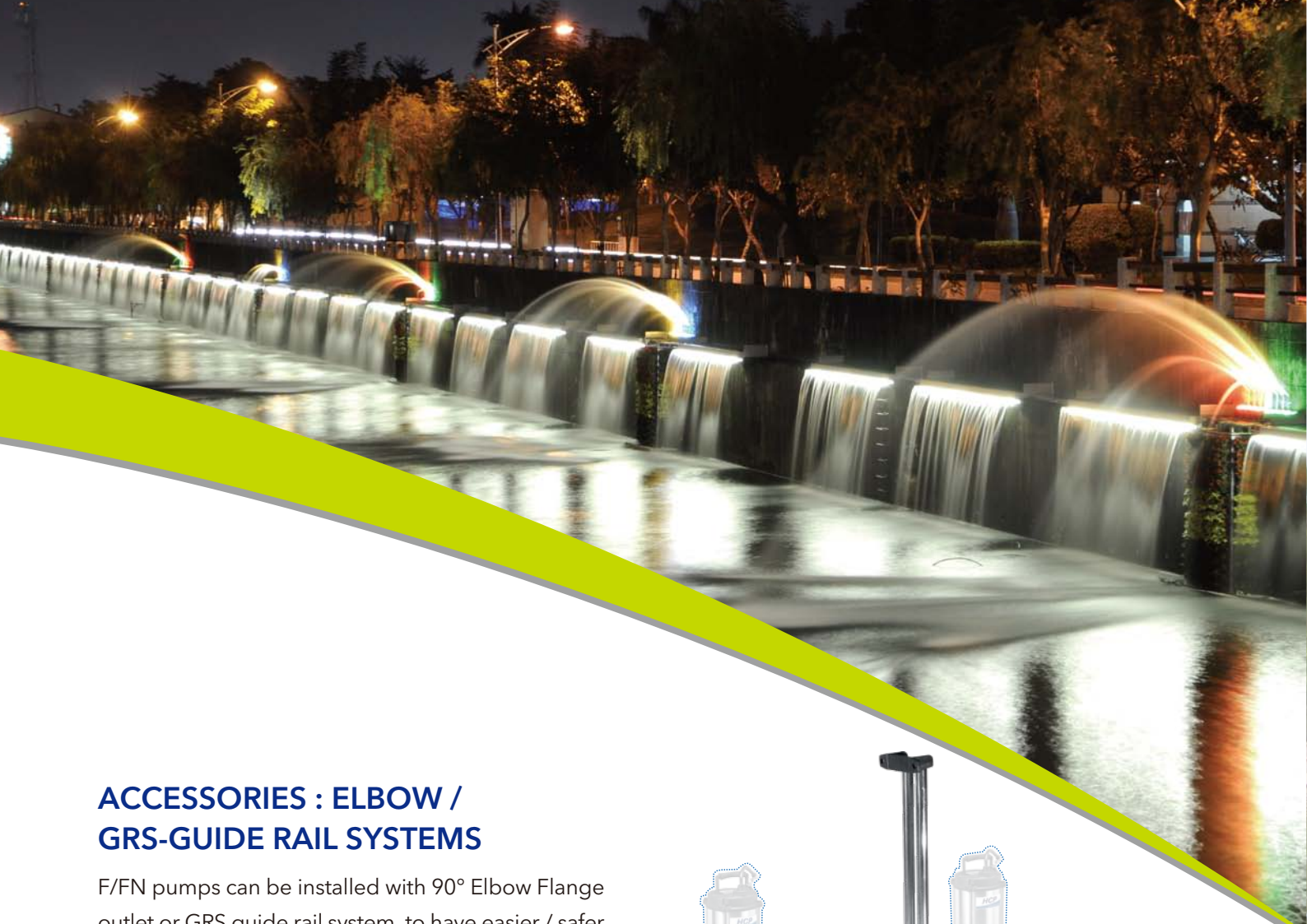




ACCESSORIES : ELBOW / GRS-GUIDE RAIL SYSTEMS

F/FN pumps can be installed with 90° Elbow Flange outlet or GRS guide rail system, to have easier / safer installation or removal during 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 is manufactured with silicon carbide to ensure the best seal effect.



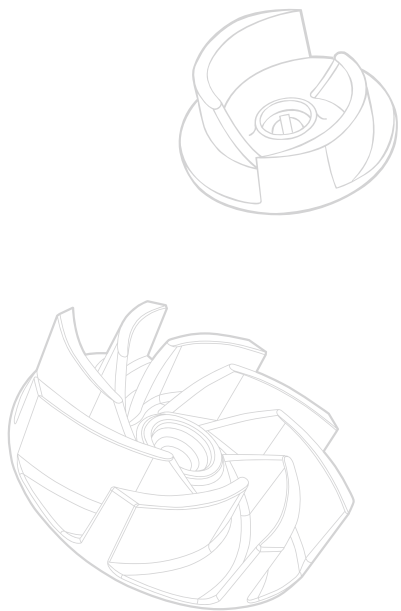
Auto-cut Protector

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 are treated with insulating vanish procedures to achieve the best insulation, efficiency and durability.



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



Professionalism • Innovation • Service • Commitment
HCP PUMP MANUFACTURER CO., LTD.
www.hcppump.com



Distributor:

DFNEN5-2008

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F/FN

FEATURES

- U/P type impellers are designed to meet the various different operating ranges in wastewater applications.
- F/FN-UL non-clog models, capable passing larger solid.
- HCP's professional assembly line, complimented with a synthetic production test to ensure each IP68 motor with highest level of final pump quality.
- Oil Elevation Disk design in the oil chamber to ensure the mechanical seals lubrication and to extend the service life of pump.
- Standard accessories include : cable with an epoxy resin sealed water-resistant cable base, Auto-cut Protector, double mechanical seals, Food grade lubricant and lip seal design.

SPECIFICATIONS

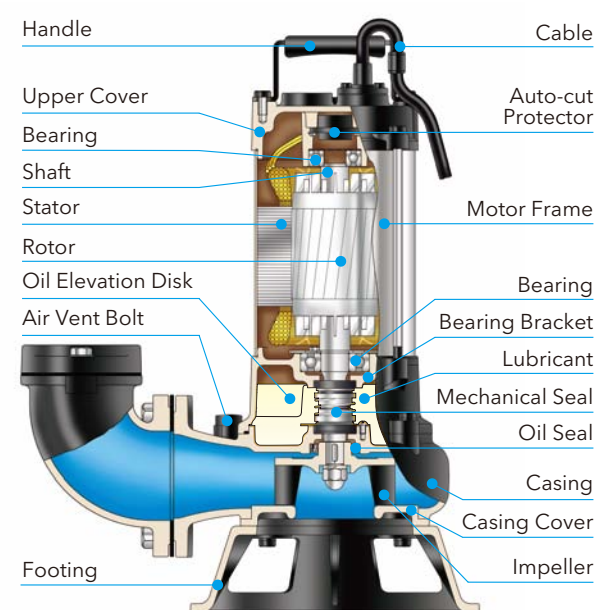
Item	Description	
Limits Of Use	Liquid Temp.	0~40°C (32~104°F)
	Applications	General wastewater • Sewage and Industrial water
Type	Frequency	50Hz
	Motor	2P (3000rpm) • Dry Motor (F- 05A : Oil Motor)
	Insulation	Class B (0.5~1HP) • Class F (2~5HP)
	Protection	IP68
	Protector	Auto-cut (0.5HP 1Ø : Thermal)
	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)
Optional	Cable	VCT or H07RN-F or SJOW/SOW
	Pumps can be customized to fit specifications Floating Switch (2P : 0.5~3HP)	

APPLICATIONS

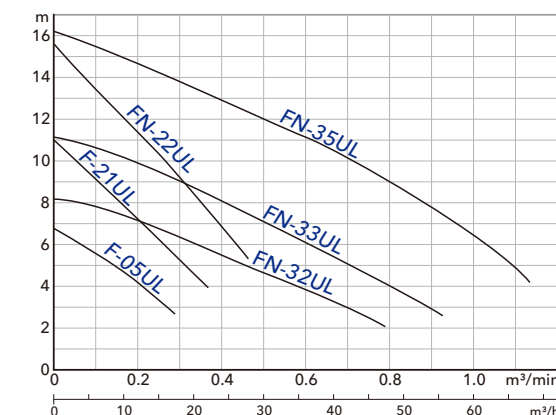
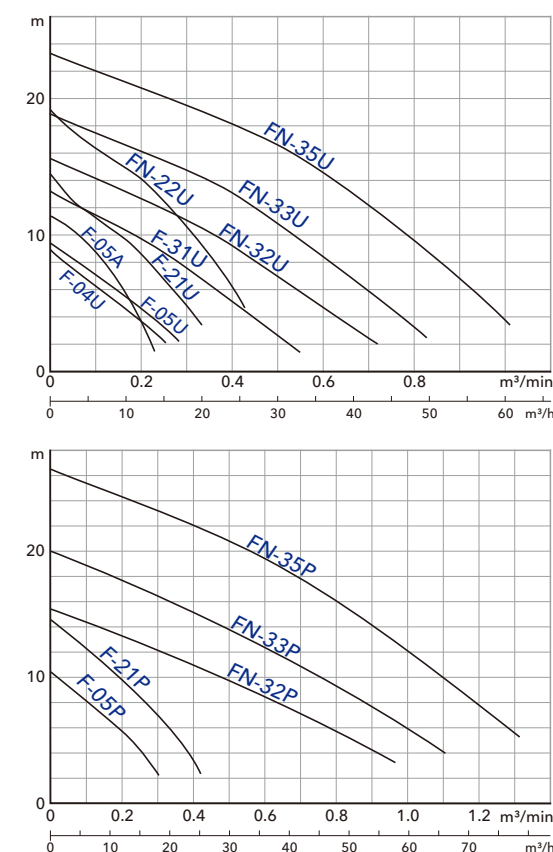
- Drainage of sewage from the building basements, hotel industry, and waste water from factories.
- Drainage of sewage from industrial process factories.
- Emptying of septic tanks, cesspits and sewage pump stations.
- Pumping surface and drainage water from garages and sprinkler systems.

PRODUCT NOMENCLATURE

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



PERFORMANCE CURVES



U Type Vortex Impeller

Vortex impeller produces a vortex (whirlpool effect) allowing long fibrous materials and solid waste to pass through, without contact with the impeller.

P Type Open Impeller

Open impeller (Single or Two Vanes) design. Impeller is excellent to use for waste materials to prevent 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	D
U Type	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 DOL	6	0.15	9	35	16	15	237	-	154	425	425	
	F-21U	1 (0.75)	2" (50)	1	Capacitor	8	0.2	12	35	17	16	237	-	154	425	425	
	F-31U	1 (0.75)	3" (80)	1	Capacitor	7	0.3	18	30	18	17	278	-	173	456	456	
	F-05UL	0.5 (0.4)	2" (50)	3	Capacitor DOL	4	0.2	12	50	17	16	243	-	164	449	449	
	F-21UL	1 (0.75)	2" (50)	3	Capacitor DOL	6	0.25	15	50	18	17	243	-	164	449	449	
	FN-22U	2 (1.5)	2" (50)	1	Capacitor	14	0.2	12	35	30	25	288	-	202	546	477	
	FN-32U	2 (1.5)	3" (80)	3	Capacitor DOL	8.5	0.4	24	50	32	28	402	260	202	588	519	
	FN-33U	3 (2.2)	3" (80)	3	Capacitor DOL	12.5	0.4	24	50	35	30	402	260	202	600	519	
	FN-35U	5 (3.7)	3" (80)	3	DOL	16.5	0.5	30	50	-	33	453	260	202	-	539	
	FN-22UL	2 (1.5)	2" (50)	3	Capacitor DOL	10	0.25	15	50	31	26	288	-	202	576	507	
	FN-32UL	2 (1.5)	3" (80)	3	Capacitor DOL	4.5	0.5	30	76	35	30	407	265	221	640	571	
	FN-33UL	3 (2.2)	3" (80)	3	Capacitor DOL	7	0.5	30	76	37	32	407	265	221	652	571	
	FN-35UL	5 (3.7)	3" (80)	3	DOL	11	0.6	36	76	-	35	409	267	202	-	591	
P Type	F-05P	0.5 (0.4)	2" (50)	1	Capacitor	5.5	0.2	12	22	16	15	276	-	235	459	459	
	F-21P	1 (0.75)	2" (50)	1	Capacitor	9	0.2	12	26	20	19	276	-	235	459	459	
	FN-32P	2 (1.5)	3" (80)	3	Capacitor DOL	8.5	0.6	36	35	34	30	417	275	260	590	521	
	FN-33P	3 (2.2)	3" (80)	3	Capacitor DOL	12.5	0.6	36	35	37	32	417	275	260	602	521	
	FN-35P	5 (3.7)	3" (80)	3	DOL	19	0.6	36	35	-	35	468	275	260	-	541	

