

# AS SERIES、TOS-AS SERIES APPARATUS USE SEWAGE SUBMERSIBLE PUMP

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



**HENG LONG ELECTRIC CO., LTD.**

# AS series Apparatus Use Sewage Submersible Pump

AS-323

AS-333  
AS-353AS-3754  
AS-3104AS-3156  
AS-3158

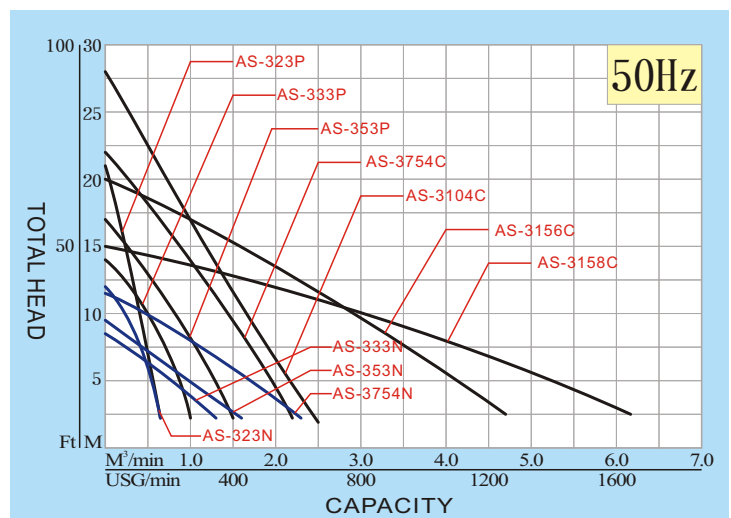
## FEATURES

1. Won the National Standard, CNS, NO. 8080 which is by Ministry of Economic Affairs in Taiwan.
2. Equipped with Epoxy Resin cable avoids the moist into the motor.
3. Dry motor is 3 phase, 2 or 4 pole, and class F (155°C) Insulation and IEC IP68.
4. Dual mechanical seal are made of silicon carbide with wear-resistant, excellent lubricant and durable.
5. Ball bearing with high wear torque, low noise, low vibration and to extend the service lifetime.
6. Thick EPOXY coating is better than common painting in corrosion-resistance and rust-resistance.
7. The Auto-cut protector usually built-in 2-10 HP of AS series submersible pumps, the miniature thermal protector will be built-in between 15HP submersible pumps. Those will shut off automatically to prevent overheat whenever its voltage drop down, impeller plugged, water level under the watermark and other unusual Conditions.
8. Three kinds of impellers, semi-open, closed, vortex, are optional as the picture for various wastewater treatment.




## APPLICATION

1. Building wastewater treatment system, sewage treatment plant, community market, sanitary sewer.
2. Drainage wastewater from paper industry, dyeing industry, food-stuff industry, leather industry and iron and steel industry.
3. Fishery, animal husbandry, dairy farm, piggery, fecal sewage tank and industry water supply.
4. Other sewage or sump treatment system.

## PERFORMANCE CURVE

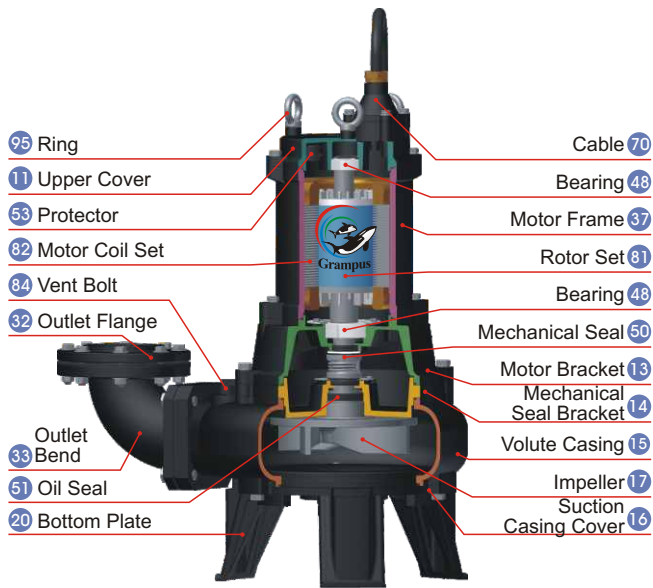


## SPECIFICATION

Model	Type	Frequency	Phase	Rated Voltage	Start Method	Power		Caliber		Pole / Rotation	Std. Head	Std. Flow	Max. Head	Max. Flow	AS Weight	TOS-AS Weight	Solid Passage
Impeller	TYPE	Hz	PH	VOLT		HP	KW	Inch	mm	P/rpm	M	M³/min	M	M³/min	KG	KG	mm
	TOS-AS-323P	50	3Ø	380	Direct	2	1.5	3"	80	2P/2850	7M	0.5	21M	0.65	42	67	32
	TOS-AS-333P	50	3Ø	380	Direct	3	2.2	3"	80	4P/1425	10M	0.5	14M	1.00	72	100	50
	TOS-AS-353P	50	3Ø	380	Direct	5	3.7	3"	80	4P/1425	13M	0.5	17M	1.50	76	104	70
	TOS-AS-3754C	50	3Ø	380	Direct	7½	5.5	4"	100	4P/1425	14M	1.0	22M	2.20	145	173	48
	TOS-AS-3104C	50	3Ø	380	Direct	10	7.5	4"	100	4P/1425	17M	1.0	28M	2.50	150	178	48
	TOS-AS-3156C	50	3Ø	380	Y-Δ	15	11	6"	150	4P/1425	12M	2.5	20M	4.70	265	315	70
	TOS-AS-3158C	50	3Ø	380	Y-Δ	15	11	8"	200	4P/1425	7M	4.5	15M	6.17	270	325	80
	TOS-AS-323N	50	3Ø	380	Direct	2	1.5	3"	80	2P/2850	6M	0.5	12M	0.65	42	67	45
	TOS-AS-333N	50	3Ø	380	Direct	3	2.2	3"	80	4P/1425	6M	0.6	8.5M	1.30	71	99	57
	TOS-AS-353N	50	3Ø	380	Direct	5	3.7	3"	80	4P/1425	6M	0.7	9.5M	1.60	75	103	42
	TOS-AS-3754N	50	3Ø	380	Direct	7½	5.5	4"	100	4P/1425	8M	1.0	11.5M	2.30	143	171	65

# AS series Apparatus Use Sewage Submersible Pump

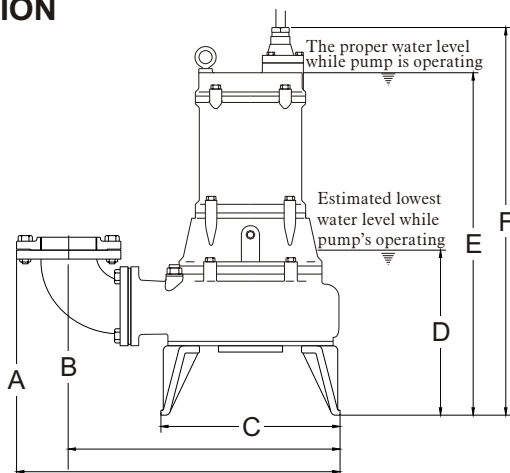
## STRUCTURAL DRAWING



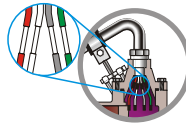
## MATERIAL AND STANDARD TABLE

Liquid	Caliber	80mm · 100mm · 150mm · 200mm	
	Coating	Epoxy	
	Temperature	0°C~40°C (32°F~104°F)	
	Application	Drainage of wastewater of building, farming, animal husbandry, industry and sewer	
Pump	The lowest depth	▽30 M	
	Structure	Impeller	Semi-open · Channel · Vortex Impeller
		Seal	Dual Mechanical Seal
		Upper Cover	FC-200
		Bearing	Heavy-duty bearing
		Impeller	FCD-450
		Volute Casing	FC-200
		Suction Casing Cover	FC-200
		Bottom Plate	FC-200
		Lubricant	ISO VG. # 32
		Motor Side	Carbon / Ceramic
	Seal	Pump Side	Silicon carbide / Silicon carbide
		Inner Protector	Percipience Instrument of seal leakage
Motor	Type	Submersible dry type	
	Insulation class	F class (155°C)	
	Inner Protector	2-10HP: Auto Reset Motor Protector 15HP: Miniature thermal protector	
	Material	Casing	FC-200
		Main Shaft	SUS-410 / SUS-420
		Cable	Standard VCT / Optional

## DIMENSION



## 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. (miniature thermal protector built-in 15HP)



### Motor

Made from 2 or 4 Pole dry type motor with insulation class F (155°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

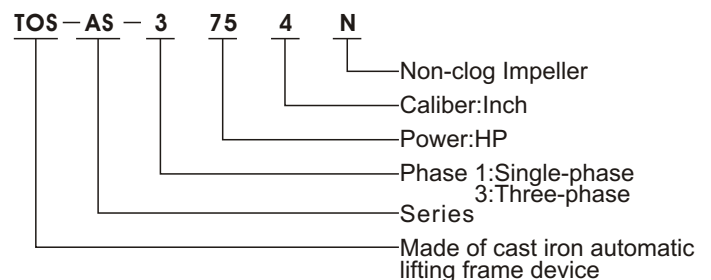
Its character is mud-resistance and excellent lubrication and is good for long-lasting running. The dual enclosed construction has a diaphragm to prevent leakage strongly.



### Surface Coating

Thick EPOXY coating is better than common painting in corrosion-resistance and rust-resistance.

## TYPE EXPLANATION



Unit:mm

TYPE	A	B	C	D	E	F
AS-323	385	330	220	195	450	515
AS-333	540	450	315	285	575	655
AS-353	540	450	315	295	620	705
AS-3754	685	580	395	340	700	805
AS-3104	685	580	395	340	710	810
AS-3156	860	720	450	540	890	990
AS-3158	920	755	450	510	910	1015

# TOS-AS 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.

TOS-AS-323

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TOS-AS-353TOS-AS-3754  
TOS-AS-3104  
TOS-AS-3156  
TOS-AS-3158

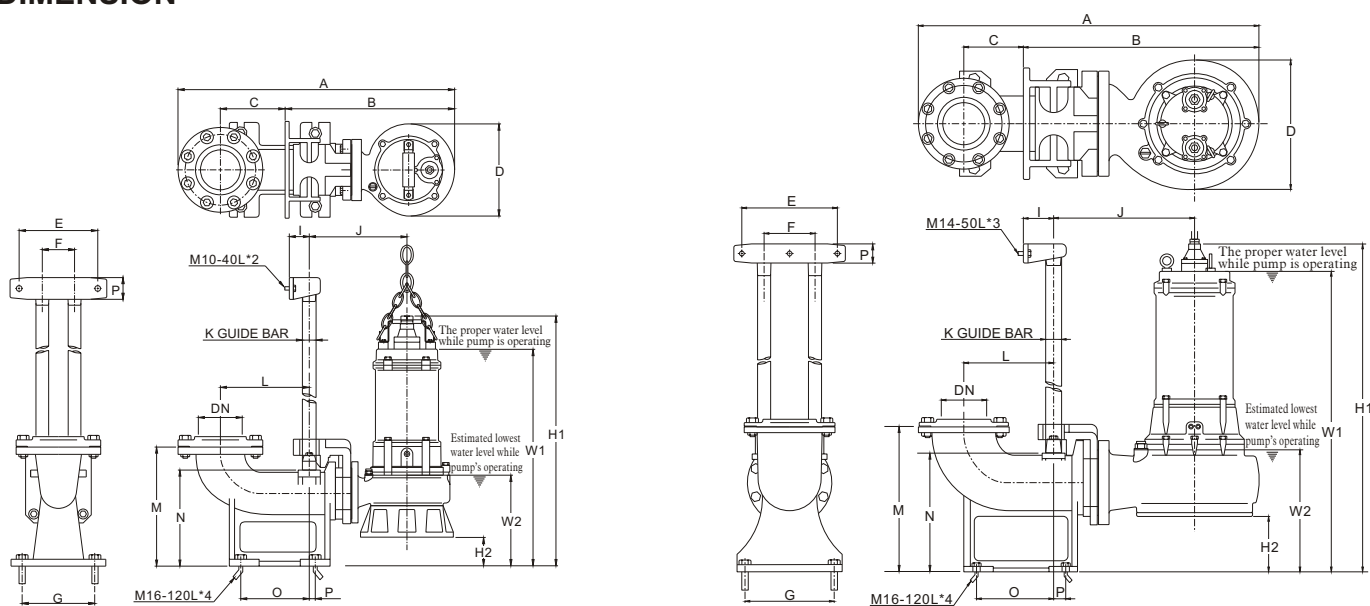
## FEATURES

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.

## APPLICATION

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

## DIMENSION



Unit:mm

TYPE	DN	A	B	C	D	E	F	G	I	J	K	L	M	N	O	W1	W2	H1	H2
TOS-AS-323	80	570	385	95	220	185	70	130	50	225	1"	145	300	275	135	565	250	635	120
TOS-AS-333	100	800	535	165	295	195	80	180	60	320	1 1/4"	225	290	240	170	585	240	660	125
TOS-AS-353	100	800	535	165	295	195	80	180	60	320	1 1/4"	225	290	240	170	610	240	685	125
TOS-AS-3754	100	900	630	165	390	195	80	180	60	370	1 1/4"	225	290	240	170	665	260	770	110
TOS-AS-3104	100	895	625	165	390	195	80	180	60	370	1 1/4"	225	290	240	170	680	260	780	110
TOS-AS-3156	150	1100	775	185	445	300	160	280	95	445	2"	280	455	370	280	880	370	980	170
TOS-AS-3158	200	1165	775	225	445	300	160	280	95	445	2"	320	465	385	300	925	405	1030	180

**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.