



# F SEWAGE/EFFLUENT SUBMERSIBLE PUMPS

## FEATURE

- A precision manufactured motor is achieved by utilizing the highest standard of quality control. All rotors adopt heat treatment methods for drive shaft assembling, and stator winding impregnated with varnish that is heat dried in an industrial oven. The Water Resistance for Pump can reach IP68 Grade.
- HCP's professional assembly line, complimented with a synthesized production test, ensures the highest level of pump quality.
- Standard accessories include : cable with an epoxy resin sealed water-resistant cable base, AC thermal motor protector, dual mechanical seals and lip seal design.
- The F-05A is a practical pump, with an oil filled motor and single seal design (CA/CE).



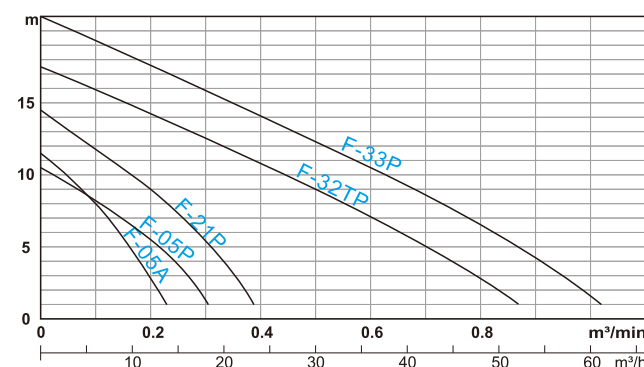
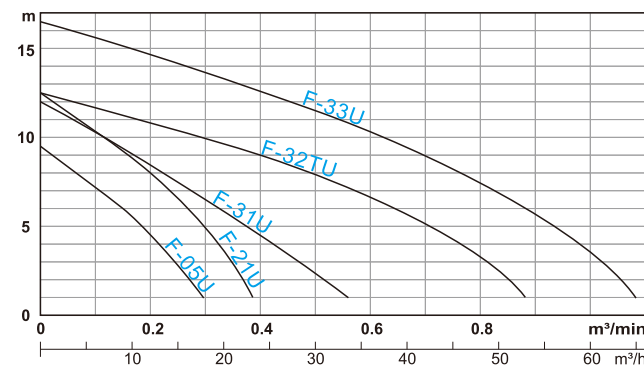
## APPLICATIONS

- Drainage of sewage from the building basements, hotel industry, and waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying of septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.

## PRODUCT NOMENCLATURE

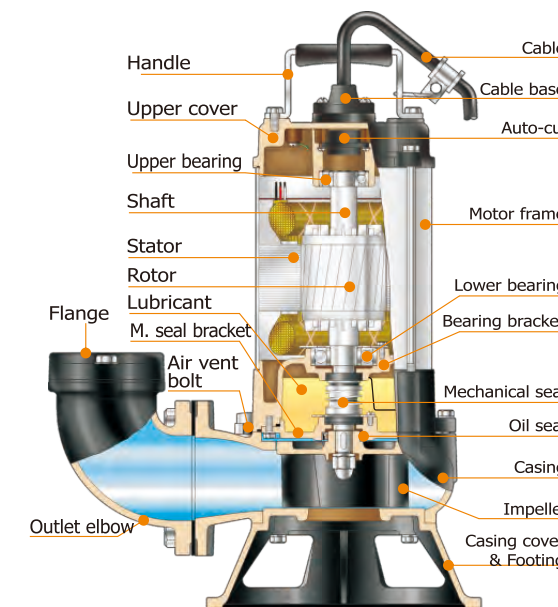
F	—	05	A	
Type		HP	Style	
F	—	2	1	P
Type		Discharge inch	HP	Impeller type (P/U)

## PERFORMANCE CURVES



## SPECIFICATIONS

Discharge (mm)		50 • 80
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	General wastewater • Sewage water and industrial waster
	Submersion Depth	30m (100feet)
Type	Frequency	50Hz
	Motor	2P (3000RPM) • Dry Motor (F-05A: Oil Motor)
	Insulation	Class B
	Protection	IP68
	Protector	Auto-cut (F-05A 3Ø: none, F-05A/U 1Ø: Overheat)
	Bearing	Ball Type
Material	M.seal	Double M.seals (F-05A: Single M.seal)
	Impeller	Semi-open
	Upper Cover	FC-200
	Motor Frame	SUS304
	Shaft End	SUS410(0.5~1HP) •SUS403 (2~3HP)
	M.seal	Upper: Carbon/Ceramic Lower: Silicon/Silicon (F-05A: Carbon/Ceramic)
	Casing	FC-200
	Impeller	FC-200 (F-05A: PA)
	Cable	VCT or H07RN-F or SJOW/SOW
Optional	Pumps can be customized to fit specifications	



## PERFORMANCE SPEC.

Model	Output HP(kW)	Size DN Inch(mm)	Phase Ø	Start Method	Head (m)	Capacity		Solid Passage (mm)	Weight (kg)		Dimension (mm)				
						m³/min	m³/h		1Ø	3Ø	A	B	C	1Ø	3Ø
F-05U	½ (0.4)	2" (50)	3	Capacitor Direct	6	0.15	9	35	16	15	237	-	154	427	427
F-21U	1 (0.75)	2" (50)	3	Capacitor Direct	8	0.2	12	35	17	16	237	-	154	427	427
F-31U	1 (0.75)	3" (80)	3	Capacitor Direct	6.5	0.3	18	30	18	17	278	-	173	457	457
F-32TU	2 (1.5)	3" (80)	3	Capacitor Direct	9	0.4	24	25	38	33	408	270	258	610	530
F-33U	3 (2.2)	3" (80)	3	Capacitor Direct	11.5	0.5	30	25	40	34	408	270	258	610	530
F-05P	½ (0.4)	2" (50)	3	Capacitor Direct	5.5	0.2	12	22	16	15	276	-	235	460	460
F-21P	1 (0.75)	2" (50)	3	Capacitor Direct	9	0.2	12	26	18	17	276	-	235	460	460
F-32TP	2 (1.5)	3" (80)	3	Capacitor Direct	9	0.5	30	32	38	34	408	270	258	610	530
F-33P	3 (2.2)	3" (80)	3	Capacitor Direct	10.5	0.6	36	35	40	34	408	270	258	610	530
F-05A	½ (0.4)	2" (50)	3	Capacitor Direct	8	0.1	6	10	12	11	226	-	161	352	350

Note: Weight Without Cable & Elbow Set

Note: 3Phase U type Vortex impeller will cause higher amperage when operated in reverse direction

