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GreatOrientalTrading



097-3619703



# JA

## 沉水喷流式曝气机

### JA Submersible jet aerator

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## JA Submersible jet aerator

### 特点

#### ■ 高效率溶氧

独特的混气室设计,吸入空气量多,与水混合均匀,产生气泡细而多,溶气率高。

#### ■ 充分的搅拌

叶轮产生压力经喷嘴孔口产生强劲水流与空气混合喷射,使氧在水中移动效率高,同时达到良好搅拌效果,可保持活性污泥浮游必须流速。

#### ■ 安静无噪音

本机组设计水中运转方式,低回转数、低噪音:陆上空气进气导管可加装消音设备,此外无须其他消音室设备,降低成本。

#### ■ 易安装维护

自动着脱装置与不附着脱装置二种可供选择,安装简单维护容易,节省操作费用。

#### ■ 适用范围广

使用范围用途广,工业污水处理,畜牧业排水处理,一般污水下水道曝气工程,使用活性污泥法处理工厂排水设施之曝气槽,单独使用或组合使用皆可。

### 构造说明

本沉水喷流曝气机使用曝气设计专用泵,与气泡产生部和自动着脱装置组成一体。

#### ■ 曝气专用泵

曝气设计专用泵,使用不阻塞污物型高效能叶轮,不阻塞、寿命长。

#### ■ 气泡产生部

由进气导管、喷嘴座、混气室、扩散管所组成,水流经连接于泵出口之喷嘴座高速射入混气室,空气由进气导管引导至混气室与水流结合,经扩散管排出。

#### ■ 自动着脱装置

由引导管、引导板、着脱本体所组成,当机组维护时,可靠着脱装置直接将泵浦从水中经引导管至槽外。

### Features

#### ■ High efficiency oxygen dissolving

It has unique design for gas mixture chamber whose intake air quantity is big. It can be mixed well with water, and can produce minute and plenty of air bubble with high air dissolving rate.

#### ■ Intensive mixing

The pressure produced by impeller through jet hole produces forceful water flow, which realizes jet after mixed with air to make oxygen move efficiently in water and at the same time achieve good mixing effect, which can maintain the flow rate necessary for activated sludge floating.

#### ■ Quiet and noise-free

The machine unit is designed to run in water with low winding number and low noise: overland air-intake duct can be additionally equipped with silencing equipment. Cost can be reduced since no other anechoic room is required.

#### ■ Easy for installation and maintenance

There are two types for your selection: equipped with or without automatic attach device. Easy for installation and maintenance, saving operation cost.

#### ■ Wide range of service

It is widely used in industrial wastewater treatment, effluent treatment of livestock husbandry and general foul sewer aeration engineering. Activated sludge method is applied to treat aeration tank of effluent facilities of factory. It can be used either individually or in a combined way.

### Constructive specification

This submersible jet aerator adopts specially designed pump of aeration, which forms the integral unit air bubble generating section and automatic attach device.

#### ■ Special aeration pump

Special aeration pump uses high-performance impeller, which does not block fouls. Therefore, it has long service life.

#### ■ Air bubble generating section

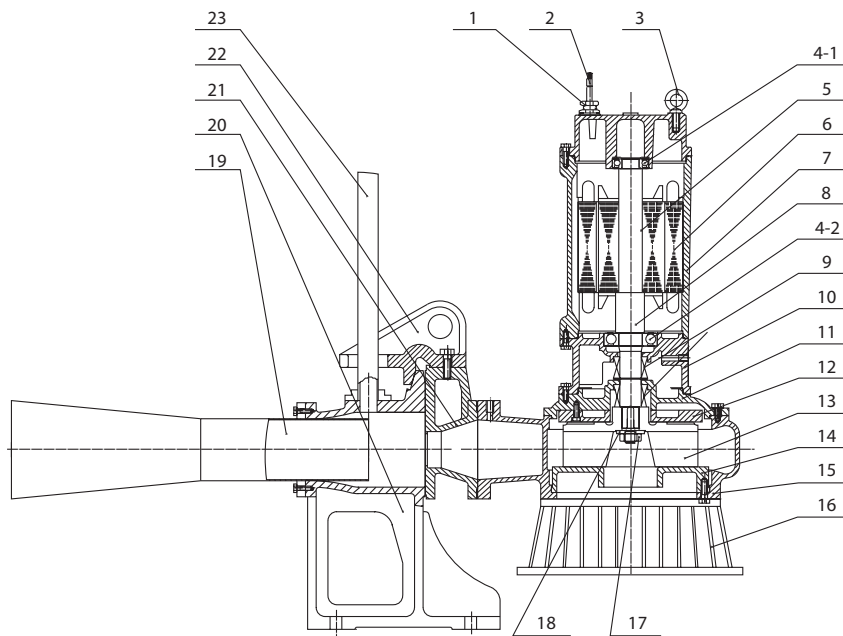
This section is composed of air-inlet duct, nozzle holder, gas mixture chamber and divergent pipe. Water is pumped into gas mixture chamber at high speed from nozzle holder connected to pump outlet. Air is inducted into gas mixture chamber through air-inlet duct and is mixed with water flow, then exhausted through divergent pipe.

#### ■ Automatic attach device

This equipment is composed of induction duct, directing plate, the attach-unit. During maintenance of equipment, the pump can be directly pulled out from water through induction duct along with the attach device.



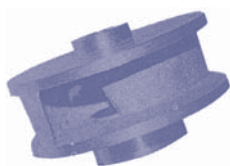
## 结构简图及材质 Construction and material



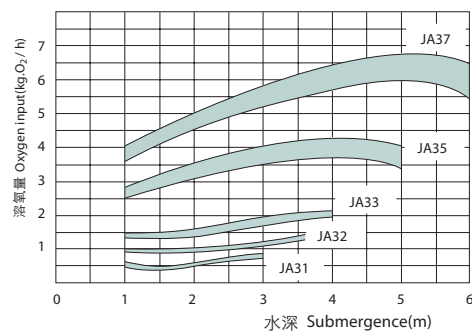
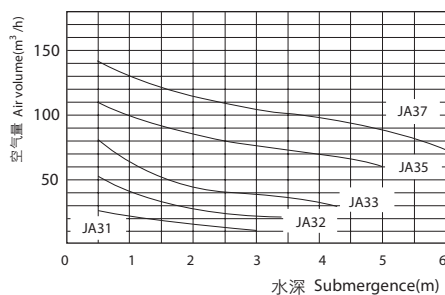
NO.	名称	Name	材质
1	电缆密封装置	Sealing equipment of cable	
2	电缆	Cable	
3	吊环	Flying rings	
4	轴承	Bearing	
5	转子	Rotor	
6	定子	Stator	
7	马达本体	Motor unit	FC200
8	主轴	Main shaft	SUS420
9	机械密封	Mechanical seal	
10	中承	Medium bearing	FC200
11	油箱	Oil tank	FC200
12	内盖	Inner cap	FC200

NO.	名称	Name	材质
13	叶轮	Impeller	FC200
14	磨擦盘	Friction disk	FC200
15	泵体	Pump body	FC200
16	滤底座	Filter seat	FC200
17	叶轮螺母	Impeller nut	SS34
18	止动垫圈	Locked spacer	SS34
19	扩散管	Divergent pipe	SUS304
20	着脱	Attach device	FC200
21	喷嘴座	Nozzle holder	FC200
22	引导板	Directing plate	FC200
23	进气管	Air intake pipe	SS34

## 性能曲线 Performance curves



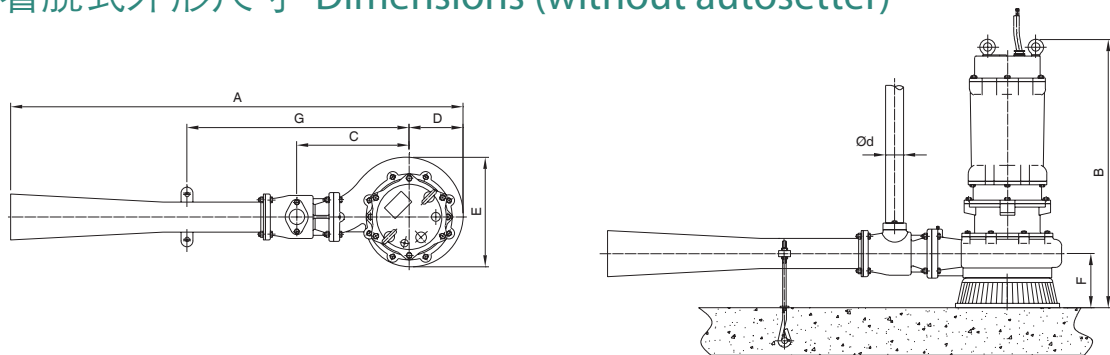
不阻塞污物型高效能叶轮  
High-performance  
impeller, without blocking fouls



## 性能规格表 Specifications

型号 Type	功率 Power		极数 Pole	空气量-水深 Air capacity-water depth m <sup>3</sup> /h-m	供氧量 Air transfer capacity kg.O <sub>2</sub> /h	曝气槽尺寸 Basin dimensions			适合水深 Workable water depth (m)
	hp	kW				L(m)	W(m)	H(m)	
JA-31-50	1	0.75	4	11-2	0.35-0.45	3	2	4	1-3
JA-32-80	2	1.5	4	22-3	1.0-1.2	4	3.5	4	1-3
JA-33-80	3	2.2	4	37-3	1.75-1.95	5	5	4.5	1.5-3.5
JA-35-100	5	3.7	4	75-3	3.5-3.95	6	6	5	2-4
JA-37-100	7.5	5.5	4	103-3	5.3-5.9	7	7	6	2-5

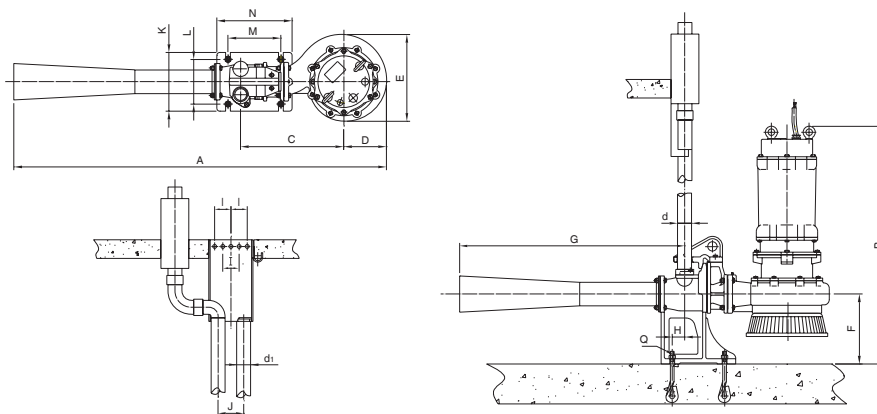
## 无着脱式外形尺寸 Dimensions (without autoserter)



型号 Type	尺寸 Dimensions(mm)							重量 Weight (kg)	
	A	B	C	D	E	F	G		
JA-31-50	1099	597	246	135	270	129	556	Ø32	55
JA-32-80	1343	642	319	153	308	145	669	Ø40	81
JA-33-80	1343	719	319	153	308	145	669	Ø40	103

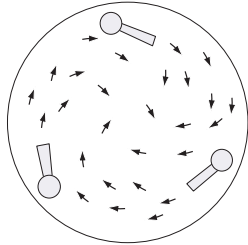
型号 Type	尺寸 Dimensions(mm)							重量 Weight (kg)	
	A	B	C	D	E	F	G		
JA-35-100	1526	770	379	182	376	182	749	Ø50	141
JA-37-100	1526	831	379	182	376	182	749	Ø50	182

## 附着脱式外形尺寸 Dimensions (with autoserter)

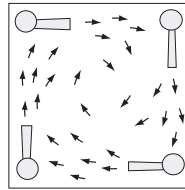


型号 Type	尺寸 Dimensions(mm)																重量 Weight (kg)	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Q	d		d1
JA-31-50	1099	718	266	135	270	250	698	34.5	100	70	180	140	155	220	M12	32A	32A	71
JA-32-80	1384	777	360	153	308	280	871	47	70	90	220	170	190	260	M16	40A	40A	121
JA-33-80	1384	854	360	153	308	280	871	47	70	90	220	170	190	260	M16	40A	40A	143
JA-35-100	1586	888	439	182	376	300	965	53.5	70	110	250	190	225	320	M16	50A	50A	201
JA-37-100	1586	949	439	182	376	300	965	53.5	70	110	250	190	225	320	M16	50A	50A	242

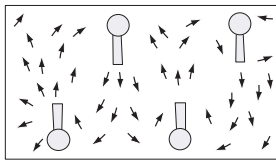
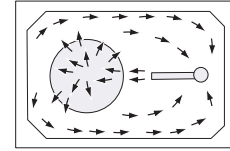
## 配置参考图 Reference diagram of configuration



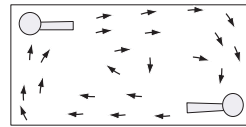
圆形池 Round tank



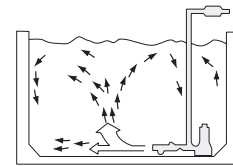
正方形池 Square tank



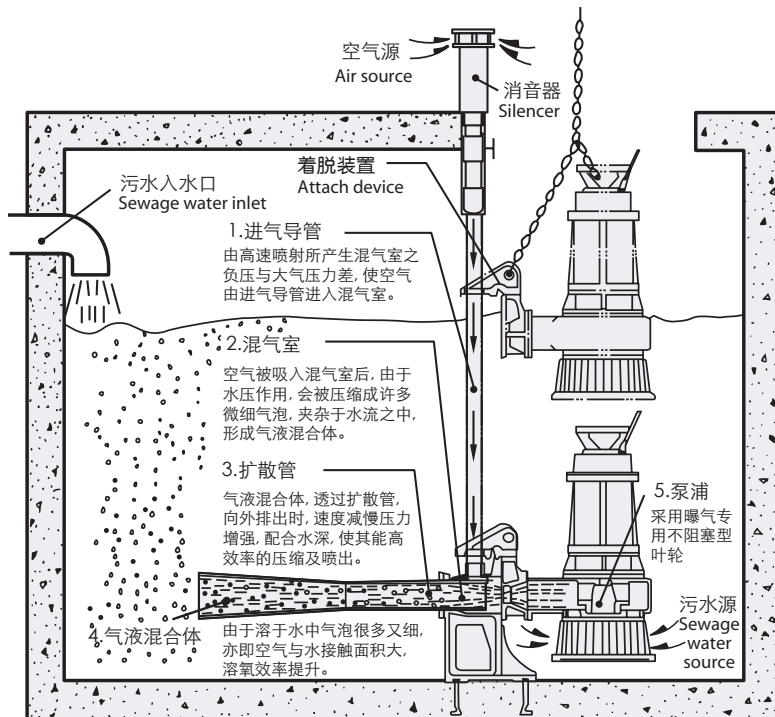
长方形池 (长:宽=2:1)  
Rectangular tank  
(Length:Width=2:1)



长方形池 (长:宽=5:1)  
Rectangular tank  
(Length:Width=5:1)



## 系统流程图 System flowchart



### 1. Air-intake duct

Air is taken into gas mixture chamber through air-intake duct due to the pressure difference between negative pressure in gas mixture chamber caused by high-velocity jet and atmospheric pressure.

### 2. Gas mixing chamber

After being drawn into gas mixing chamber, air is compressed into plenty of air bubbles, which are mingled in water flow forming gas-liquid compound body under the action of hydraulic pressure.

### 3. Divergent pipe

When gas-liquid compound body is discharged outwards through divergent pipe, its flow rate will slow down and pressure will rise along with the depth of water so that it can be compressed and ejected efficiently.

### 4. Gas-liquid compound body

Oxygen dissolving efficiency increases due to that there are large quantity of minute air bubbles in water; which means the contact area between air and water is large.

### 5. Pump

This pump adopts special unblocking type impeller for aeration.



如蒙洽询请指示下列各项：  
For further details, please fulfill the chart below.

客户: \_\_\_\_\_ 承办人员: \_\_\_\_\_  
Customer \_\_\_\_\_ Undertaker \_\_\_\_\_

工程名称: \_\_\_\_\_ 工程地点: \_\_\_\_\_  
Name of project \_\_\_\_\_ Address of project \_\_\_\_\_

电话: \_\_\_\_\_ 传真: \_\_\_\_\_  
Telephone \_\_\_\_\_ Fax \_\_\_\_\_

*当地状况 Local condition	海拔(m) Elevation		最高相对湿度(%) Max relative humidity	
	当地大气压力(MPa) Local atmospheric pressure		最高气温(°C) Max air temperature	
污水情况 Water quality	污水类型 Wastewater type		处理工艺 Treatment processes	
	* 曝气时间(H/day) Aeration time		日处理量(m³/d) Waste water daily valume	
		进水 Inlet	出水 Effluent	
	COD(mg/l)			
	BOD(mg/l)			
	NH <sub>3</sub> -N(mg/l)			
	pH			
	温度(°C) Temperature			
其他 Others				
*曝气机参数 JA's parameters	使用场所 Use location	<input type="checkbox"/> 调节池 Regulating reservoir <input type="checkbox"/> 曝气池 Aeration tank <input type="checkbox"/> 其他 Others		
	空气量(m³/min) Air capacity		容氧量(kgO <sub>2</sub> /h) Dissolved oxygen	
	水深(m) Water depth		其他 Others	
*水池参数 Aeration tank's parameters	方形 Rectangle or square(m)	长 Length		
		宽 Width		
		高 Height		
	圆形 Circle(m)	直径 Diameter		
		高 Height		
其他 Others				
其它要求 Other requirements				

备注: 1. 以上资料请尽可能完整填写。 Notes: 1. Please fill in the parameter lists as complete as possible.  
2. 项目前加注“\*”者, 请务必填写。 2. The item with "\*" must be filled.