

**F/FN** **50Hz**  
**SERIES**

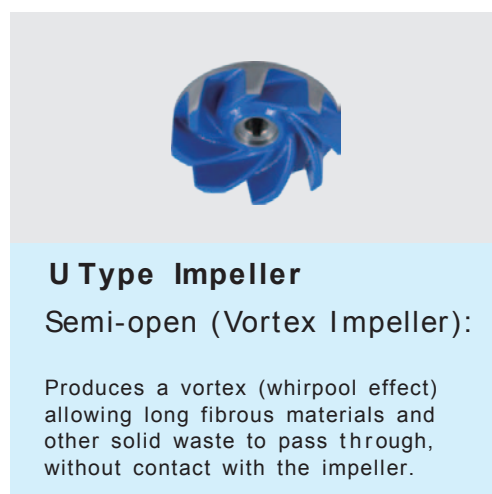
SUBMERSIBLE SEWAGE  
EFFLUENT PUMPS



# FN

## FEATURES

- 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, Auto-cut Protector, dual mechanical seals and lip seal design.

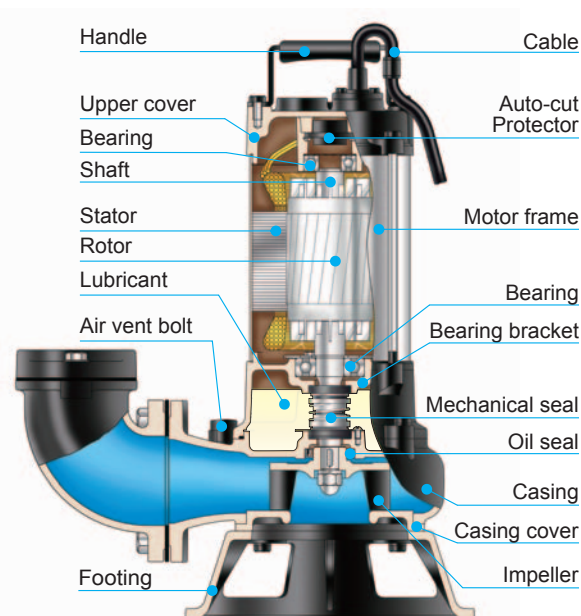


## APPLICATIONS

- 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

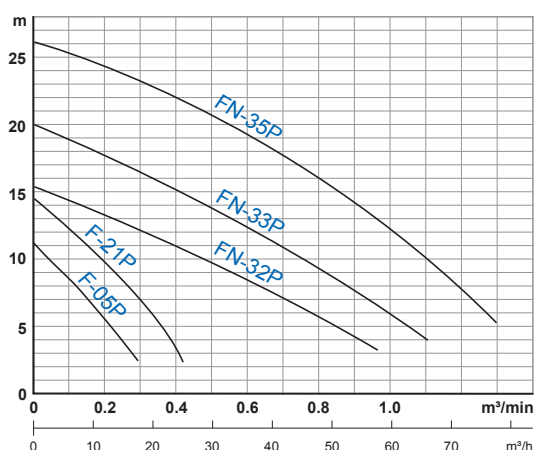
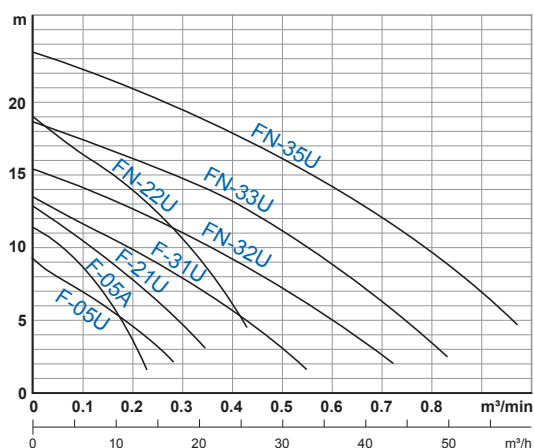
F/ FN	—	3	2	P
Type		Discharge inch	HP	Impeller type (P/ U)







## PERFORMANCE CURVES



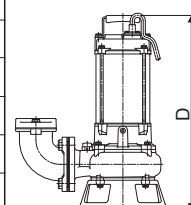
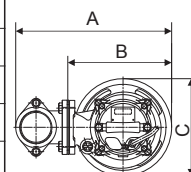
## SPECIFICATIONS

Item		Description
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	General wastewater • Sewage water and Industrial waster
Type	Frequency	50Hz
	Motor	2P (3000rpm) • Dry Motor (F-05A: Oil Motor)
	Insulation	Class B(0.5HP~3HP) • Class F(5HP)
	Protection	IP68
	Protector	Auto-cut Protector (F-05A/05U/05P 1Ø:Thermal)
	Bearing	Ball Type
	M.seal	Double M.seals (F-05A : Single M.seals)
	Impeller	Semi-open
Material	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS410(0.5~1HP) • SUS403 (2~5HP)
	M.seal	Upper : Carbon/Ceramic Lower : Silicon/Silicon (F-05A : Carbon/Ceramic)
	Casing	FC200
	Impeller	FC200 (F-05A : PA)
	Cable	VCT or H07RN-F or SJOW/SOW
	Optional	Pumps can be customized to fit specifications Floating Switch (2P: 0.5~3HP)

## PERFORMANCE SPECS.

Note: Weight Without Cable & Elbow Set.

	Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Head m	Standard		Solid Passage mm	Weight kg		Dimensions mm					
							m³/min	m³/h		1Ø	3Ø	A	B	C	D	1Ø	3Ø
U Type	F-05A	0.5 (0.4)	2" (50)	1	Capacitor	8	0.1	6	10	12	-	225	-	161	349	-	-
	F-05U	0.5 (0.4)	2" (50)	1 3	Capacitor Direct	6	0.15	9	35	16	15	237	-	154	425	425	-
	F-21U	1 (0.75)	2" (50)	1 3	Capacitor Direct	8	0.2	12	35	17	16	237	-	154	425	425	-
	F-31U	1 (0.75)	3" (80)	1 3	Capacitor Direct	6.5	0.3	18	30	18	17	278	-	173	456	456	-
	FN-22U	2 (1.5)	2" (50)	1 3	Capacitor Direct	14	0.2	12	35	30	25	288	-	202	546	477	-
	FN-32U	2 (1.5)	3" (80)	1 3	Capacitor Direct	8.5	0.4	24	50	32	28	402	260	202	588	519	-
	FN-33U	3 (2.2)	3" (80)	1 3	Capacitor Direct	12.5	0.4	24	50	35	30	402	260	202	600	519	-
	FN-35U	5 (3.7)	3" (80)	3	Direct	16.5	0.5	30	50	-	33	453	260	202	-	539	-
P Type	F-05P	0.5 (0.4)	2" (50)	1 3	Capacitor Direct	5.5	0.2	12	22	16	15	276	238	235	459	459	-
	F-21P	1 (0.75)	2" (50)	1 3	Capacitor Direct	9	0.2	12	26	18	17	276	-	235	459	459	-
	FN-32P	2 (1.5)	3" (80)	1 3	Capacitor Direct	8.5	0.6	36	35	34	30	417	275	260	590	521	-
	FN-33P	3 (2.2)	3" (80)	1 3	Capacitor Direct	12.5	0.6	36	35	37	32	417	275	260	602	521	-
	FN-35P	5 (3.7)	3" (80)	3	Direct	19	0.6	36	35	-	35	468	275	260	-	541	-





## ACCESSORIES : ELBOW / GRS-GUIDE RAIL SYSTEMS

Pump can be installed with 90 ° elbow , flange or guide rail system, for quick and safe installation, removal, replacement and maintenance.



ELBOW



GRS

## PRODUCT FEATURES



### Epoxy Cable Base

An epoxy resin seal cable base prevents moisture from entering the motor through the core wires.



### Double Mechanical Seals

Superior abrasion resistant mechanical seal manufactured with silicon carbide to ensure the best seal effect.



### Auto-cut Protector

Automatic On/Off motor protector to prevent motor burn out due to high temperature and excess amperage draw.



### High Efficiency Dry Motors

All stator coils need to be treated with insulating varnish procedure to achieving the best insulation, efficiency and durability.



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