

# **FEATURES**

- The FN Series Submersible Sewage Effluent Pumps are designed to handle and meet the needs of a wide range of wastewater applications.
- The FN-UL non-clogging models are made to handle larger solids.
- Optional casing: The FN-32/33U and FN-32/33P models have vertical casing available, and the FN-21P has a horizontal casing available.
- The FN-32U/33U models can handle a maximum of 50mm solid passage, and the FN-32P/33P models can handle a maximum of 35mm solid passage.

# PRODUCT NOMENCLATURE

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



## **SPECIFICATIONS**

Spec.	Description				
Liquid Temp.	0~40°C (32~104°F)				
Motor	2P ( 3000rpm) • Dry Motor				
Insulation	Class B • Class F				
Protection	IP68				
Protector	Thermal • Auto-cut				
M.seal Type	Single M.seals • Double M.seals				
Impeller Type	Vortex (U) ∙ Open (P)				
ltem	Material				
Upper Cover	FC200 / GG-20				
Motor Frame	SUS304 / X5CrNi18-10				
Shaft	SUS410 / X10Cr13 • SUS403 / X5Cr13				
M.seal	CA/CE • CA/CE & SiC/SiC				
Casing	FC200 / GG-20				
Impeller	PA+G50 • FC200 / GG-20				
Footing	FCD450 / GGG-45				
Tooting					

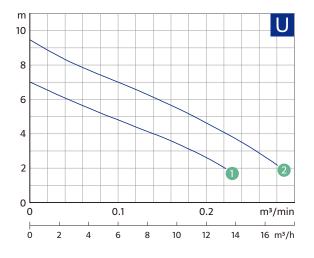
## **APPLICATIONS**

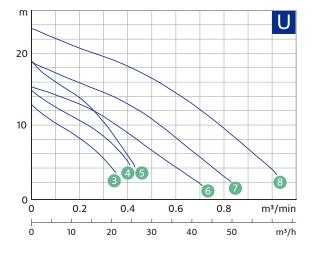
- Building, hotel, and industrial factory sewage drainage
- Drainage of flooded basement, garage, and factory wastewater
- Emptying of septic tanks, cesspits, and sewage pump stations
- Pumping for sprinkler systems
- Surface water dewatering

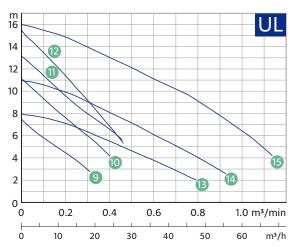
# ACCESSORIES: ELBOW / GRS-GUIDE RAIL SYSTEMS

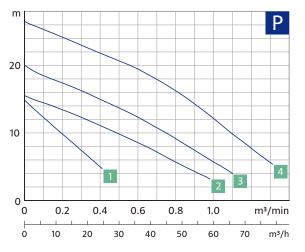
FN pumps can be installed with 90° Elbow Flange outlet or GRS guide rail system, to have easier/safer installation or removal during replacement and maintenance. The GRS does not support the vertical casing models.

# PERFORMANCE CURVES AND SPECS









Model	Output HP(kW)	Discharge Inch(mm)	Phase Ø	Start Method	Standard	Max.	Solid Passage	Casing	Weight kg	
					m-m³/min		mm	Type	1Ø	3Ø
1 FN-2.3U	⅓(0.25)	2" (50)	1 3	Capacitor DOL	4-0.14	7-0.22	35	V	13.5	13
2 FN-2.5U	0.5(0.4)	2" (50)	1 3	Capacitor DOL	6-0.15	9.5-0.28	35	V	14	13.5
<b>3</b> FN-21U	1(0.75)	2" (50)	<u>1</u> 3	Capacitor DOL	8-0.22	13-0.35	35	V	16	15
4 FN-21.5U	1.5 (1.1)	2" (50)	<u>1</u> 3	Capacitor DOL	10-0.23	15-0.41	35	V	18.5	16.5
<b>5</b> FN-22U	2(1.5)	2" (50)	1 3	Capacitor DOL	14-0.2	19-0.45	35	V	30	25
6 FN-32U	2(1.5)	3" (80)	1 3	Capacitor DOL	8.5-0.4	15.5-0.75	50	H/V	32	28
<b>7</b> FN-33U	3(2.2)	3" (80)	1 3	Capacitor DOL	12.5-0.4	19-0.85	50	H/V	35	30
8 FN-35U	5(3.7)	3" (80)	3	DOL	16.5-0.5	23.5-1.05	50	Н	-	33
9 FN-2.5UL	0.5(0.4)	2" (50)	1 3	Capacitor DOL	4-0.24	7.5-0.31	50	V	14.5	14
10 FN-21UL	1(0.75)	2" (50)	1 3	Capacitor DOL	6.5-0.26	11-0.40	50	V	16.5	15.5
11 FN-21.5UL	1.5 (1.1)	2" (50)	1 3	Capacitor DOL	7.5-0.34	13-0.45	50	V	19	17
12 FN-22UL	2(1.5)	2" (50)	1 3	Capacitor DOL	10-0.25	15.5-0.47	50	V	31	26
13 FN-32UL	2(1.5)	3" (80)	<u>1</u> 3	Capacitor DOL	4.5-0.5	8-0.85	76	Н	35	31
14 FN-33UL	3(2.2)	3" (80)	1 3	Capacitor DOL	7-0.5	11-0.95	76	Н	37	33
15 FN-35UL	5(3.7)	3" (80)	3	DOL	11-0.6	16-1.15	76	Н	-	35
1 FN-21P	1(0.75)	2" (50)	<u>1</u> 3	Capacitor DOL	8.5-0.26	14.5-0.41	26	H/V	19.5/19	18.5
2 FN-32P	2(1.5)	3" (80)	1 3	Capacitor DOL	8.5-0.6	15.5-1.05	35	H/V	34	30
3 FN-33P	3(2.2)	3" (80)	1 3	Capacitor DOL	12-0.6	20-1.15	35	H/V	37	32
4 FN-35P	5(3.7)	3" (80)	3	DOL	19-0.6	26.5-1.4	35	Н	-	35

X Casing type: V stands for Vertical and H for Horizontal.





# **PRODUCT FEATURES**



## 1 Epoxy Cable Base

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



#### Auto-cut Protector

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



#### **3** High Efficiency Dry Motors

All stator coils are treated with insulating varnish procedures to achieve the best insulation, efficiency and durability.



#### **4** Double Mechanical Seals

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





#### **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.



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Catalog