

### ▲ Features

- Non-clogging impeller minimizes abrasives wear and allows large solid passage.
- Dry motor with overload protector; Cable with an epoxy resin sealed water-proof cable hood; Use deep groove C3 bearing to extend life time.
- Superior abrasion resistant double mechanical seal made of silicon carbide(SIC) to ensure best seal effect and reduce abrasion from sewage.
- SUS316 main sub. pump components minimize abrasion from sewage and wastewater.

### ▲ Motor Spec.

- 2P dry type or oil type motor.
- Insulation: F class.
- Protection: IP68.
- Frequency: 50HZ
- Voltage: 1ø220~240V(0.5~2HP)  
3ø220~440V(all models)

### ▲ Parts and Materials List

No.	Parts	Std. Material
		EFS Model
1	Cable	UL_STOW or VCT
2	Cable hood	PVC
3	Handle	SUS304 or (Nylon6:0.5~1HP)
4	Motor cover	SUS316
5	Seal housing	SUS316
6	Bracket	SUS316
7	Oil chamber	SUS316
8	Pump casing	SUS316
9	Impeller	SUS316
10	Nut	SUS316
11	Mech. seal	SIC/SIC
12	Oil seal	VITON
13	Bearing	(NTN brand)
14	Overload protector	(T.I.brand)
15	Shaft	SUS316
16	Motor housing	SUS304
17	Lubricant oil	(Turbine Oil ISO VG46)

### ▲ Applications

- Waste water drainage from all industries.
- Sewage drainage from hotels, restaurants, schools, malls, and public buildings.
- Fishery, animal husbandry, stock farm, piggery, and fecal sewage tank in water treatment plant.
- Drainage of waste water containing fibrous additives from leather factory, dyeing factory and food processing factory.
- PH3~11 industrial or domestic wastewater.



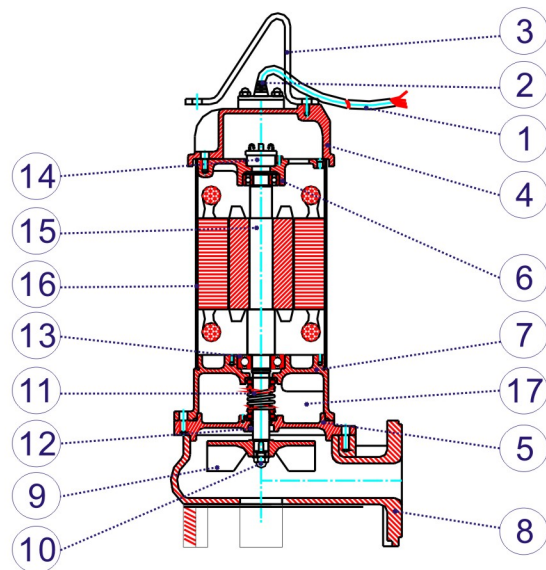
SUS Non-clogging  
Vortex Impeller



SUS Sub.pump with  
guide rail device(Q.D.C)



Sub.pump(0.5~2HP,1phase)  
with auto float switch



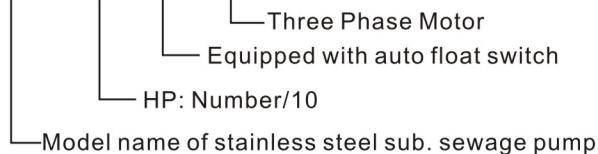


### Operating Conditions

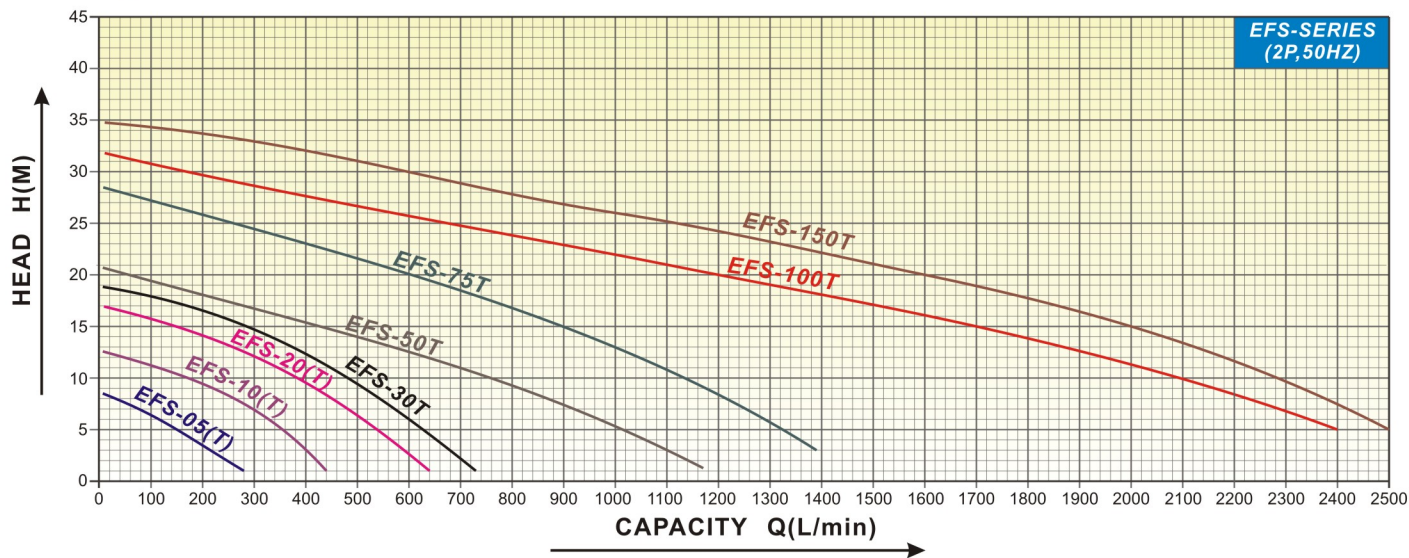
- Water temperature: 0~40°C.
- Ambient temperature: 0~40°C.
- Solid passage: 35~50MM.
- Operating water depth: Max.8~10M.
- No 24hrs continuously running.
- No use in (100%)pure sea water.

### Model Code

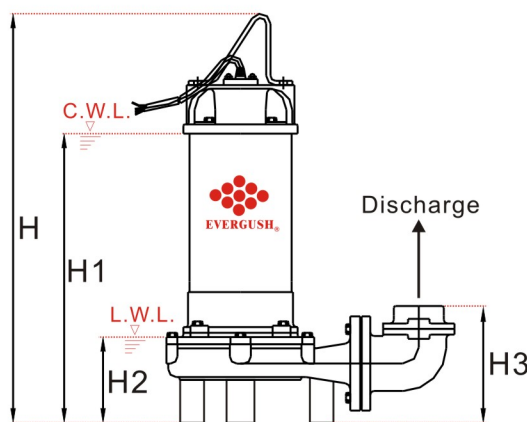
**EFS-20(A)(T)**



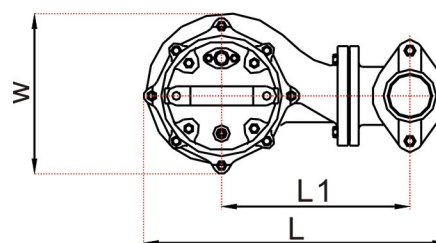
### Performance Curves



### Specification & Dimension



NOTE: Forbid running submersible pumps continuously under L.W.L.



C.W.L.: Continuously Running Water Level.  
L.W.L.: Lowest Running Water Level.

Model	Type	Power		Disch. Inch	Phase φ	Rated		Max.		Dimensions (mm)						Cable M	Net Weight KG	Solid Passage MM	
		KW	HP			Head M	Capacity LPM	Head M	Cap. LPM	L	L1	W	H	H1	H2				H3
EFS-05(A)(T)	Direct	0.37	0.5	2"	1,3	4~5	180~150	8.5	300	224	115	132	409	296	112	113	5	13	35
EFS-10(A)(T)	Direct	0.75	1	2"	1,3	8~9	260~220	12.5	460	224	115	132	439	326	112	113	5	18	35
EFS-20(A)(T)	Elbow	1.5	2	2"(3")	1,3	9~10	420~380	17	650	387	234	205	530	398	120	143	5	33	35
EFS-30T	Elbow	2.2	3	2"(3")	3	10~11	480~450	19	750	387	234	205	550	418	120	143	5	35	35
EFS-50T	Elbow	3.7	5	3"(4")	3	11~14	700~500	21	1200	459	256	230	641	471	160	220	5	55	50
EFS-75T	Elbow	5.5	7.5	3"(4")	3	13~15	1000~900	28.5	1450	459	256	230	681	511	160	220	5	61	50
EFS-100T	Elbow	7.5	10	4"	3	15~22	1700~1000	32	2400	560	310	310	700	550	250	310	10	102	50
EFS-150T	Elbow	11	15	4"	3	15~26	2000~1000	35	2500	560	310	310	730	580	250	310	10	110	50

Remarks: ●(A): Equipped with automatic float switch. ●(T): Three phase motor. ●10M cable are available for 0.5~10HP models per special request.





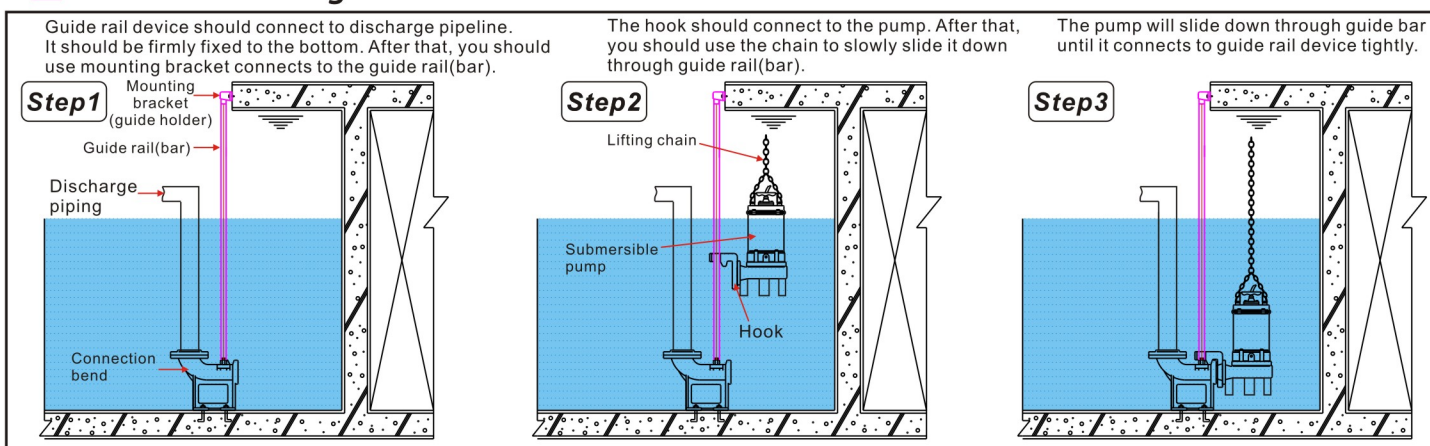
**Product Features**

- Through simple and convenient installation, we can connect the pump onto guide rail device. Whenever the pump needs maintenance, it can be easily pulled out through guide bar to dismantle, repair or examine the pump. For safety purpose, The workers no longer need to go down the septic tank to do maintenance. It will greatly reduce down time.

**Applications**

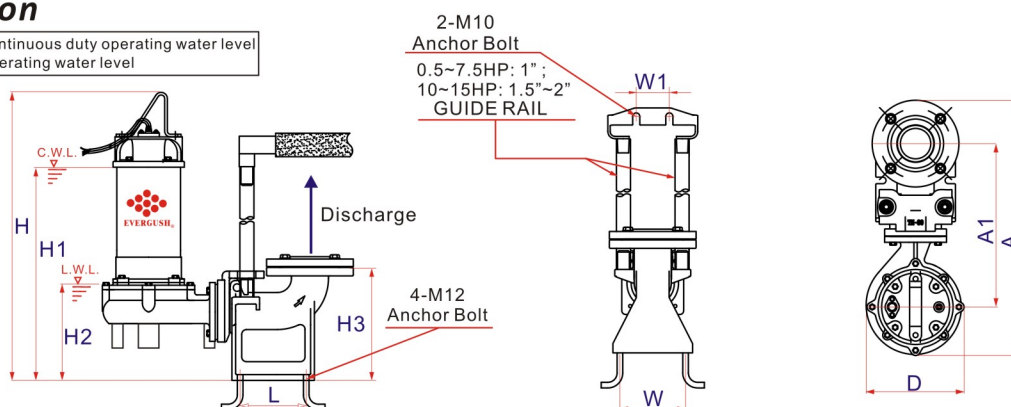
- Animal husbandry and dairying septic tank waste water drainage; sewers, apartments, buildings and basements sewage treatment equipment drainage; Dye house, fur and leather industry and steel industry waste water drainage; other waste water treatments drainage.

**Installation Diagram**



**Dimension**

C.W.L.: Min. continuous duty operating water level  
L.W.L.: Min. operating water level



Model	Power HP	Disch. Inch	Dimensions(mm)										Weight(KG)	
			A	A1	D	H	H1	H2	H3	L	W	W1	TOS Device	TOS & PUMP
TOS(TUS)-EFS-05(T)	0.5	2"	490	303	163	496	380	196	243	110	140	70	16	29
TOS(TUS)-EFS-10(T)	1	2"	490	303	163	547	423	196	243	110	140	70	16	34
TOS(TUS)-EFS-20(T)	2	3"	545	350	210	650	480	210	243	110	140	70	16	49
TOS(TUS)-EFS-30T	3	3"	545	350	210	670	500	210	243	110	140	70	16	51
TOS(TUS)-EFS-50T	5	4"	725	515	230	745	580	270	310	160	150	70	24	79
TOS(TUS)-EFS-75T	7.5	4"	725	515	230	785	620	270	310	160	150	70	24	85
TOS(TUS)-EFS-100T	10	4"	770	510	310	755	605	305	360	180	125	245	40	142
TOS(TUS)-EFS-150T	15	4"	770	510	310	785	635	305	360	180	125	245	40	150

Remarks: ● TOS means cast iron(FC200) guide rail device. (Q.D.C:Quick Discharge Device) ● "T" means 3 phase motor.  
● TUS means stainless steel guide rail device. (Q.D.C:Quick Discharge Device)