



## 5" VN SERIES SUBMERSIBLE PUMP



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# NAUTI (VN series)

## Stainless Steel Close-Coupled Multistage Submersible Pump for 6" wells and larger

### APPLICATIONS

- Water distribution / pressure boosting
- Rainwater collection
- Irrigation / Gardening / Sprinklers
- Dewatering
- Wash down unit
- Fountains
- Other various installations

### FEATURES

- Compact close-coupled design, robust and rust resistant
- Impellers and diffusers are made of stainless steel in order to achieve durability, superior efficiency and the highest performances
- Double mechanical seal separated by an oil\* chamber for maximum motor protection  
\*In compliance with FDA - Food, Drug Administration - and the annex to G.U. no. 104 of 20/04/73 for oils in contact with food stuffs
- Plug-in type power cable and level control (floater) for easy replacement
- Heavy duty over size motor shaft
- Stainless steel water proof capsule to protect the motor
- Motor cooling is guaranteed by the pumped liquid

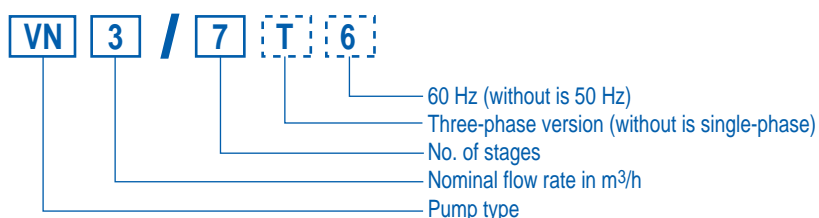
### SPECIFICATIONS

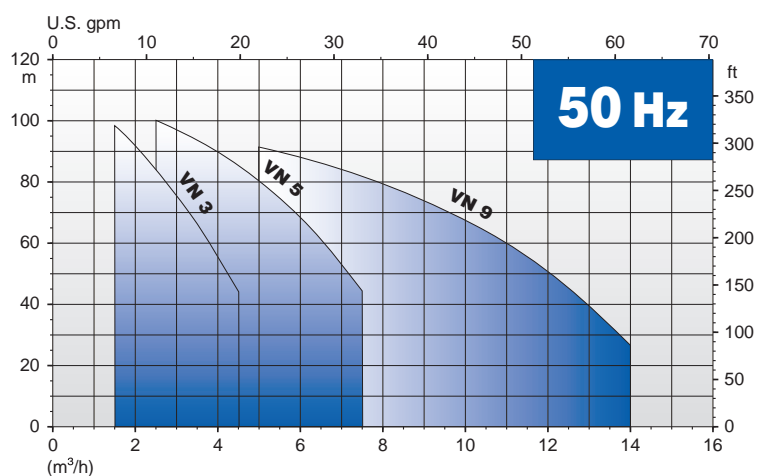
- Capacities up to 14 m<sup>3</sup>/h at 50Hz / 70 GPM at 60Hz
- Heads up to 11 Bar at 50Hz / 370 feet at 60Hz
- Discharge outlet 1¼" Rp
- Maximum working pressure 15 Bar
- Maximum immersion depth 20 m
- Maximum allowable amount of sand 50 gr/m<sup>3</sup>
- Maximum solids size up to 2 mm
- Liquid temperature range -5° C to 40° C
- Continuous operation either in vertical or horizontal position
- Motor range: 0,55kW to 3kW
- Asynchronous, Class F insulation, IP 68 protection
- 20 m of power cable type H07RN F is supplied with the standard version
- Maximum number of starts per hour: 20

### AVAILABLE ON REQUEST

- Single-phase models equipped with level control
- Various voltages and frequencies
- Three phase 220-230V
- Various power cable lengths
- Starter panel for single-phase units

### PUMP IDENTIFICATION CODE





MATERIAL IN CONTACT WITH THE LIQUID				
Pos.	PARTS DESCRIPTIONS	MATERIAL		
		Type	AISI	DIN / EN
10.00	Discharge head	Nickel plated pressed brass alloy		UNI-EN 12165-98
20.00	Outer case	Stainless steel	304	1.4301
20.01	Suction strainer	Stainless steel	304	1.4301
30.00	Motor housing	Stainless steel	304	1.4301
30.01 / 30.03	Covers/flanges motor casing	Stainless steel	304	1.4301
30.08	Pump shaft	Stainless steel	304	1.4301
40.00 / 40.01 / 40.03	Diffuser/s	Stainless steel	304	1.4301
50.00 / 50.01	Impeller/s with spacers	Stainless steel	304	1.4301
30.05 / 30.06	Upper mechanical seal	Ceramic/Carbon/NBR		
30.06	Lower mechanical seal	Ceramic/Carbon/NBR		
30.09	Screws and washers	Stainless steel	304	1.4301

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# **VN Series Technical Data and Performance Curves**

**VN 9 50Hz**

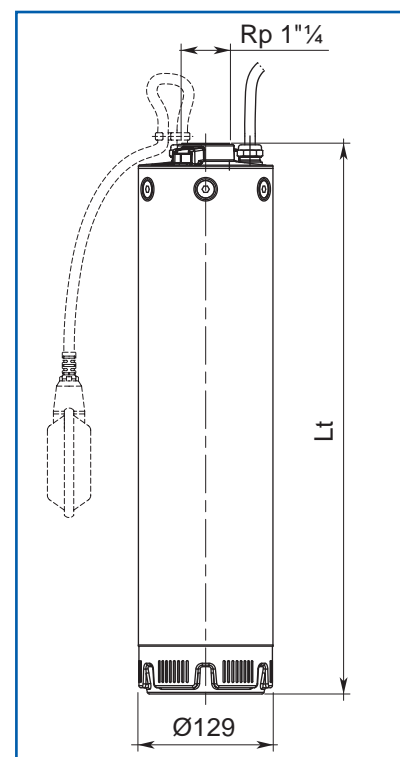
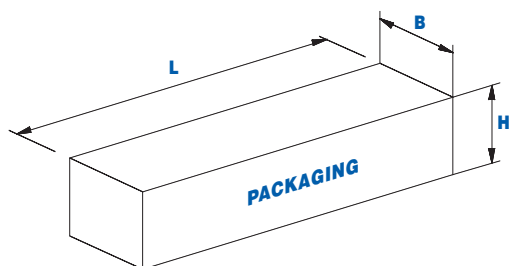
## Technical data 50Hz

Pump model		NUMBER OF STAGES	MOTOR POWER		INPUT POWER	INTERNAL CAPACITOR		RATED CURRENT	
Single-phase 220-240V 50Hz	Three-phase 380-415V 50Hz		kW	HP		μF	V	Single-phase 220-240V 50Hz	Three-phase 380-415V 50Hz
VN 9/3	-	3	1.1	1.5	1.44	30	450	6.9	-
VN 9/4	VN 9/4T	4	1.5	2	1.86	35	450	9.7	3.2
VN 9/5	VN 9/5T	5	2.2	3	2.30	45	450	10.5	5.0
VN 9/6	VN 9/6T	6	2.2	3	2.68	45	450	11.9	5.4
-	VN 9/7T	7	3	4	3.16	-	-	-	5.9
-	VN 9/8T	8	3	4	3.54	-	-	-	6.3
-	VN 9/9T	9	3	4	3.91	-	-	-	6.8

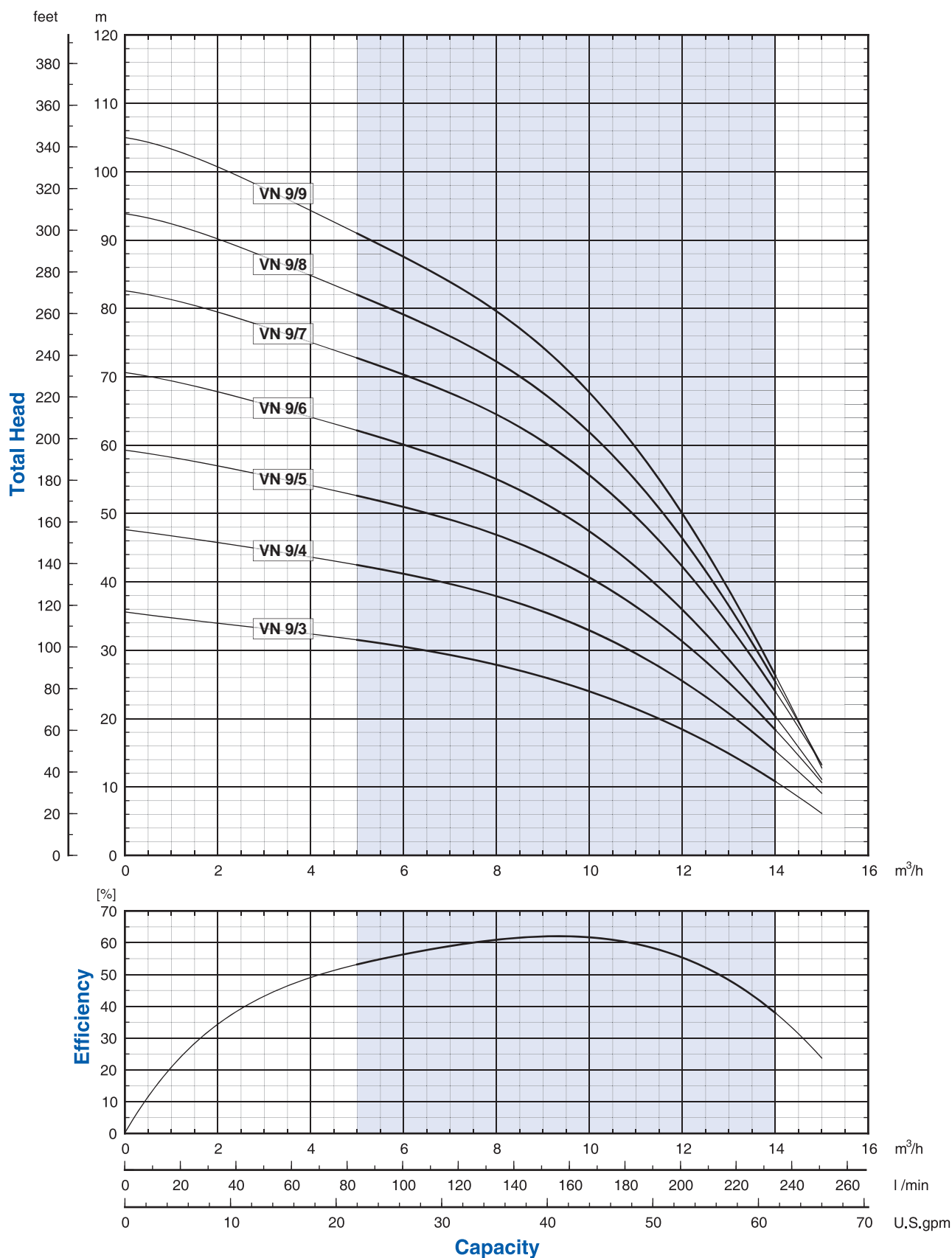
- Single-phase motors: 220-240 V  $\pm$  5 % / 50 Hz. Thermal protection built into the motor up to 1,1 kW. Thermal protection provided into the starter panel from 1,5 kW and above.
- Three-phase motors: 380-415 V  $\pm$  5 % / 50 Hz. Thermal protection to be provided into the starter panel by the installer.

## Dimensions and weights

Pump model			PACKAGING				
Single-phase 220-240V 50Hz	Three-phase 380-415V 50Hz	Lt mm	L mm	B mm	H mm	Weight kg	
						Single-phase	Three-phase
VN 9/3	-	504	720	230	175	18.5	-
VN 9/4	VN 9/4T	584	720	230	175	21.5	19.5
VN 9/5	VN 9/5T	614	800	230	195	23.5	22.0
VN 9/6	VN 9/6T	644	800	230	195	24.5	22.5
-	VN 9/7T	674	800	230	195	-	24.5
-	VN 9/8T	704	800	230	195	-	25.0
-	VN 9/9T	734	800	230	195	-	25.5



## Performance curves 50Hz



The hydraulic characteristics are guaranteed, according to ISO standard 9906, Annex A, grade 2.

It is our policy to continuously develop and improve our products, therefore, we reserve the right to amend specifications without prior notice.

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# **VN Series Pump Section and List of Main Components**

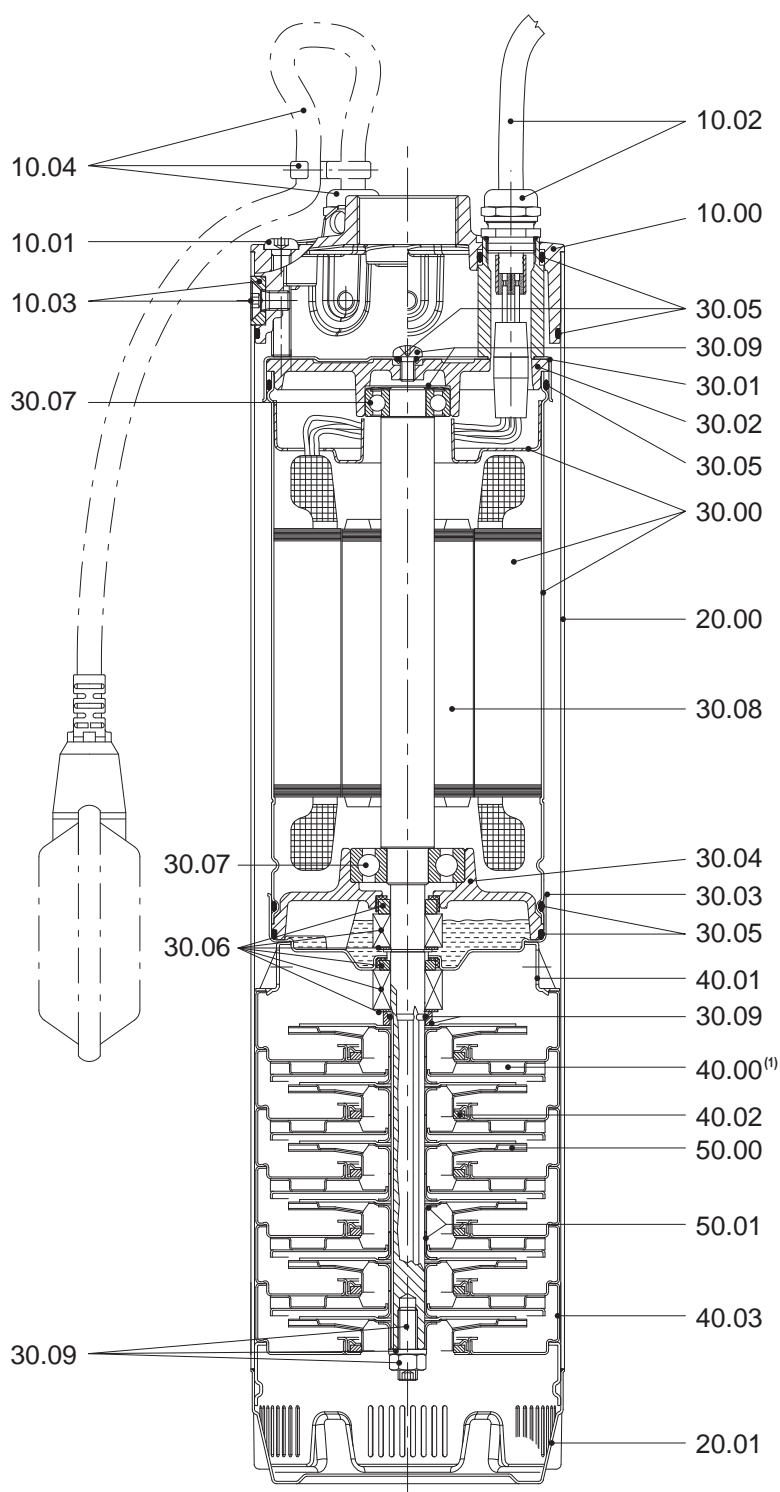
**VN 3**

**VN 5**

**VN 9**



# VN 3 VN 5 VN 9



Ref. N.	Description
10 00	Discharge head
10 01	Screws for pre-loading assembly (3 pcs)
10 02	Power cable assembly
10 03	Screws and inserts (6 pcs)
10 04	Level control assembly
20 00	Outer case
20 01	Suction strainer
30 00	Motor housing and stator
30 01	Upper motor cover
30 02	Upper bearing housing
30 03	Lower motor cover
30 04	Lower bearing cover

Ref. N.	Description
30 05	Kit O-Rings (5 pcs)
30 06	Kit mechanical seals (2 pcs)
30 07	Kit ball bearings (2 pcs)
30 08	Rotor and pump shaft
30 09	Kit screws, nut and washers
40 00	Stage housing and diffuser
40 01	Spacer
40 02	Floating neck ring assembly
40 03	Initial stage housing
50 00	Impeller
50 01	Impeller spacers (2 pcs)

1) For VN 9, Diffusers = Impellers + 1. Ex. VN 9/4 = 4 impellers and 5 diffusers.

## Notes

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