



APEC-SUN

Submersible Ejector



APPLICATIONS:

- Living wastewater, manholes, stock farms, wastewater treatment, supplies the oxygen to a slurry treatment tank.
- To produce the water current in fountain pools or water tanks to help avoid accumulation and decay on the bottom of tank and pool.
- Aquaculture farm, oxygen supply for water tank.

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 flocs. Therefore, it has long service life.

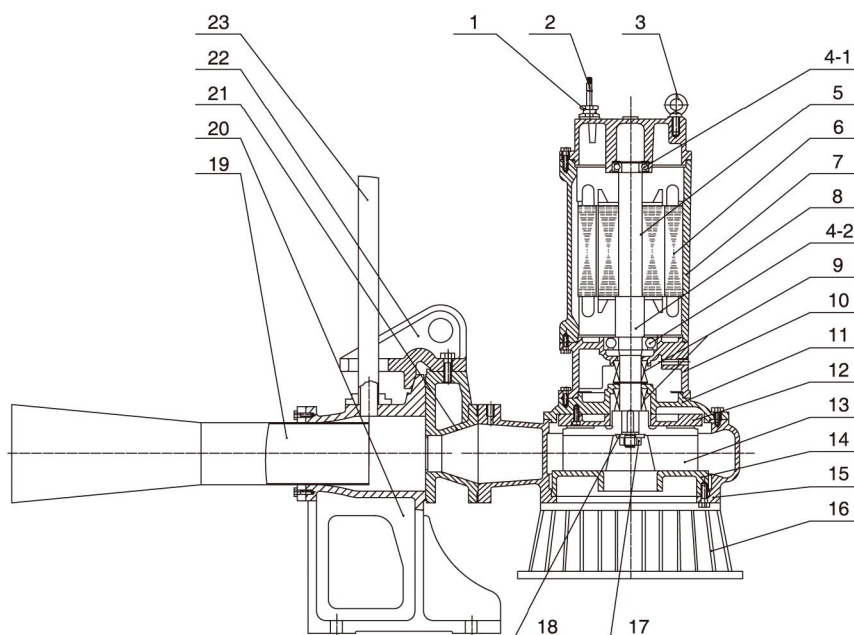
- Air bubble generating section:

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.

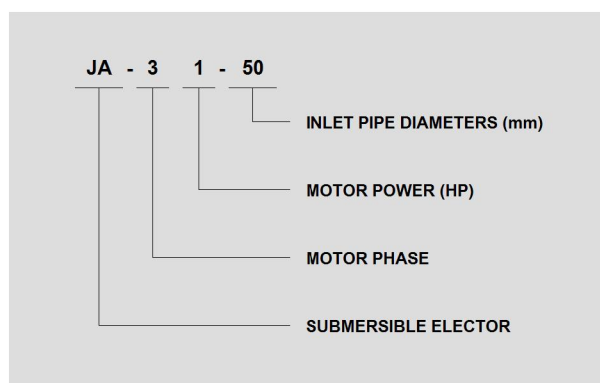
CONSTRUCTION:



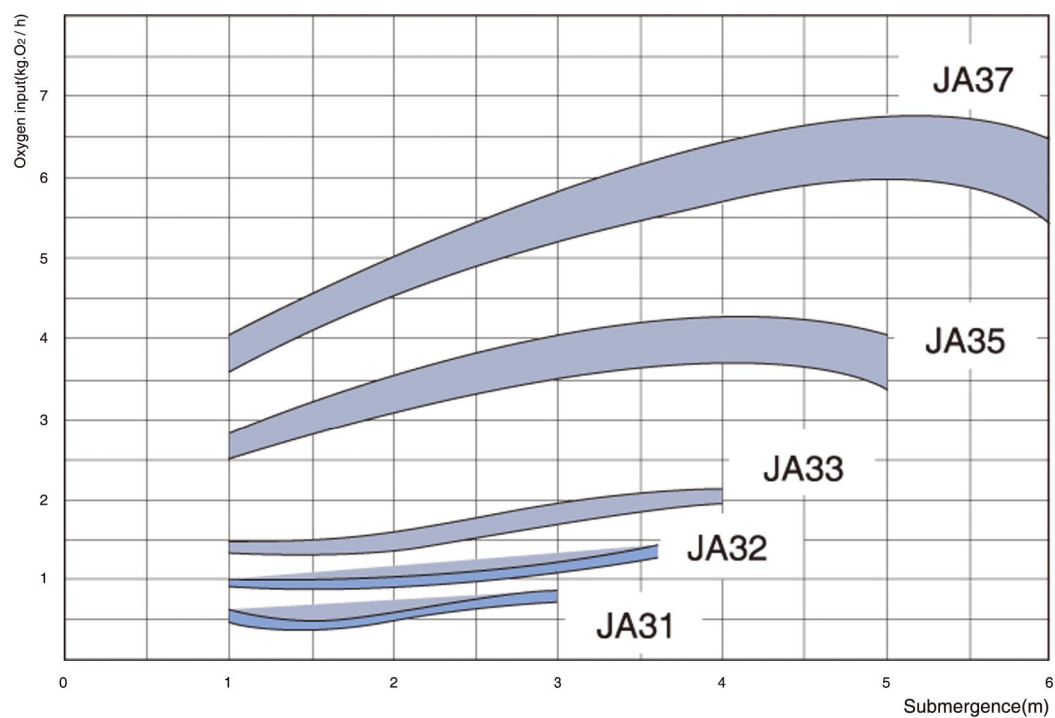
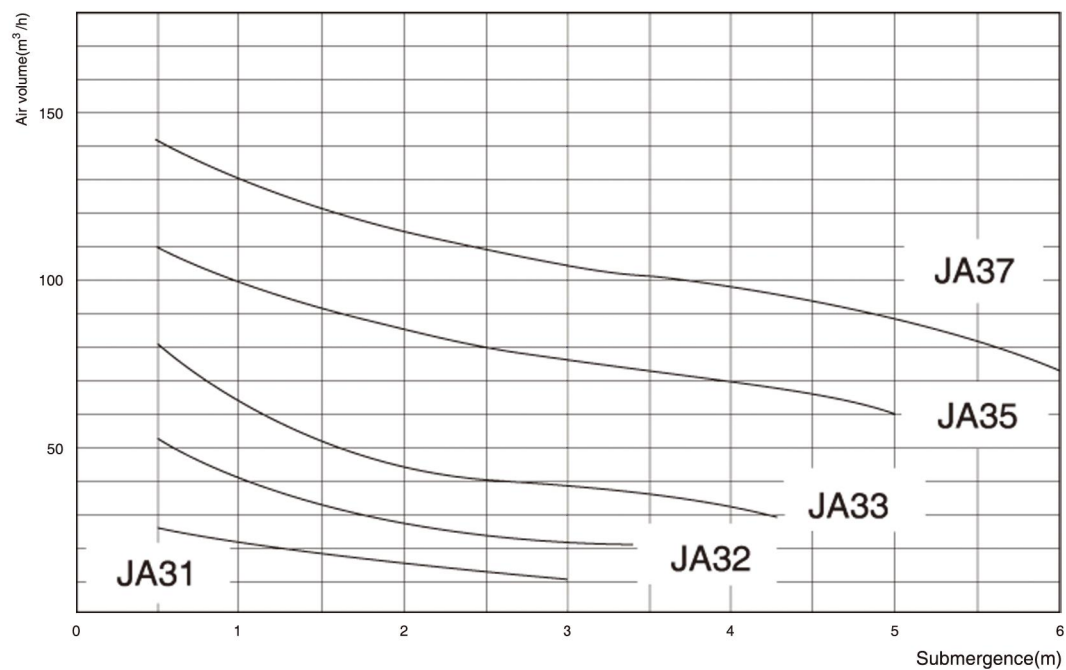
NO.	NAME	MATERIAL
1	Sealing Equipment of Cable	
2	Cable	
3	Flying Rings	
4	Bearing	
5	Rotor	
6	Stator	
7	Motor Unit	FC200
8	Main Shaft	SUS420
9	Mechanical Seal	
10	Medium Bearing	FC200
11	Oil Tank	FC200
12	Inner Cap	FC200

NO.	NAME	MATERIAL
13	Impeller	FC200
14	Friction Disk	FC200
15	Pump Body	FC200
16	Filter Seat	FC200
17	Impeller Nut	SS34
18	Locked Spacer	SS34
19	Divergent Pipe	SUS304
20	Attach Device	FC200
21	Nozzle Holder	FC200
22	Directing Plate	FC200
23	Air Intake Pipe	SS34

TYPE DESCRIPTION:



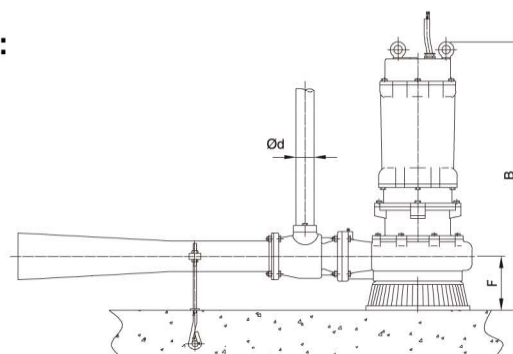
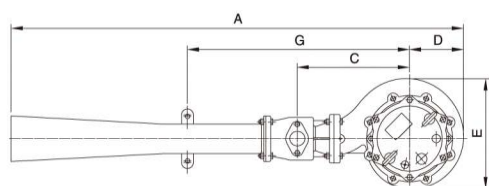
PERFORMANCE CURVE:



PERFORMANCE PARAMETER:

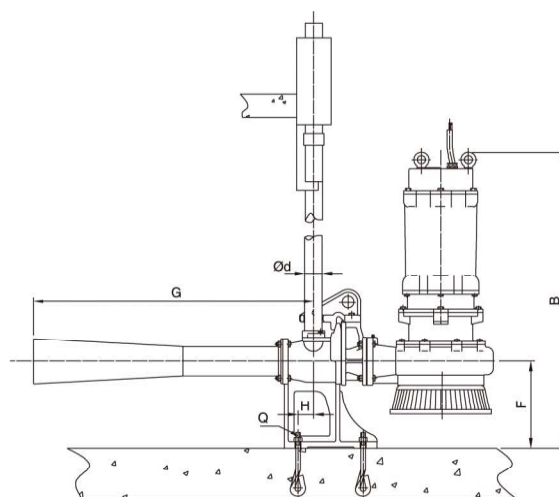
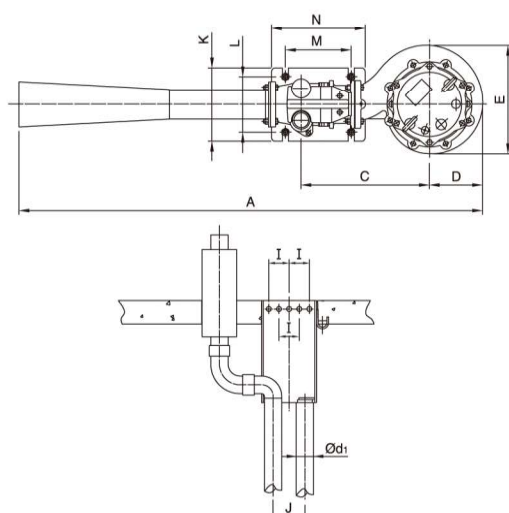
PUMP MODEL	POWER		POLE	AIR CAPACITY WATER DEPTH (m ³ /h - m)	INLET PIPE DIAMETER (mm)	AIR TRANSFER CAPACITY (kgO ₂ /h)	BASIN DIMENSIONS			WORKABLE WATER DEPTH (m)
	HP	kW					L (m)	W (m)	H (m)	
JA-31-50	1	0.75	2	11 - 2	32	0.35 - 0.45	3	2	4	1 - 3
JA-32-80	2	1.5	2	22 - 3	40	1.0 - 1.2	4	3.5	4	1 - 3
JA-33-80	3	2.2	4	37 - 3	40	1.75 - 1.95	5	5	4.5	1.5 - 3.5
JA-35-100	5	3.7	4	75 - 3	50	3.5 - 3.95	6	6	5	2 - 4
JA-37-100	7.5	5.5	4	103 - 3	50	5.3 - 5.9	7	7	6	2 - 5

DIMENSIONS (WITHOUT AUTOSETTER):



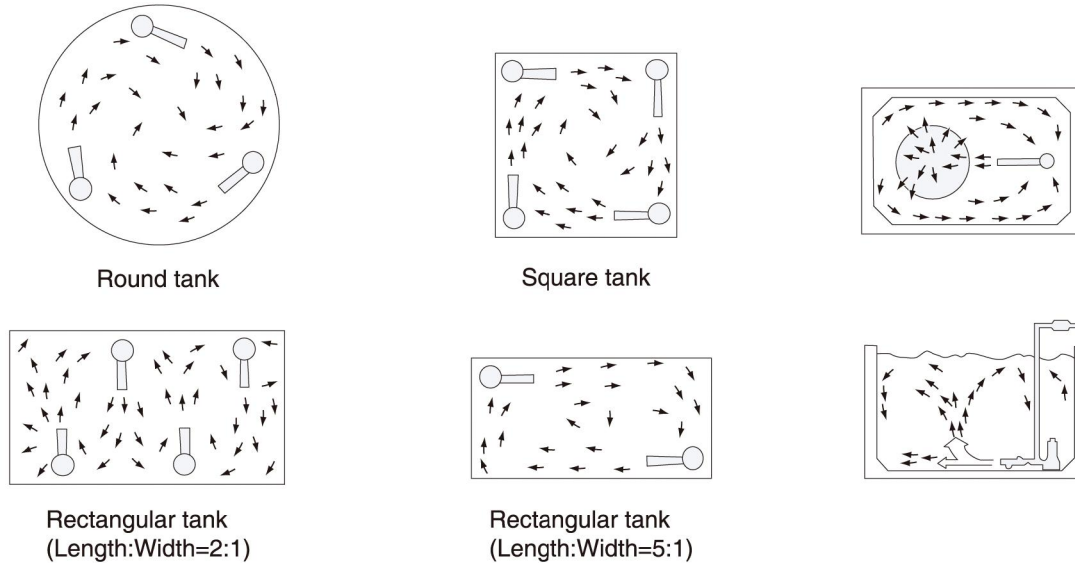
PUMP MODEL	DIMENSIONS (mm)								WEIGHT (kg)
	A	B	C	D	E	F	G	Ød	
JA-31-50	1099	597	246	135	270	129	556	Ø32	55
JA-32-80	1343	642	319	153	308	145	669	Ø40	81
JA-33-80	1343	719	319	153	308	145	669	Ø40	103
JA-35-100	1526	770	379	182	376	182	749	Ø50	141
JA-37-100	1526	831	379	182	376	182	749	Ø50	182

DIMENSIONS (WITH AUTOSETTER):

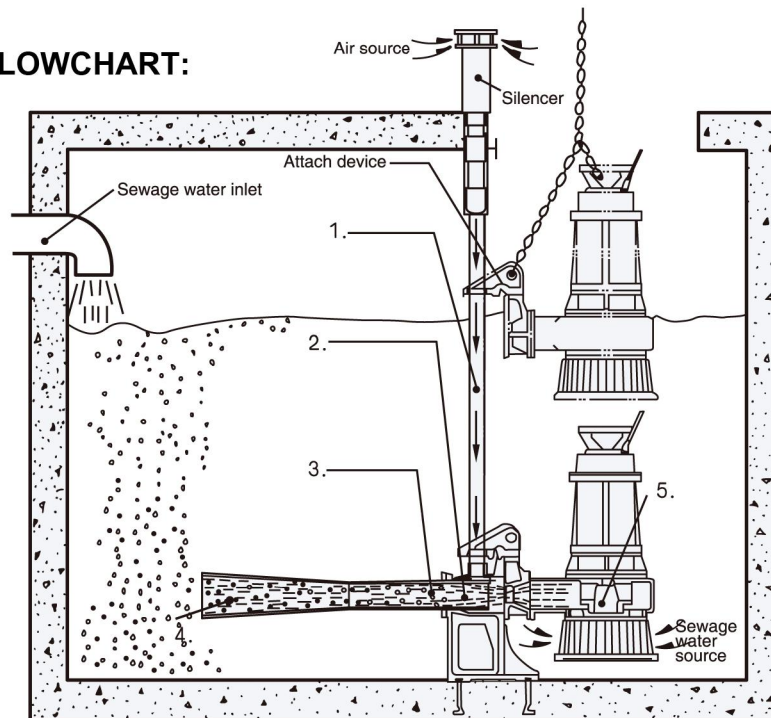


PUMP MODEL	DIMENSIONS (mm)																WEIGHT (kg)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Q	Ød	
JA-31-50	1099	718	266	135	270	250	698	35	100	70	180	140	155	220	M12	Ø32	71
JA-32-80	1384	777	360	153	308	280	871	47	70	90	220	170	190	260	M16	Ø40	121
JA-33-80	1384	854	360	153	308	280	871	47	70	90	220	170	190	260	M16	Ø40	143
JA-35-100	1586	888	439	182	376	300	965	54	70	110	250	190	225	320	M16	Ø50	201
JA-37-100	1586	949	439	182	376	300	965	54	70	110	250	190	225	320	M16	Ø50	242

REFERENCE DIAGRAM OF CONFIGURATION:



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.