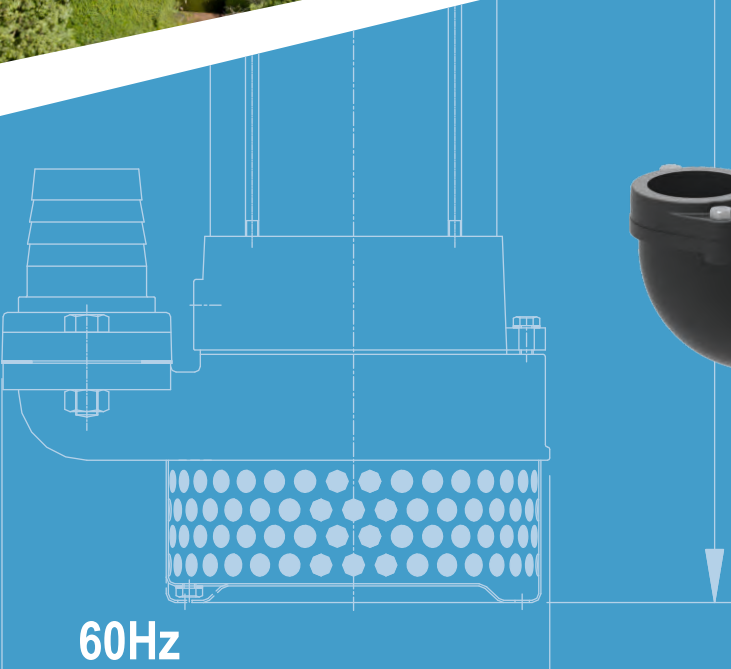
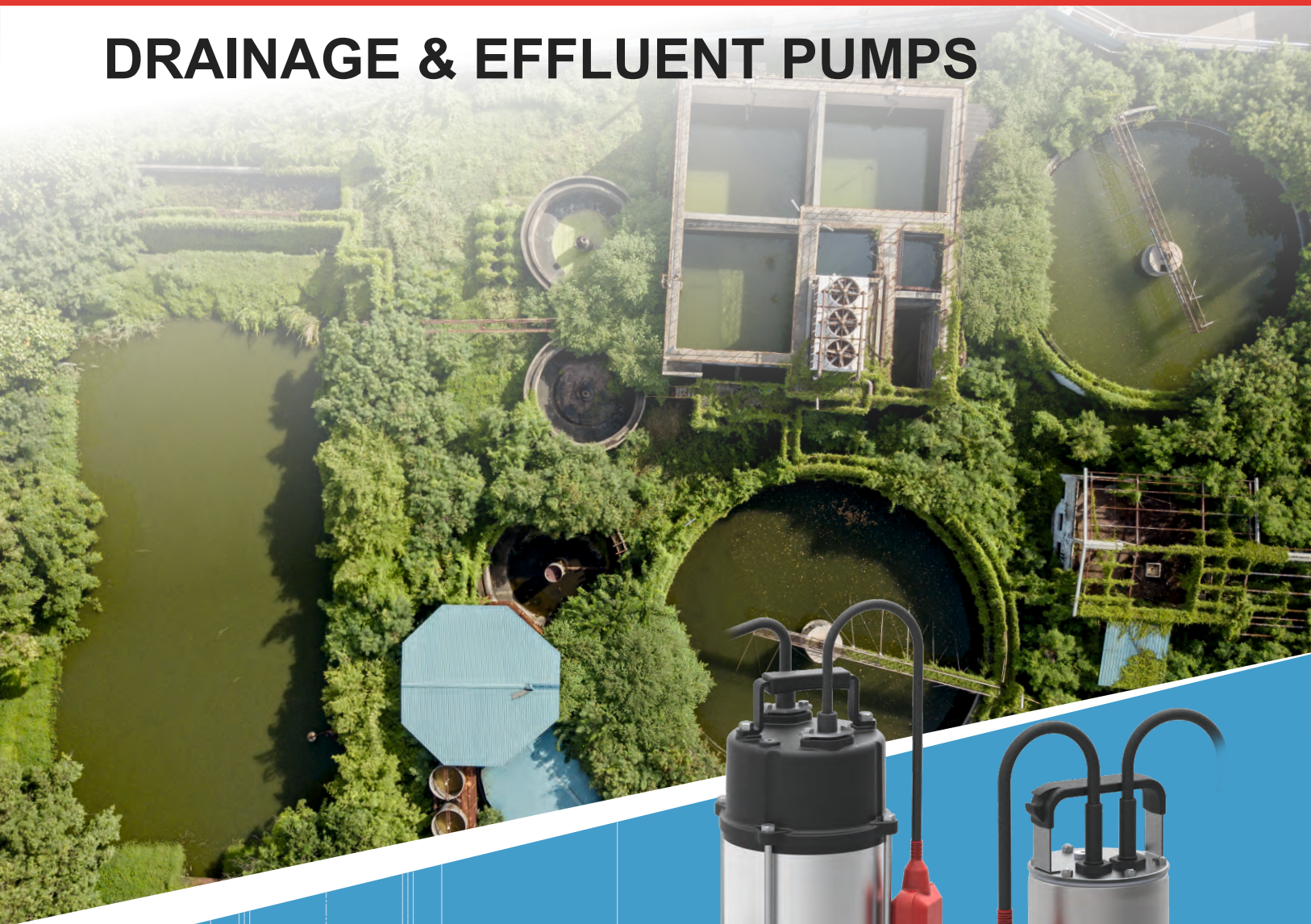


DRAINAGE & EFFLUENT PUMPS



Drainage Pumps (0.5 HP to 3.0 HP)

Performance Range

- ▶ Flow rate up to 255 USgpm.
- ▶ Dynamic head up to 97 feet.

Applications

- ▶ Slushy water, waste water without solids, sump drainage.
- ▶ Drainage application, flood control.
- ▶ Dewatering for fish pond or basement.

Features

- ▶ New design for light weight, elegant shape with best quality.
- ▶ Unfastening the bolts between the oil casing and the upper pump casing allows the body to be separated for easy maintenance.
- ▶ All pumps are furnished with double mechanical seal. All pumps up to 1 HP have carbon/ceramic sealing faces at both water end and motor end. All pumps starting with 2 HP and above have Sic sealing faces at the water end and carbon/ceramic sealing faces at the motor end.
- ▶ Available with Sic/Sic mechanical shaft seal for pumping sandy water for 1 HP (optional).

Special Features on Request

- ▶ Other voltages.
- ▶ Available in 50 Hz.

Direction of Rotation

- ▶ Clockwise as seen from the motor rear end.

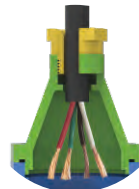
Thermal overload protector

- ▶ Equipped with Automatic reset motor protector, prevents motor from burning due to high temperature/phase failure/voltage drop and lock impeller.



Cable base

- ▶ Epoxy resin seal cable base to prevent water intrusion into motor through the cable wire.



U Type Impeller

- ▶ This impeller can generate rapid rotating vortex to handle fluid mixed with long fiber, the majority of abrasive solids do not touch impeller to minimize impeller wear.



Float Switch

- ▶ Excellent quality float switch Provided with epoxy resin sealed connector.



Motor

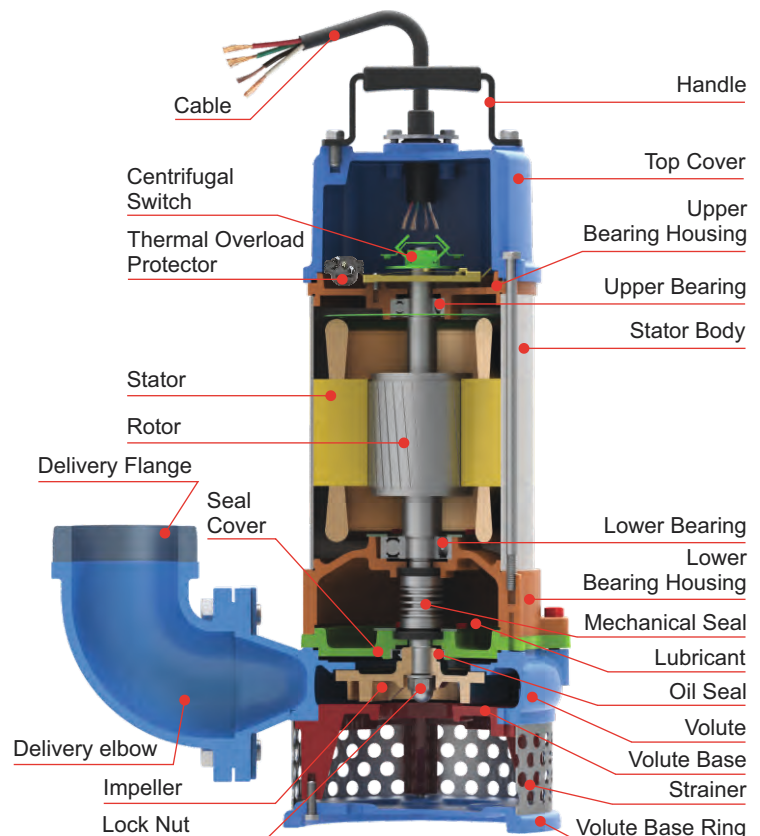
- ▶ 2 - pole dry submersible motor
- ▶ 60Hz (n = 3450 RPM)
- ▶ Single phase : 230 V \pm 10%
- ▶ Three phase : 230 V \pm 10% (up to 3 H.P.)
380 V, 460 V \pm 10%
- ▶ Protection IP 68
- ▶ Insulation class : F

Operating Conditions

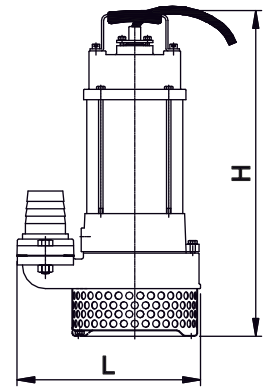
- ▶ Ambient temperature : +32°F to +122°F
- ▶ Liquid temperature : Max. +122°F
- ▶ Max. Starts per hour : 30 at regular intervals.
- ▶ Duty rating :
S1 - When pump is completely submerged.
S3 - When pump is partially submerged.

Float Switch Pump

- ▶ The pumps are equipped with wide angle on/off level control float switch for easy and simple automatic operation.
- ▶ Applications : Slushy water, dewatering, drainage application.
- ▶ Type : 0.5-2 HP Single-phase pumps.
0.5-1 HP Three-phase pumps.



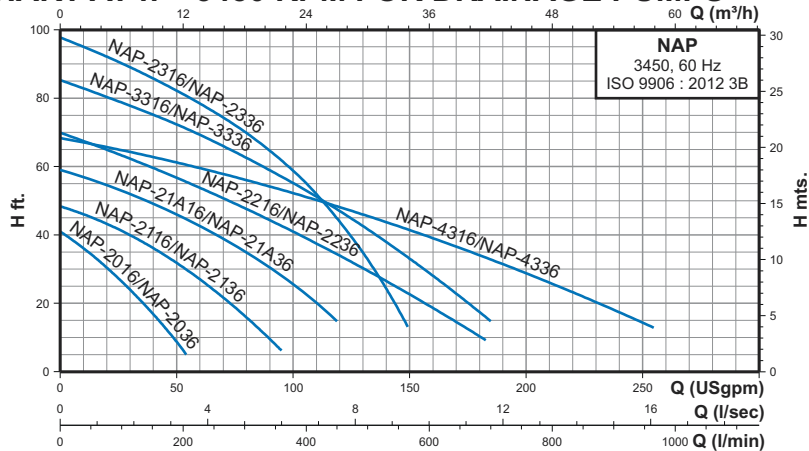
Drainage Pumps (0.5 HP to 3.0 HP)



DIMENSIONS

Model		Disc. Inch (mm)	Dimensions (inch)			Solid Passage (inch)	Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)	Cable data cable x core x size (AWG) x length (ft) x Material
Single Phase	Three Phase		Length	Width	Height					
NAP-2016/2016F	-	2 (50)	8.94	6.30	14.30	0.31	33	37	1.30	1 x 3 x 17 x 16 x PVC
-	NAP-2036/2036F		8.94	6.30	14.30		33	37	1.30	1 x 4 x 17 x 16 x PVC
NAP-2116/2116F	-	2 (50)	10.91	7.01	17.32	0.39	42	46	1.59	1 x 3 x 17 x 16 x PVC
-	NAP-2136/2136F		10.91	7.01	17.32		40	44	1.59	1 x 4 x 17 x 16 x PVC
NAP-2216/2216F	-	2 (50)	16.22	8.19	22.40	0.43	97	152	5.16	1 x 3 x 14 x 26 x PVC
-	NAP-2236/2236F		16.22	8.19	18.50		88	143	5.16	1 x 4 x 15 x 26 x PVC
NAP-2316/2316F	-	2 (50)	11.02	8.50	22.52	0.43	101	154	5.16	1 x 3 x 12 x 26 x PVC
-	NAP-2336/2336F		11.02	8.50	19.41		95	145	5.16	1 x 4 x 15 x 26 x PVC
NAP-3316/3316F	-	3 (80)	15.16	8.50	22.64	0.43	104	156	5.16	1 x 3 x 12 x 26 x PVC
-	NAP-3336/3336F		15.16	8.50	19.49		95	147	5.16	1 x 4 x 15 x 26 x PVC
NAP-4316/4316F	-	4 (100)	15.35	8.19	22.99	0.43	104	158	5.16	1 x 3 x 12 x 26 x PVC
-	NAP-4336/4336F		15.35	8.19	19.49		95	150	5.16	1 x 4 x 15 x 26 x PVC
NAP-21A16/21A16F	-	2 (50)	10.91	7.01	18.50	0.39	49	56	1.77	1 x 3 x 16 x 16 x PVC
-	NAP-21A36/21A36F		10.91	7.01	18.50		46	54	1.77	1 x 4 x 17 x 16 x PVC

PERFORMANCE CHART AT n = 3450 RPM FOR DRAINAGE PUMPS



PERFORMANCE DATA AT n = 3450 RPM

Model		Power		Voltage	Start Method	l/min Usgpm	95	189	284	379	473	568	662	757	946									
Single Phase	Three Phase	HP	kW				H ft.	25	50	75	100	125	150	175	200	250								
NAP-2016/2016F	-	0.5	0.37	230V	Capacitor	H ft.	27.5	8.5	-	-	-	-	-	-	-									
-	NAP-2036/2036F			460V	Direct																			
NAP-2116/2116F	-	1.0	0.75	230V	Capacitor											41.5	32	18.5	-	-	-	-	-	-
-	NAP-2136/2136F			460V	Direct																			
NAP-2216/2216F	-	2.0	1.50	230V	Capacitor											63.5	57	49	41	32	22.5	12.5	-	-
-	NAP-2236/2236F			460V	Direct																			
NAP-2316/2316F	-	3.0	2.20	230V	Capacitor											90.5	82	72	58.5	39	13	-	-	-
-	NAP-2336/2336F			460V	Direct																			
NAP-3316/3316F	-	3.0	2.20	230V	Capacitor											79	72	64	55	45	33	20	-	-
-	NAP-3336/3336F			460V	Direct																			
NAP-4316/4316F	-	3.0	2.20	230V	Capacitor											65	61	57	52	47	41.5	35	29.5	14.5
-	NAP-4336/4336F			460V	Direct																			
NAP-21A16/21A16F	-	1.5	1.10	230V	Capacitor	53	46	37	26	-	-	-	-	-										
-	NAP-21A36/21A36F			460V	Direct																			

Note : Subscript "F" pumps will be provided with a float switch. • Pumps are available for 380 V three phase power supply on request.

Performance Range

- ▶ Flow rate up to 120 USgpm.
- ▶ Dynamic head up to 49 feet.

Applications

- ▶ All applications of pumping and draining effluent, civil and industrial sewage with suspended solids.
- ▶ Pumping stations with one or more pumps for civil and industrial plants.

Features

- ▶ Light weight, portable.
- ▶ Made out of stainless steel AISI 304 sheet metal.
- ▶ High quality mechanical shaft seal.
- ▶ Class-F motor insulation which can handle higher motor temperature.
- ▶ Thermally protected motors which prevents motor from burn out.
- ▶ Vortex impeller designs to handle solids laden sewage and/or fibrous substance.
- ▶ A fully waterproof IP 68 structure, combined with a high grade silicon carbide mechanical seal.
- ▶ Permanently lubricated ball bearings.
- ▶ Solid passage size up to 40 mm.

Special Features on Request

- ▶ Other voltages.
- ▶ Available in 50 Hz.

Vortex Impeller



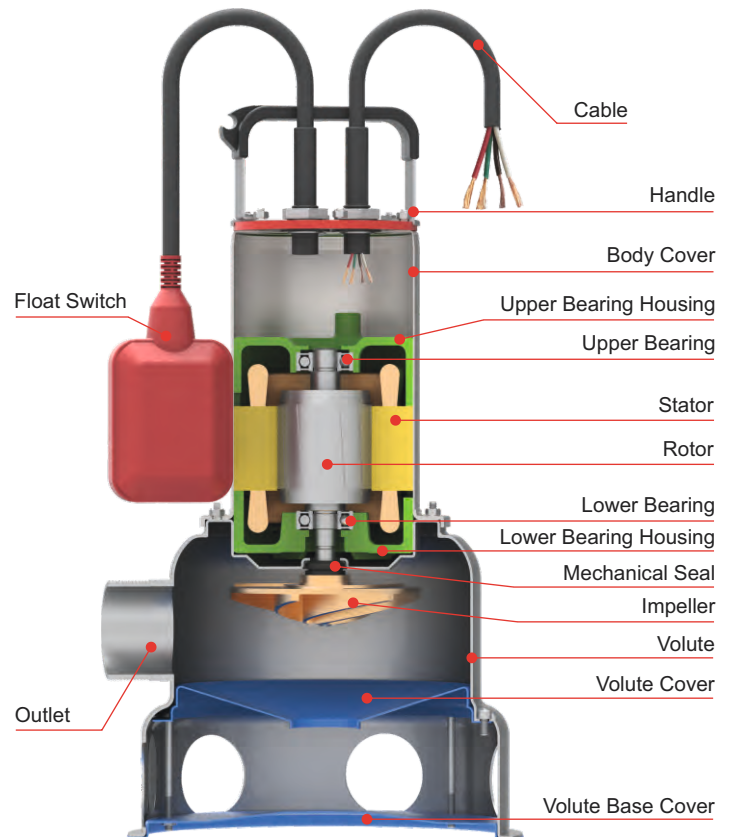
- ▶ Vortex impellers create a hydraulic passage, allowing long fibrous materials to pass through without any contact with the impeller.

Specification

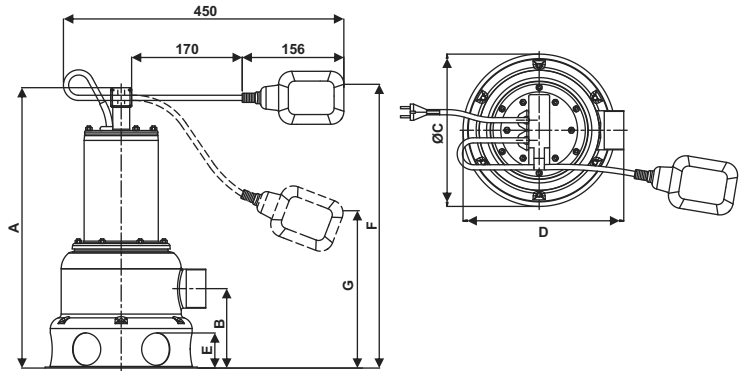
Pumping liquid	Ambient temp	Max. +122°F	
	Liquid temp	+32°F to +122°F	
	Liquid nature	Pumps are suitable for drainage waste or sump drainage water with or without solids.	
Pump	Structure	Impeller	Vortex
		M.seal	Mechanical seal
		Bearing	Ball type bearing
	Material	Impeller	S.S. AISI 304
		Volute	S.S. AISI 304
		Upper cover	S.S. AISI 304
		M.seal	Sic/Sic
Motor	Type	Dry motor	
	Insulation	F Class	
	Frequency	60 Hz	
	Material	Stator body	S.S. AISI 304
		Shaft	S.S AISI 410
		Cable	PVC
		Protection	IP 68
Duty	S1 - When pump is completely submerged S3 - When pump is partially submerged		
Voltage	1 Ph. 230 V ±10%, 3 Ph. 230 V, 380 V, 460 V ±10%		

Direction of Rotation

- ▶ Clockwise as seen from the motor rear end.



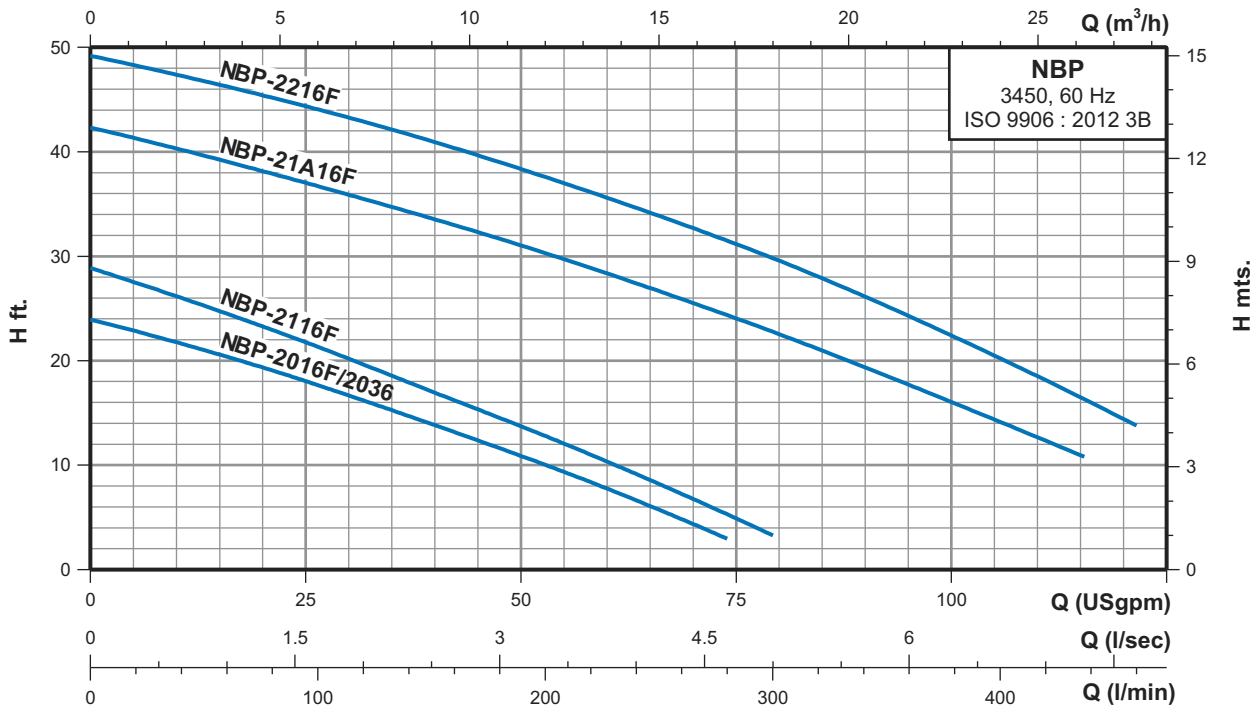
Stainless Steel Submersible Effluent Vortex Pumps



DIMENSIONS

Model		Disc. Inch (mm)	Dimensions (inch)							Net Weight (lbs)	Gross Weight (lbs)	Volume (ft ³)	Cable data cable x core x size (AWG) x length (ft) x Material
Single Phase	Three Phase		A	B	C	D	E	F	G				
NBP 2016F	-	50 (2")	16.93	4.84	9.25	9.49	2.17	21.65	11.42	20.9	26.0	1.589	1 x 3 x 17 x 16 x PVC
-	NBP 2036/2036F	50 (2")	16.93	4.84	9.25	9.49	2.17	21.65	11.42	20.9	26.0	1.589	1 x 4 x 17 x 16 x PVC
NBP 2116F	-	50 (2")	16.93	4.84	9.25	9.49	2.17	21.65	11.42	20.9	26.0	1.589	1 x 3 x 17 x 16 x PVC
NBP 21A16F	-	50 (2")	19.61	4.84	9.25	9.49	2.17	21.65	11.42	30.4	33.7	1.766	1 x 3 x 16 x 16 x PVC
NBP 2216F	-	50 (2")	20.39	4.84	9.25	9.49	2.17	21.65	11.42	33.5	35.9	1.766	1 x 3 x 16 x 26 x PVC

PERFORMANCE CHART AT n = 3450 RPM FOR SEWAGE PUMPS



PERFORMANCE DATA AT n = 3450 RPM

Model		Power		Voltage	Start Method	l/min USgpm	76	114	151	189	217	265	303	341	379	416	454
Single Phase	Three Phase	HP	kW				20	30	40	50	60	70	80	90	100	110	120
NBP 2016F	-	0.5	0.37	230V	Capacitor	H ft.	19.4	16.7	13.8	10.9	7.8	4.4	-	-	-	-	-
-	NBP 2036/2036F	0.5	0.37	460V	Direct		19.4	16.7	13.8	10.9	7.8	4.4	-	-	-	-	-
NBP 2116F	-	1.0	0.75	230V	Capacitor		23.3	20.2	17	13.7	10.3	6.7	-	-	-	-	-
NBP 21A16F	-	1.5	1.10	230V	Capacitor		38.1	36	33.6	31.1	28.3	25.6	22.6	19.3	16	12.7	-
NBP 2216F	-	2.0	1.50	230V	Capacitor		45.4	43.2	41.1	38.3	35.8	32.7	29.7	26.1	22.4	18.5	14.4

Note : Subscript "F" pumps will be provided with a float switch. • Pumps are available for 380 V three phase power supply on request.



Northam Inc.

995/C Griffin Pond Road, Clarks Summit, PA 18411, USA

Email : sales@northam-inc.com