

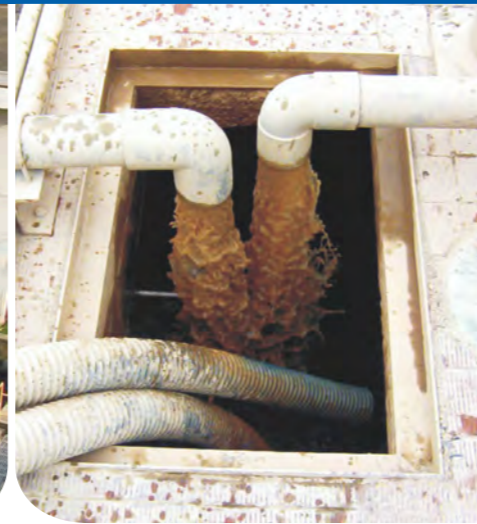
# F

# SEWAGE/EFFLUENT SUBMERSIBLE PUMPS

## HCP PUMP



HANA PUMP, LTD.  
ALVEST MONT, LTD.  
OOO ALVESTKRYM, LTD.



### FEATURE

- A precision manufactured motor is achieved utilizing the highest standard of quality control. All rotors adopt heat treatment method for drive shaft assembling and stator winding impregnated with varnish and heat dried in industrial oven.
- HCP's professional assembly line, complimented with a synthesized production test ensures the highest level of final 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 an extremely practical pump with low temperature oil filled motor and single seal design (CA/CE).

### APPLICATIONS

- Drainage of sewage from the building basements, hotel industry, wastes 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

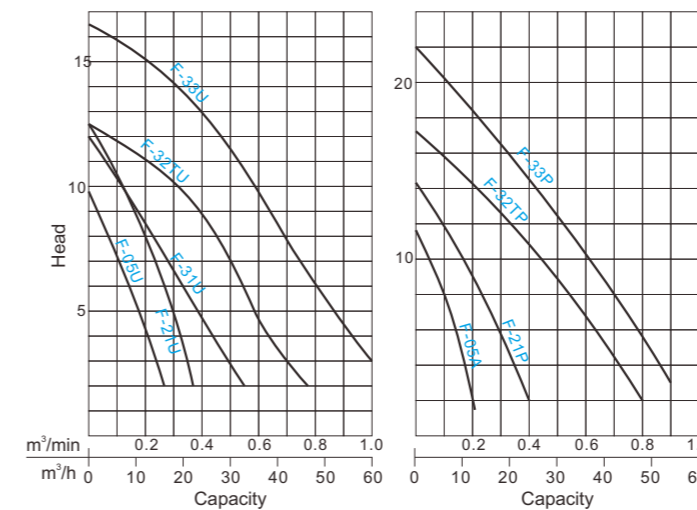
F	-	05	A	
Type		HP	Style	
F	-	2	1	P
Type		Discharge inch	HP	Impeller type (P/U)

### SPECIFICATIONS

Item	Description	
Liquid temp.	0~40°C(32~104°F)	
Applications	General wastewater, sewage water and industrial waster	
Max depth	30m	
Pump sect.	Impeller	Semi-open · Vortex
	M. seal	Double M. seals
	Bearing	Ball type
Material	Upper cover	FC-200
	Casing	FC-200
	Impeller	FC-200
	M. seal	Lower: Sic/Sic · Upper: CA/CE
Motor sect.	Motor	Dry motor 2P (3000RPM)
	Insulation	B Class
	Frequency	50Hz
	Protector	Auto-cut
Material	Frame	SUS304
	Main shaft	SUS410 ( 2-3HP : SUS403 )
	Cable	VCT or H07RN-F or SJOW/SOW

※Pumps can be customized to fit specifications.

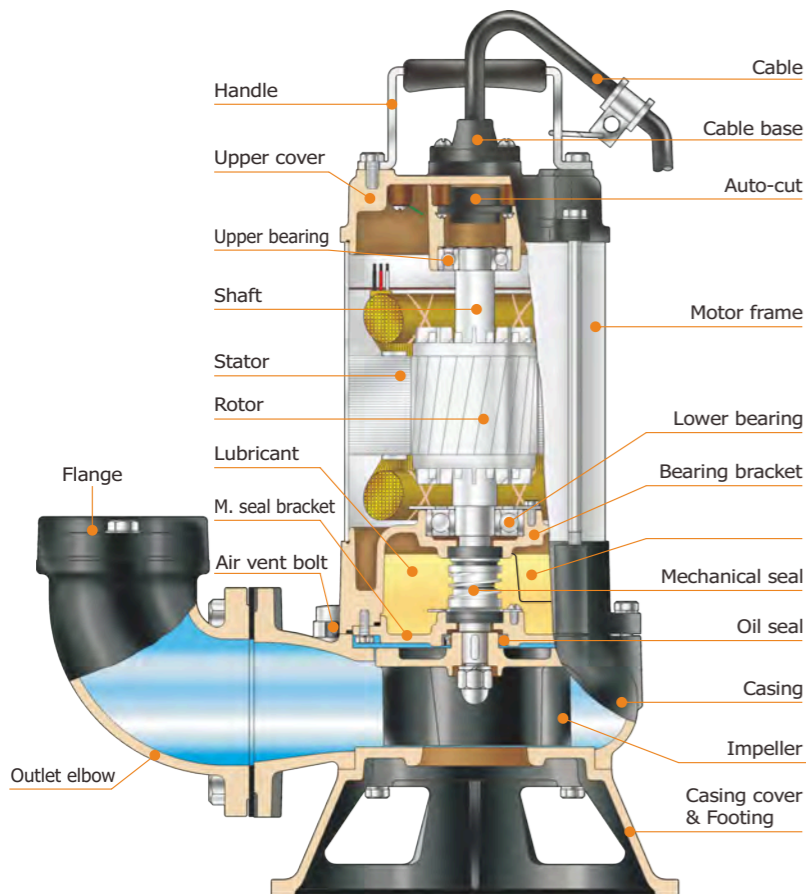
### PERFORMANCE CURVES



### PERFORMANCE SPEC.

Model	Power HP(kW)	Discharge Inch(mm)	Phase	Start Method	Head m	Capacity		Weight kg 1 / 3	Solid Passage mm	Dimension (mm)		
						m³/min	m³/h			Length	Width	Height
F-05U	1/2(0.4)	2"(50)	1 3	Capacitor Direct	6	0.15	9	16 15	35	237	154	427
F-21U	1(0.75)	2"(50)	1 3	Capacitor Direct	8	0.2	12	18 17	35	237	154	427
F-31U	1(0.75)	3"(80)	1 3	Capacitor Direct	6.5	0.3	18	19 18	30	278	173	457
F-32TU	2(1.5)	3"(80)	1 3	Capacitor Direct	9	0.4	24	43 38	25	408	258	610 530
F-33U	3(2.2)	3"(80)	1 3	Capacitor Direct	11.5	0.5	30	45 39	25	408	258	610 530
F-21P	1(0.75)	2"(50)	1 3	Capacitor Direct	9	0.2	12	18 17	22	274	235	440
F-32TP	2(1.5)	3"(80)	1 3	Capacitor Direct	8.5	0.5	30	43 38	30	408	258	610 530
F-33P	3(2.2)	3"(80)	1 3	Capacitor Direct	10.5	0.6	36	45 39	30	408	258	610 530
F-05A	1/2(0.4)	2"(50)	1 3	Capacitor Direct	8	0.1	6	12	8	227	161	352

Note : Weight W/O Cable



### P Type Impeller

**Semi-open(Single Vane Impeller) :**  
Excellent to use with waste materials to prevent from clogging.



### U Type Impeller

**Semi-open(Vortex Impeller) :**  
produces a vortex (whirlpool effect) allowing long fibrous materials and other solid waste to pass through without contact with the impeller.

Note: The vortex impeller will cause higher amperage when operated in reverse direction.