

# BS SERIES、TOS-BS SERIES NON-CLOG APPARATUS USE SEWAGE SUBMERSIBLE PUMP

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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.**

# BS series Non-Clog Apparatus Use Sewage Submersible Pump



BS-1052  
BS-3052  
BS-112  
BS-312



BS-323  
BS-333  
BS-353



BS-3754  
BS-3104



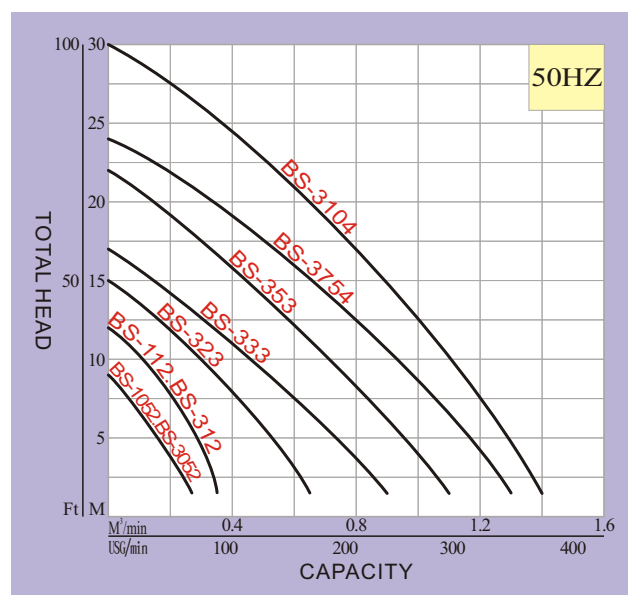
## FEATURES

1. Cable base and core wire are dealt with Epoxy Resin in order to avoid the moisture into the motor.
2. Volute casing is equipped with the vortex impeller for drawing out mud and sewage effectively.
3. Equipped with vent bolt at volute casing is to avoid air lock ensuring the pump operation steady.
4. Equipped with high quality dual SIC mechanical seal.
5. Motor is B class(130°C) insulation, enclosure IEC IP68.
6. Auto-cut prevents motor from overheat.
7. Thick EPOXY coating is better than common painting in corrosion-resistance and rust-resistance.
8. This type can be equipped with lift bracket.

## APPLICATION

1. Wastewater lift station, municipal wastewater treatment plant.
2. Building wastewater treatment system.
3. Piggery excrement, animal & poultry farm.
4. School, hospital, community wastewater treatment system.
5. Food, paper, mining, textile, leather industry wastewater treatment system.

## PERFORMANCE CURVE



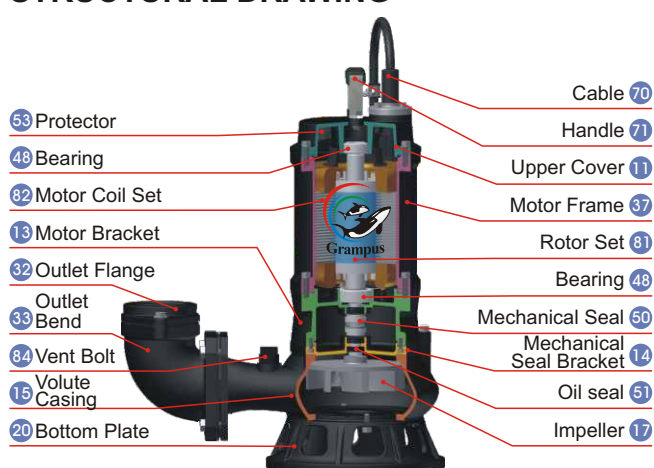
## SPECIFICATION

Type	Ferquency	Phase	Voltage	Power		Caliber		Pole / Rotation	Std. Head	Std. Flow	Max. Head	Max. Flow	BS Weight	TOS-BS Weight	Solid Passage
TYPE	Hz	PH	VOLT	HP	KW	Inch	mm	P/rpm	M	M³/min	M	M³/min	KG	KG	mm
TOS-BS-1052	50	1Ø	220	1/2	0.4	2"	50	2P/2850	5M	0.16	9M	0.27	18	27	35
TOS-BS-3052	50	3Ø	380	1/2	0.4	2"	50	2P/2850	5M	0.16	9M	0.27	18	27	35
TOS-BS-112	50	1Ø	220	1	0.75	2"	50	2P/2850	8M	0.19	12M	0.35	21	30	35
TOS-BS-312	50	3Ø	380	1	0.75	2"	50	2P/2850	8M	0.19	12M	0.35	21	30	35
TOS-BS-323	50	3Ø	380	2	1.5	3"	80	2P/2850	10M	0.30	15M	0.65	34	54	40
TOS-BS-333	50	3Ø	380	3	2.2	3"	80	2P/2850	11M	0.40	17M	0.90	43	63	45
TOS-BS-353	50	3Ø	380	5	3.7	3"	80	2P/2850	14M	0.50	22M	1.10	47	67	40
TOS-BS-3754	50	3Ø	380	7 1/2	5.5	4"	100	2P/2850	16M	0.60	24M	1.30	58	78	50
TOS-BS-3104	50	3Ø	380	10	7.5	4"	100	2P/2850	20M	0.65	30M	1.40	63	83	50

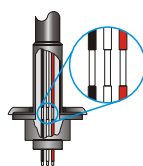
# BS series Non-Clog Apparatus Use Sewage Submersible Pump



## STRUCTURAL DRAWING



## 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.



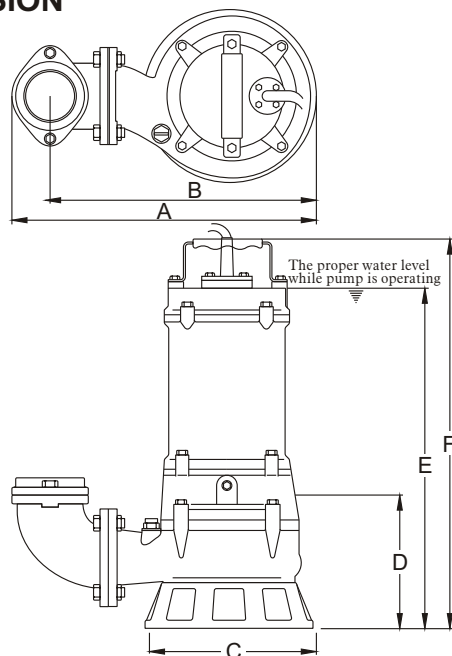
### Vortex Impeller

The vortex impeller not only could drain out solid object and long fiber object, but also it will be without touching the impeller in which reduce the abrasion and approach lif extension.

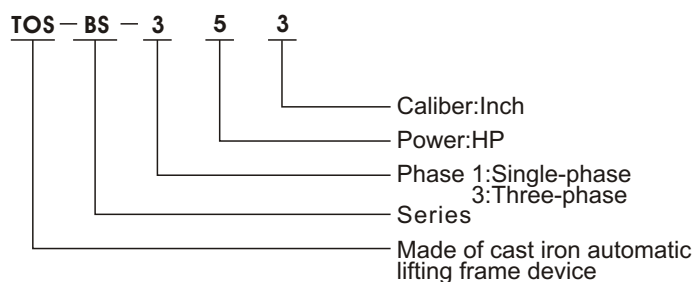
## MATERIAL AND STANDARD TABLE

Liquid	Caliber	50mm · 80mm · 100mm	
	Temperature	0°C ~ 40°C ( 32°F ~ 104°F )	
	Application	Available to deal with wastewater of building, sewer and industrial wastewater of food, paper, mining, textile,leather, dyeing and metal.	
	The lowest depth	▽30 M	
Pump	Structure	Impeller	Vortex Impeller
		Seal	Dual Mechanical Seal
	Material	Upper Cover	FC-200
		Bearing	Heavy-duty bearing
		Impeller	FC-200
		Volute Casing	FC-200
		Motor Bracket	FC-200
		Mechanical Seal Bracket	FC-200
		Bottom Plate	FC-200/Engineering Strengthen Fiber Resin
		Seal	Lubricant
Motor Side	Carbon/Ceramic		
Pump Side	Silicon Carbide/Silicon Carbide		
Motor	Type	Submersible dry type	
	Insulation class	B class (130°C)/F class(7.5-10HP)	
	Inner protector	Auto Reset Motor Protector	
	Material	Casing	FC-200
		Main Shaft	SUS-410/SUS-420
Cable	Standard VCT/Optional		

## DIMENSION



## TYPE EXPLANATION



Unit:mm

TYPE	A	B	C	D	E	F
BS-1052	230	200	170	130	355	410
BS-3052	230	200	170	130	355	410
BS-112	230	200	170	130	390	440
BS-312	230	200	170	130	390	440
BS-323	405	350	220	200	470	540
BS-333	445	390	250	200	470	540
BS-353	460	405	250	205	490	560
BS-3754	550	445	250	225	510	580
BS-3104	550	445	250	230	530	600

# TOS-BS 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.

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TOS-BS-3754  
TOS-BS-3104



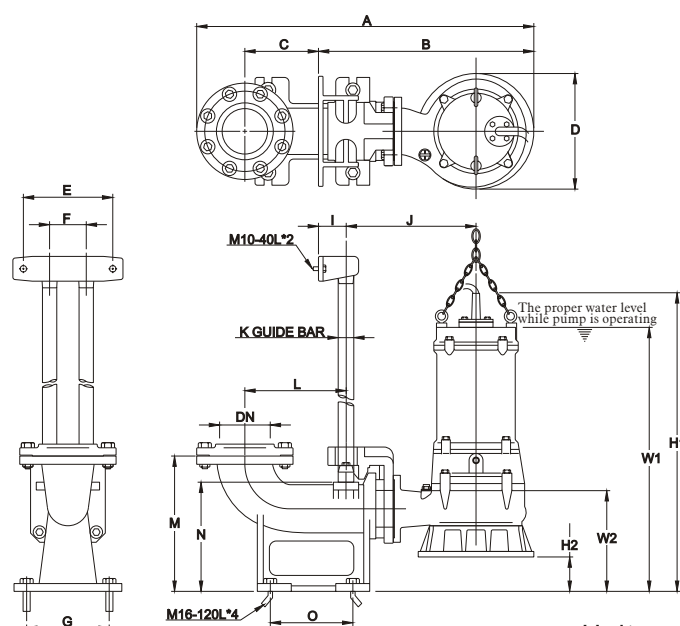
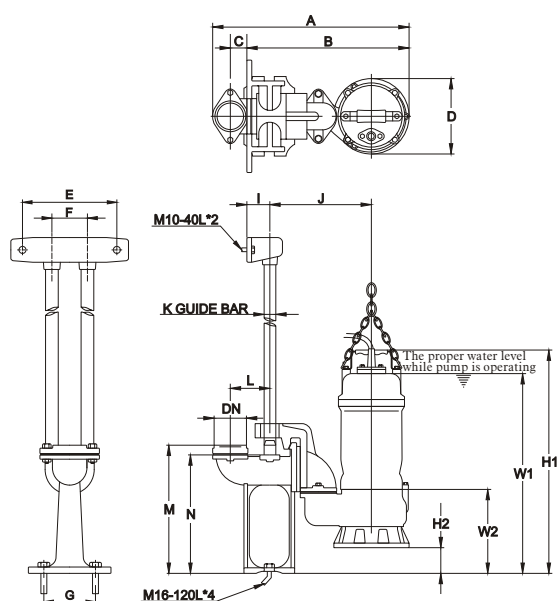
## FEATURES

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.

## DIMENSION

## APPLICATION

Piggery excrement, factory sewage, food-processing factory, leather factory, paper-dyeing, iron and steel, and various industries.



Unit:mm

TYPE	DN	A	B	C	D	E	F	G	I	J	K	L	M	N	O	W1	W2	H1	H2
TOS-BS-1052	50	425	345	40	165	185	70	100	50	210	1"	90	275	255		400	170	460	45
TOS-BS-3052	50	425	345	40	165	185	70	100	50	210	1"	90	275	255		400	170	460	45
TOS-BS-112	50	425	345	40	165	185	70	100	50	210	1"	90	275	255		430	180	490	45
TOS-BS-312	50	425	345	40	165	185	70	100	50	210	1"	90	275	255		430	180	490	45
TOS-BS-323	80	590	400	95	220	185	70	130	50	240	1"	145	305	275	135	590	275	660	115
TOS-BS-333	100	755	485	165	250	195	80	180	60	300	1 1/4"	225	290	240	170	535	235	610	70
TOS-BS-353	100	755	485	165	250	195	80	180	60	300	1 1/4"	225	290	240	170	555	230	630	70
TOS-BS-3754	100	755	485	165	250	195	80	180	60	300	1 1/4"	225	290	240	170	575	230	650	70
TOS-BS-3104	100	755	485	165	250	195	80	180	60	300	1 1/4"	225	290	240	170	595	230	670	70

**HENG LONG**

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Specialized Manufacturer of Submersible Pump · Made in TAIWAN

ISO 9001 Certified

- 1.Product supported by continuously research and improvement. We reserve the right to modify the specifications, capabilities and accessories of all products.
- 2.Please inform the detailed type, application, phase, power, caliber, voltage and head before order. It is easy to obtain a suitable model.
- 3.All the capabilities and specifications are subject to the products. If the voltage and frequency is specific standard, please customize in advance.