



### 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.



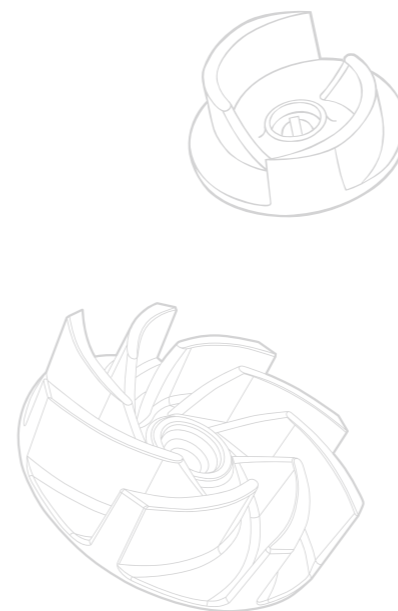
**Double Mechanical Seals**  
Superior abrasion resistant mechanical seal manufactured with silicon carbide to ensure the best seal effect.



**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.



**F/FN** 50Hz  
**SERIES**  
**SUBMERSIBLE SEWAGE EFFLUENT PUMPS**

**HCP** Professionalism · Innovation · Service · Commitment  
HCP PUMP MANUFACTURER CO., LTD.  
[www.hcppump.com](http://www.hcppump.com)



Distributor:

DFNEN5-1912

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# FN

## FEATURES

- U / P type impellers are designed in maximizing the difference of wastewater applications performance needs.
- FN-UL non-clog models, capable passing larger solid.
- HCP's professional production assembly line, combined with synthetic testing and monitoring, to ensures each IP68 motor enclosures and the highest level of pump quality.
- Standard accessories include : epoxy resin sealed cable base, Auto-cut Protector, dual mechanical seals, Food grade lubricant and lip seal design.

## APPLICATIONS

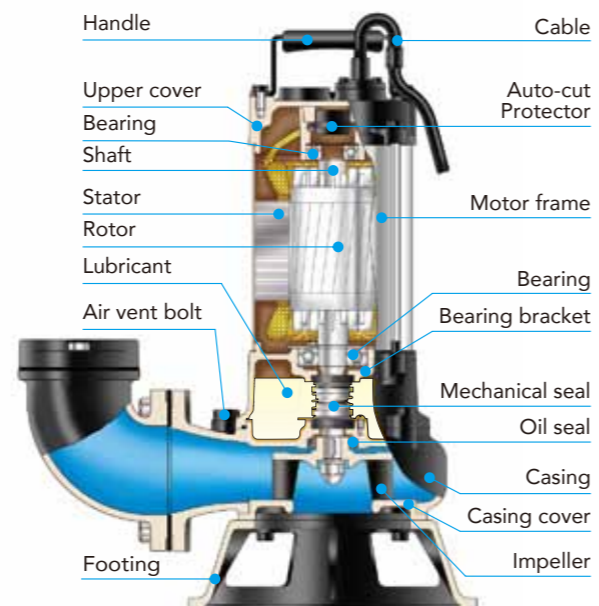
- Drainage of sewage from the building basements, hotel industry, and waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying of septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.

## PRODUCT NOMENCLATURE

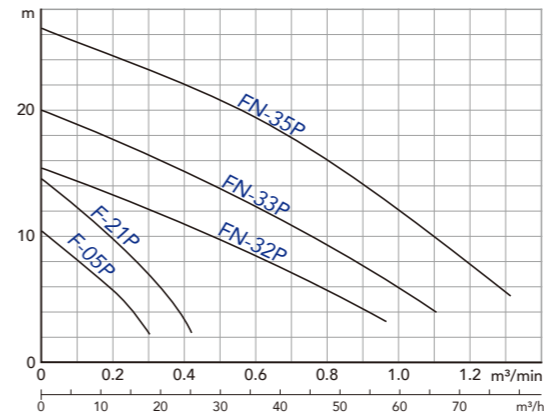
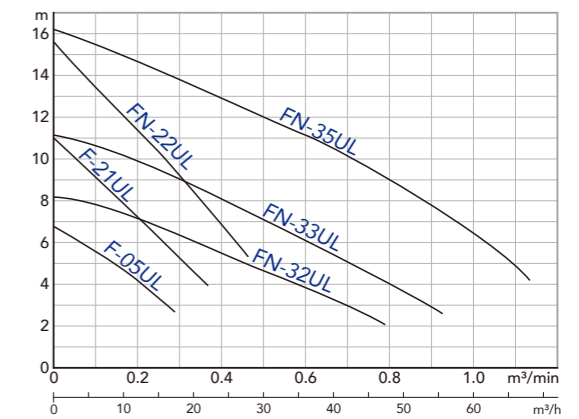
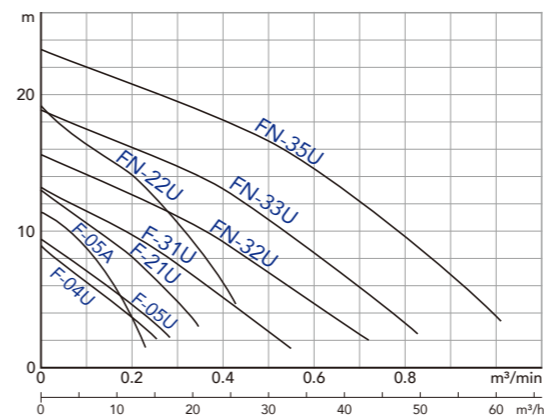
FN	-	3	2	U	L
Type		Discharge inch	HP	Impeller type (U/P)	Larger solid handling



## SPECIFICATIONS

Item	Description	
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	General wastewater • Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P ( 3000rpm) • Dry Motor (F-05A : Oil Motor)
	Insulation	Class B(0.5~1HP) • Class F(2~5HP)
	Protection	IP68
	Protector	Auto-cut (0.5HP 1Ø : Thermal)
	Bearing	Ball Type
	M.seal	Double M.seals (F-05A : Single M.seals)
Material	Impeller	Vortex • Open
	Upper Cover	FC200
	Motor Frame	SUS304
	Shaft	SUS410(0.5~1HP) • SUS403(2~5HP)
	M.seal	CA/CE & SIC/SIC (F-05A : CA/CE)
	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 CURVES



U Type Vortex Impeller	P Type Open Impeller
	
Vortex impeller produces a vortex (whirlpool effect) allowing long fibrous materials and solid waste to pass without contact with the impeller.	Open impeller (Single or Two Vanes) design. Impeller is excellent to use within wastewater to prevent from clogging.

## 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	1Ø	3Ø
F-05A	0.5 (0.4)	2" (50)	1	Capacitor	8	0.1	6	10	12	-	225	-	161	349	-
F-04U	0.5 (0.4)	2" (50)	1	Capacitor	5	0.15	9	35	15	-	243	-	154	382	-
F-05U	0.5 (0.4)	2" (50)	3	Capacitor Direct	6	0.15	9	35	16	15	237	-	154	425	425
F-21U	1 (0.75)	2" (50)	1	Capacitor Direct	8	0.2	12	35	17	16	237	-	154	425	425
F-31U	1 (0.75)	3" (80)	3	Capacitor Direct	7	0.3	18	30	18	17	278	-	173	456	456
F-05UL	0.5 (0.4)	2" (50)	1	Capacitor Direct	4	0.2	12	50	17	16	243	-	164	449	449
F-21UL	1 (0.75)	2" (50)	3	Capacitor Direct	6	0.25	15	50	18	17	243	-	164	449	449
FN-22U	2 (1.5)	2" (50)	1	Capacitor Direct	14	0.2	12	35	30	25	288	-	202	546	477
FN-32U	2 (1.5)	3" (80)	3	Capacitor Direct	8.5	0.4	24	50	32	28	402	260	202	588	519
FN-33U	3 (2.2)	3" (80)	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
FN-22UL	2 (1.5)	2" (50)	3	Capacitor Direct	10	0.25	15	50	31	26	288	-	202	576	507
FN-32UL	2 (1.5)	3" (80)	1	Capacitor Direct	4.5	0.5	30	76	35	30	407	265	221	640	571
FN-33UL	3 (2.2)	3" (80)	1	Capacitor Direct	7	0.5	30	76	37	32	407	265	221	652	571
FN-35UL	5 (3.7)	3" (80)	3	Direct	11	0.6	36	76	-	35	409	267	202	-	591
F-05P	0.5 (0.4)	2" (50)	1	Capacitor Direct	5.5	0.2	12	22	16	15	276	-	235	459	459
F-21P	1 (0.75)	2" (50)	1	Capacitor Direct	9	0.2	12	26	18	17	276	-	235	459	459
FN-32P	2 (1.5)	3" (80)	1	Capacitor Direct	8.5	0.6	36	35	34	30	417	275	260	590	521
FN-33P	3 (2.2)	3" (80)	1	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

