



Integrity  
Innovation  
Improvement



# JET-B SERIES / TOJ-B SERIES JET AERATOR



Moisture-resistance cable / Vortex Impeller design / Vent bolt design  
Dual SIC mechanical seal / Dry type induction motor / Motor overload protector



HENG LONG ELECTRIC CO., LTD.

# JET-B Series JET Aerator



According to the situation of set up is different at project scene, our Aeration Device doesn't include the Air Pipe. Air Pipe is optional.

JET-B-1052  
JET-B-3052  
JET-B-112  
JET-B-312



JET-B-123  
JET-B-323  
JET-B-333



JET-B-353  
JET-B-3754  
JET-B-3104



## ■ FEATURES

- 1.The jet aeration with powerful flow which is produced by the pressure through impeller operation passing through a nozzle in order to get excellent mix as well.
- 2.Dry Induction motor is B class insulation(155°C) and enclosure IEC IP68. The air guide pipe is able to be equipped with the equipment of noise elimination.
- 3.It produces powerful jet flow in the bottom of tank, excellent balanceable, low noisy and durable.
- 4.Equipped with lifting frame device to install and maintain easily and to ensure the safety of operators.

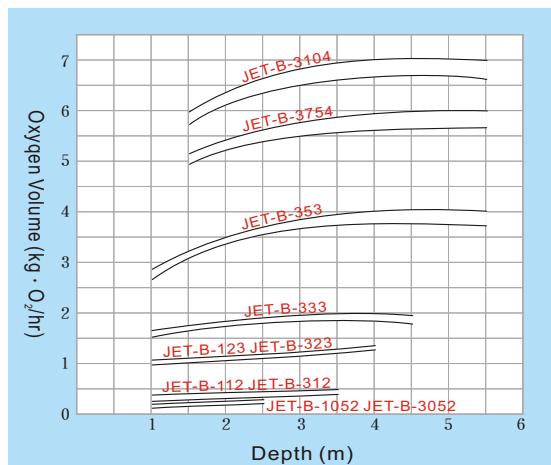
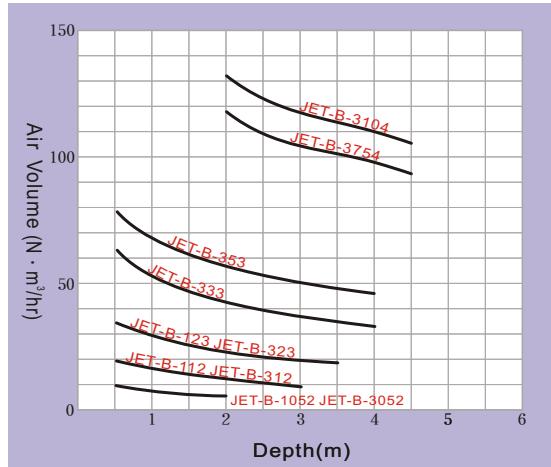
## ■ APPLICATION

Industrial wastewater aeration treatment, animal husbandry sewage water aeration treatment, general sewer aeration engineering, aeration tank of the active slurry treatment in the plant, aeration of various industries and the apparatus of mixing wastewater treatment.

## ■ SPECIFICATION

Type	Phase	Voltage	Power		Air Caliber		Pole / Rotation	Air Volume	Oxygen Volume	Depth	Aeration Dimension			JET-B Weight	TOJ-B Weight
			HP	KW	Inch	mm					L	W	H		
JET-B-1052	1Ø	110/220	1/2	0.4	1"	25	2P/2850	8—1	0.17~0.28	0.5~1.5	2.0	1.8	2.0	25	34
JET-B-3052	3Ø	220/380	1/2	0.4	1"	25	2P/2850	8—1	0.17~0.28	0.5~1.5	2.0	1.8	2.0	25	34
JET-B-112	1Ø	110/220	1	0.75	1"	25	2P/2850	12—1.5	0.38~0.47	1~2	3.0	2.0	3.0	28	37
JET-B-312	3Ø	220/380	1	0.75	1"	25	2P/2850	12—1.5	0.38~0.47	1~2	3.0	2.0	3.0	28	37
JET-B-123	1Ø	220	2	1.5	1 1/4"	32	2P/2850	23—1.5	1.05~1.26	1~2	4.0	3.5	3.5	45	64
JET-B-323	3Ø	220/380	2	1.5	1 1/4"	32	2P/2850	23—1.5	1.05~1.26	1~2	4.0	3.5	3.5	45	64
JET-B-333	3Ø	220/380	3	2.2	1 1/4"	32	2P/2850	38—2	1.78~1.98	1.5~2.5	5.0	5.0	4.0	49	68
JET-B-353	3Ø	220/380	5	3.7	1 1/4"	32	2P/2850	57—2	3.55~4.05	2~3	6.0	7.0	5.0	54	73
JET-B-3754	3Ø	220/380	7 1/2	5.5	1 1/2"	40	2P/2850	105—3	5.40~5.95	2~4	7.0	7.0	6.0	59	
JET-B-3104	3Ø	220/380	10	7.5	2"	50	2P/2850	118—3	6.35~7.00	2~4	8.0	7.0	7.0	64	

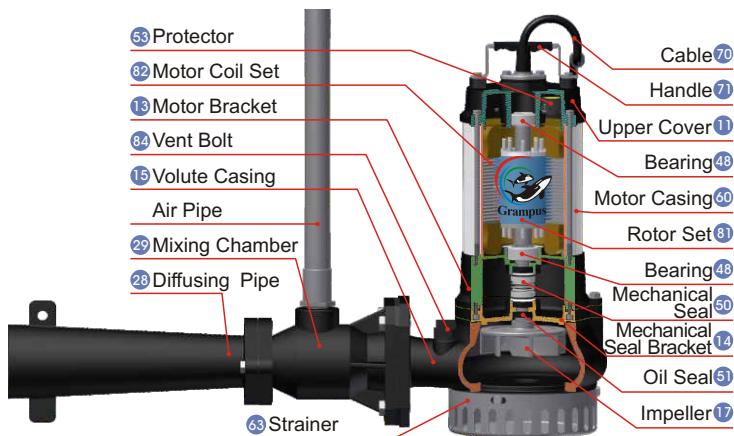
## ■ PERFORMANCE CURVE



# JET-B Series JET Aerator



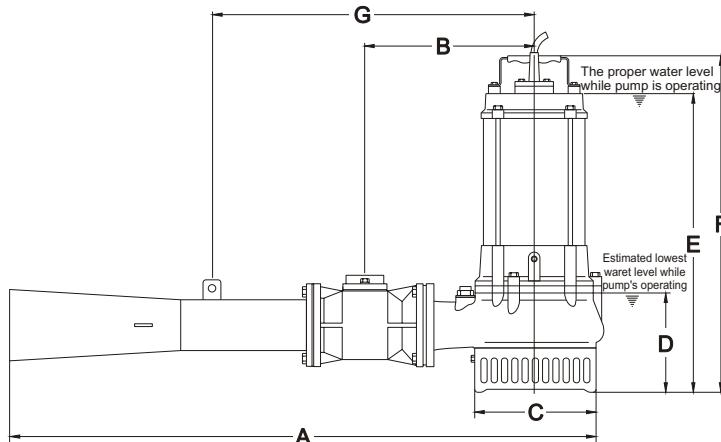
## STRUCTURAL DRAWING



## MATERIAL AND STANDARD TABLE

	Caliber	25mm · 32mm · 40mm · 50mm
Liquid	Temperature	0°C ~ 40°C (32°F ~ 104°F)
	Available to deal with wastewater of building, sewer and industrial wastewater of food, paper, mining, textile, leather, dyeing and metal.	
Pump	Structure	Impeller Vortex Imperller
	Material	Seal Dual Mechanical Seal
	Upper Cover	FC-200
	Bearing	Heavy duty bearing
	Impeller	FC-200
	Volute Casing	FC-200
	Motor Bracket	FC-200
	Mechanical Seal Bracket	FC-200
	Seal	Lubricant ISO VG. # 32
		Motor Side Carbon/Ceramic
		Pump Side Silicon Carbide/Silicon Carbide
Motor	Type	Submersible dry type
	Insulation class	B class(130°C)/F class(7.5-15HP)
	Inner protector	Auto Cat Motor Protector
	Material	Casing SUS-304
		Main Shaft SUS-403/SUS-410
		Cable VCT

## DIMENSION



## AERATION PROCESS

### Air Pipe:

Vortex impeller produces high speed jet flow to cause the discrepancy of the minus pressure and barometric pressure in the mixing chamber in order to the air is sucked in the mixing chamber through air pipe.

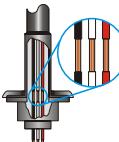
### Mixing Chamber:

The air sucked in the mixing chamber by high speed produces upward convection of numerous tiny bubbles through compressing the air and water of the effect of water pressure to increase the oxygen in the aeration tank.

### Diffusing Pipe:

The aeration flow of powerful tiny bubbles drains through diffusing pipe, the speed becomes slow, the pressure increase greater. The aeration effect will be excellent as long as the aerator is installed at the proper water depth.

## MAIN PART



### Waterproof Cable Base

Our motor wire has the highest quality waterproof treatment to prevent moisture into motor from gaps or other situations.



### Protector

The automatic reset motor overload protector will shut itself off automatically to prevent overheat whenever its voltage drop, impeller plugged, the drainage line is below the watermark and other unusual conditions.



### Motor

Made from 2 Pole dry type motor with insulation class B (130°C) which is sustainable in high temperature.



### Ball Bearing

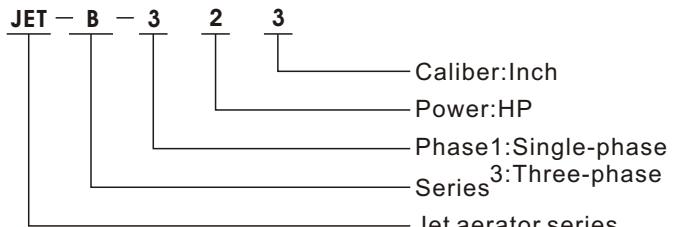
Precision ball bearing, whose character is high circumgyration, low noise, low vibration and low wear torque, increases long service life.



### Dual Silicon Car-bide Mechanical Seal

Its character is mud-resistance and excellent lubrication and is good for long-lasting running. The dual enclosed construction has a diaphragm to prevent leakage strongly.

## TYPE EXPLANATION



TYPE	A	B	C	D	E	F	G
JET-B-1052	675	215	160	125	360	415	550
JET-B-3052	675	215	160	125	330	385	550
JET-B-112	675	215	160	125	390	455	550
JET-B-312	675	215	160	125	365	420	550
JET-B-123	710	250	180	140	490	545	580
JET-B-323	710	250	180	140	420	470	580
JET-B-333	745	275	195	160	465	525	610
JET-B-353	1005	285	195	160	485	565	545
JET-B-3754	1005	285	195	160	510	585	555
JET-B-3104	1005	285	195	160	530	610	555

# TOJ-B Series (Guide Rail System)



According to the situation of set up is different at project scene, our Lifting Device doesn't include the Guide Rail. Guide Rail needs to be purchased optional.

TOJ-B-1052  
TOJ-B-3052  
TOJ-B-112  
TOJ-B-312



TOJ-B-123  
TOJ-B-323  
TOJ-B-333



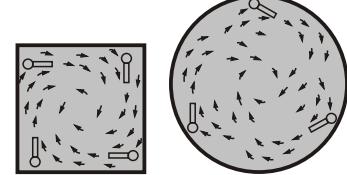
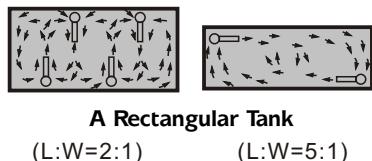
TOJ-B-353



## ■ FEATURES

Automatically lift bracket, which is easy to repair or maintain by guide rail bars and chains. On the other hand, that help pumps ascend and descend, assemble and disassemble, and it is safer and more convenient comparing to traditional pump.

## ■ INSTALLATION CONSULTATION



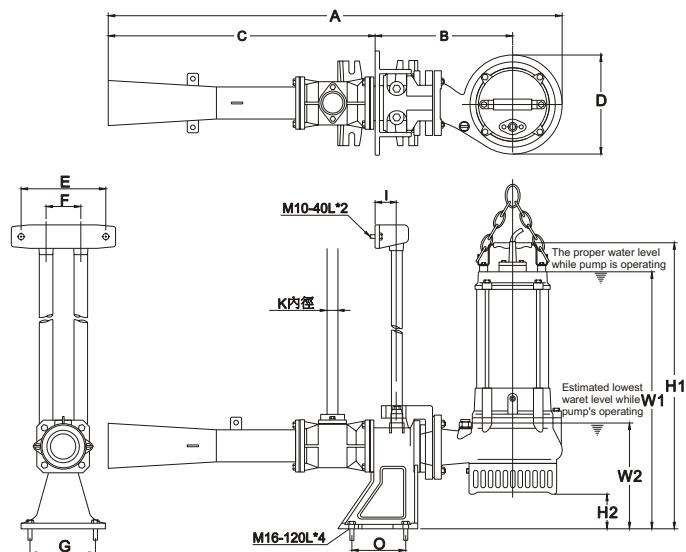
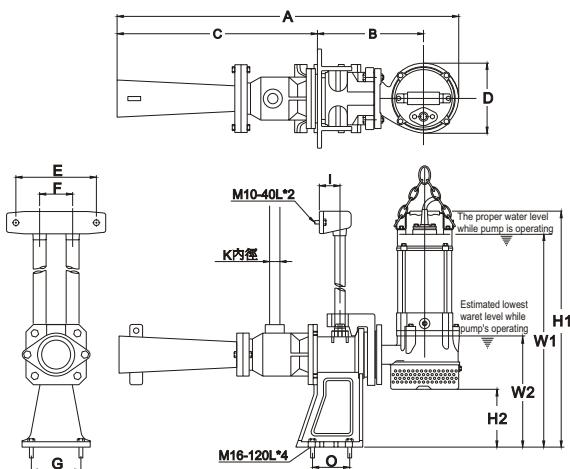
A Rectangular Tank (L:W=2:1)      A Square Tank (L:W=5:1)

## ■ TYPE EXPLANATION

TOJ — B    3    5    3

- Caliber:Inch
- Power:HP
- Phase1:Single-phase
- 3:Three-phase
- Series
- Jet aerator series with automatic lifting frame device

## ■ DIMENSION



Unit : mm

TYPE	A	B	C	D	E	F	G	I	K	O	H1	H2	W1	W2
TOJ-B-1052(3052)	825	260	485	165	185	70	115	50	1"	90	575(545)	150	510(480)	275
TOJ-B-112(312)	830	260	485	165	185	70	115	50	1"	90	605(575)	150	540(515)	275
TOJ-B-123(323)	910	320	485	205	195	80	180	60	1 1/4"	150	690(620)	140	625(555)	275
TOJ-B-333	960	360	485	225	195	80	180	60	1 1/4"	150	650	115	580	275
TOJ-B-353	1220	360	740	250	195	80	180	60	1 1/4"	150	670	115	600	275