth structure must first be determined.

TYPE	Voltage VI	power/ (kw)	rotation speed / m i n	weight (kg)	Oxygenatio n capacity (kgO ₂ /h)	Circulating water volume(m ³ / h)	Induction flow (m ³ /h)
LJ-PSA750	220/380	0.75	2850	19	1.6-1.9	280	14000
LJ-PSA1200	220/380	1.2	2850	20.5	1.8-2.1	390	19000
LJ-PSA1500	220/380	1.5	2850	22.5	2.3-2.5	450	23000
LJ-PSA2200	380	2.2	2850	26.5	3.5-4.5	610	24500
LJ-PSA3000	380	3.0	2850	30.5	4.3-5.3	720	27000
LJ-PSA4000	380	4.0	2850	36.5	5.7-6.8	815	29500
LJ-PSA5500	380	5.5	2850	42	7.4-8.3	1360	32000

LJ-PSA 系列推流曝气机工作概况

General situation of LJ-PSA series push flow aerator

潜水推流曝气机强大的推动力，可使景观水体短期内溶解氧迅速增加，形成富氧活水，流化水体自净能力，短期内明显改善水质。曝气增氧，迅速减轻水体缺氧状态；推流造流，提高水体流动性，减少水体死角；提升底层溶解氧，提高底泥微生物活性；加速分解底泥中有机物及氮磷，减轻底泥释放造成的水体二次污染；迅速去除底泥产生的硫化物、甲烷及氨气，减少水体臭味；提高水中微生物活性及含量，分解水中营养物质。

The powerful driving force of the submersible push-flow aerator can rapidly increase

the dissolved oxygen in the landscape water body in a short period of time, form the self-purification ability of the oxygen-rich living water fluidized water body, and significantly improve the water quality in the short term. Aeration and oxygenation can quickly reduce the anoxic state of the water body; push the flow to improve the fluidity of the water body and reduce the dead angle of the water body; increase the dissolved oxygen in the bottom layer and improve the microbial activity of the sediment; accelerate the decomposition of organic matter and nitrogen and phosphorus in the sediment, and reduce the release of sediment secondary pollution of water bodies; quickly remove sulfide, methane and ammonia gas produced by sediment, reduce water odor; increase microbial activity and content in water, and decompose nutrients in water.



LJ-PSA 系列推流曝气机选型

LJ-PSA series push flow aerator selection

LJ-PSA 河道、湖泊、池塘用推流式曝气机，全称潜水推流曝气机，具有强效曝气、混合、推流作用。它是一种轻便的多功能增氧曝气设备及水体循环设备，广泛应用于水景住宅、人工湖、人工河等小型景观水体；在水体修复实践中，对水体复氧、水体循环等方面效果明显，针对不同水体具有多种安装方式。

LJ-PSA push flow aerator for rivers, lakes and ponds, the full name of submersible push flow aerator, has the functions of strong aeration, mixing and push flow. It is a portable multifunctional aeration aeration equipment and water circulation equipment, which is widely used in waterscape houses, artificial lakes, artificial rivers

and other small landscape water bodies. Obviously, there are many installation methods for different water bodies.

推流曝气机安装方式

Installation instructions for push flow aerator

在深水池塘里安装曝气或喷泉设备很困难，然而采用漂浮式喷泉曝气机，你会发现整个过程轻而易举，设备安装后不受水位变化影响。

- 1、 电源安装务必请专业电工；
- 2、 水体深度不得低于 0.6 米。

固定方式：

采用插杆式安装——水体表面除设备及杆，无其他配件

采用锚石固式安装——水体表面除设备外，无可见配件

注意事项：

- 1、 电源线应选用可移动橡胶套防水电缆，其中一芯与电机外壳可靠接地。
- 2、 安装深度应对照技术参数表严格控制，不可任意调节工作深度。
- 3、 开机后几秒内观察电机运转方向是否正确，如反转及时调整。
- 4、 设备运作的水体内不可有金属线、绳子、塑料袋等纤维杂物，以免缠绕叶轮和堵塞进水口等部位。
- 5、 设备出厂、可配电器控制系统，工作中当控制系统自动切断电源时需及时查明原因，排除故障后再启动。

Installing aeration or fountain equipment in deep water ponds can be difficult, however with a floating fountain aerator, you will find the entire process a breeze and the equipment is not affected by changes in water levels after installation.

1. Please ask a professional electrician for power installation;
2. The depth of the water body shall not be less than 0.6 meters.

a fixed way:

Adopt plug-in installation - no other accessories except equipment and rods on the surface of water body

Anchored installation - no visible accessories except for equipment on the surface of the water body

Precautions:

1. The power cord should be a removable rubber sheathed waterproof cable, one of which is reliably grounded to the motor casing.
2. The installation depth should be strictly controlled according to the technical parameter table, and the working depth cannot be adjusted arbitrarily.
3. Observe whether the motor is running in the correct direction within a few seconds after starting the machine, and adjust it in time if it is reversed.
4. There should be no metal wires, ropes, plastic bags and other fibrous debris in the water body in which the equipment operates, so as to avoid entanglement of the impeller and blockage of the water inlet and other parts.
5. The equipment is shipped from the factory and can be equipped with a distributor control system. When the control system automatically cuts off the power supply, it is necessary to find out the reason in time, and then start after troubleshooting.