

## ***NAUTI VN SERIES***

### ***5" SUBMERSIBLE PUMPS***



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# NAUTI (VN series) Stainless Steel Close-Coupled Multistage Submersible Pump for 6" wells and larger

The widest pump range of its kind, designed to incorporate the latest technical features and made with the most advanced manufacturing technology.

## 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

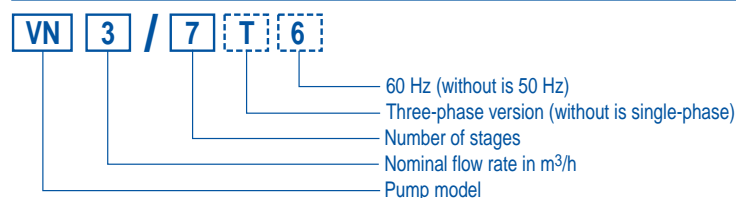
## SPECIFICATIONS

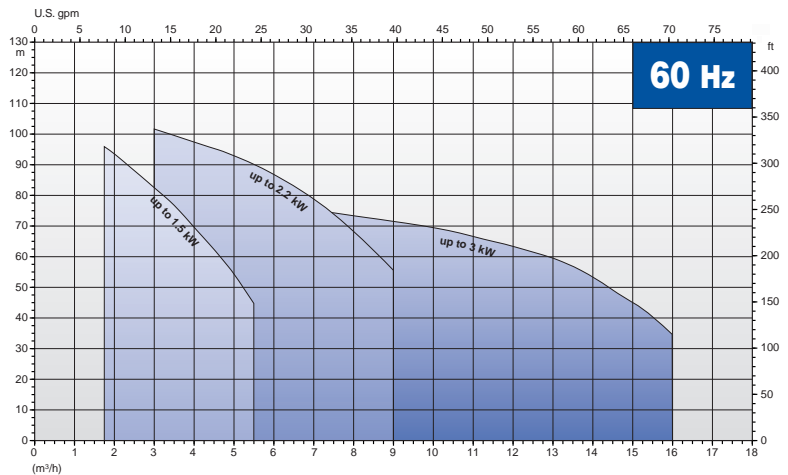
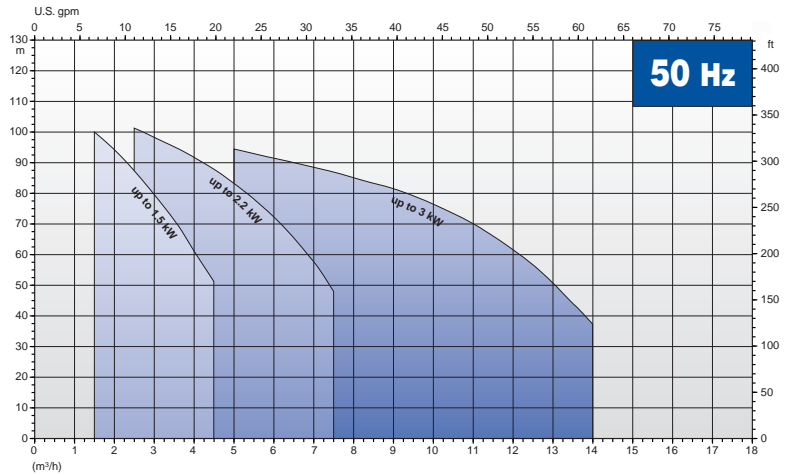
- Capacities up to 14 m<sup>3</sup>/h at 50Hz / 70 GPM at 60Hz
- Heads up to 11 Bar at 50Hz / 370 feet at 60Hz
- Discharge outlet 1 1/4" Rp
- Maximum working pressure 15 Bar
- Maximum immersion depth 20 m
- Maximum allowable amount of sand 50 gr/m<sup>3</sup>
- Maximum solids size up to 2 mm
- Liquid 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
- Various power cable lengths
- Starter panel for single-phase units

## PUMP IDENTIFICATION CODE





PART DESCRIPTION	MATERIAL	
Outer case	Stainless steel	DIN-EN 1.4301 (AISI 304)
Suction strainer	Stainless steel	DIN-EN 1.4301 (AISI 304)
Motor housing	Stainless steel	DIN-EN 1.4301 (AISI 304)
Covers/flanges motor casing	Stainless steel	DIN-EN 1.4301 (AISI 304)
Pump shaft	Stainless steel	DIN-EN 1.4301 (AISI 304)
Diffuser/s	Stainless steel	DIN-EN 1.4301 (AISI 304)
Impeller/s	Stainless steel	DIN-EN 1.4301 (AISI 304)
Screws and washers	Stainless steel	DIN-EN 1.4301 (AISI 304)
Discharge head	Nickel plated pressed brass alloy	UNI-EN 12165-98
Upper mechanical seal	Ceramic/Carbon/NBR	
Lower mechanical seal	Ceramic/Carbon/NBR	

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# **VN Series Performance Curves and Tables**

**VN 3** 50Hz

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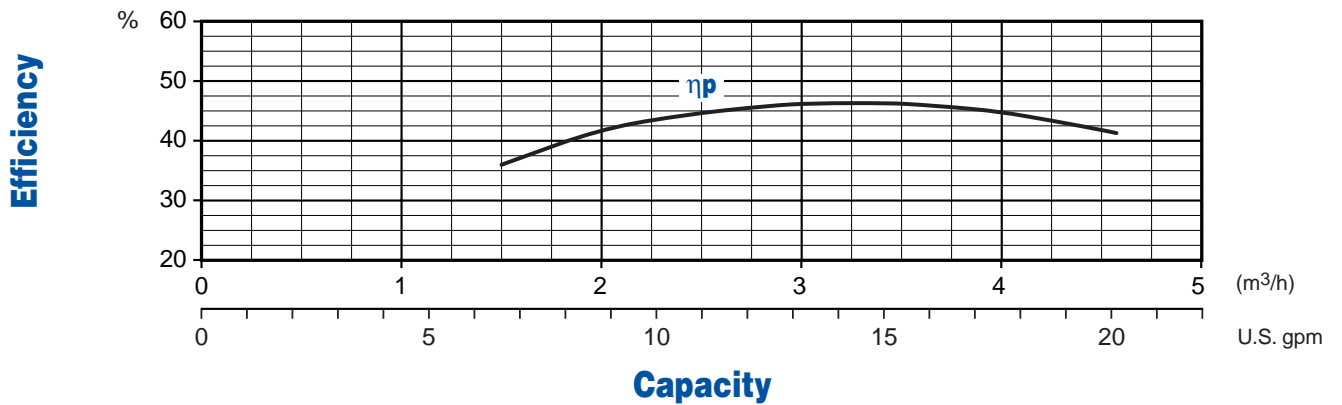
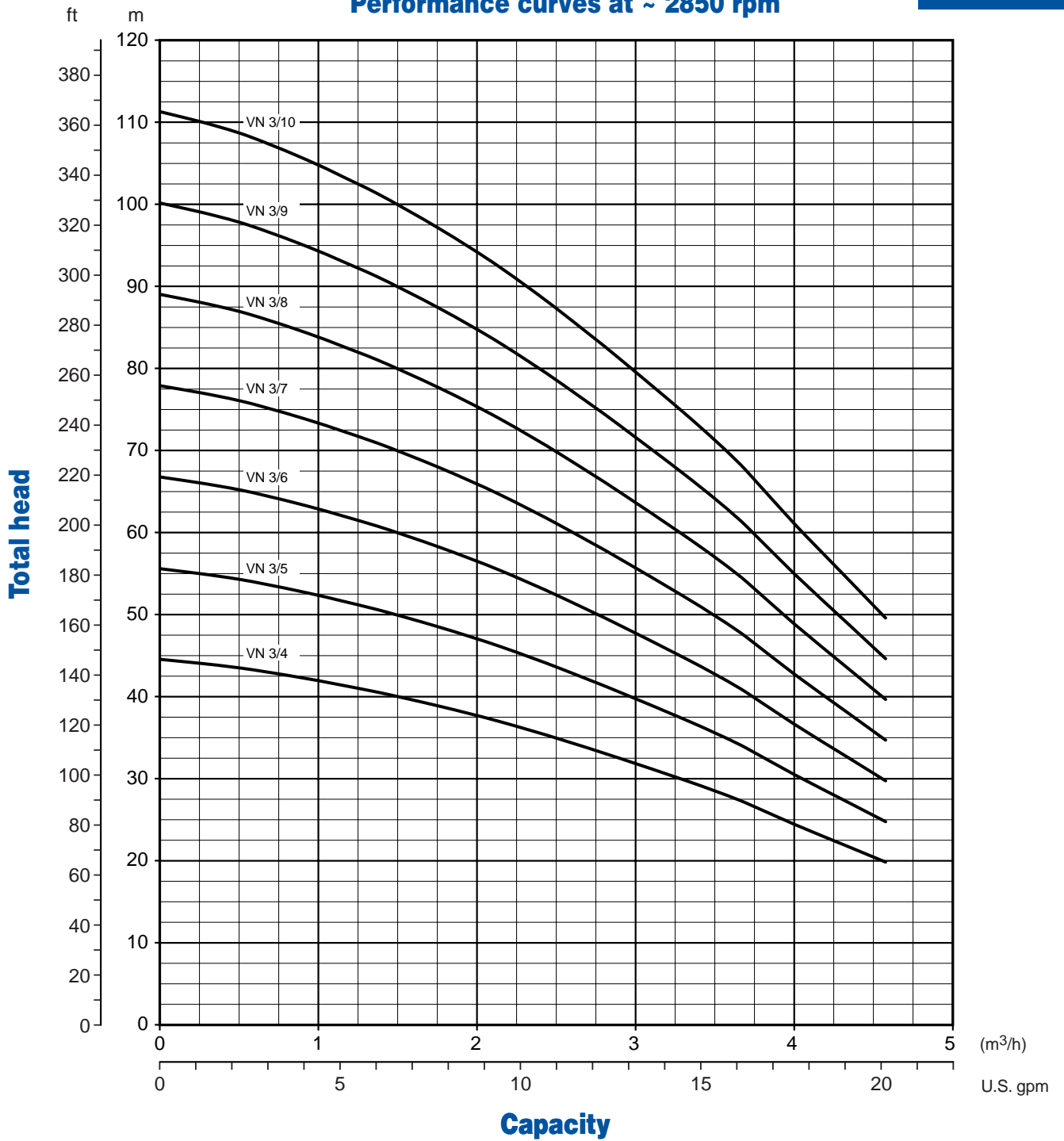
**VN 5** 50Hz

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**VN 9** 50Hz



## Performance curves at ~ 2850 rpm



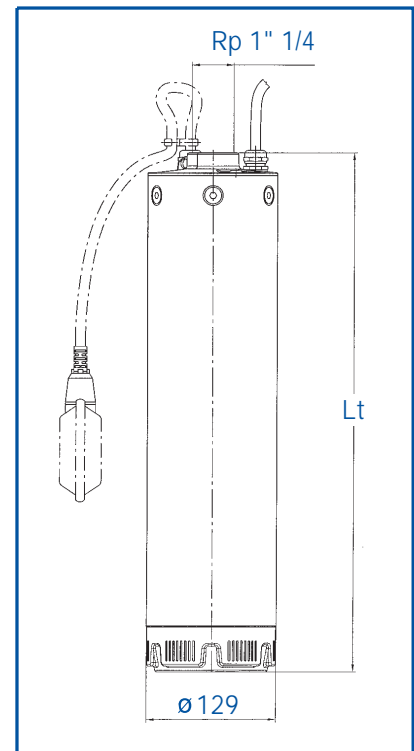
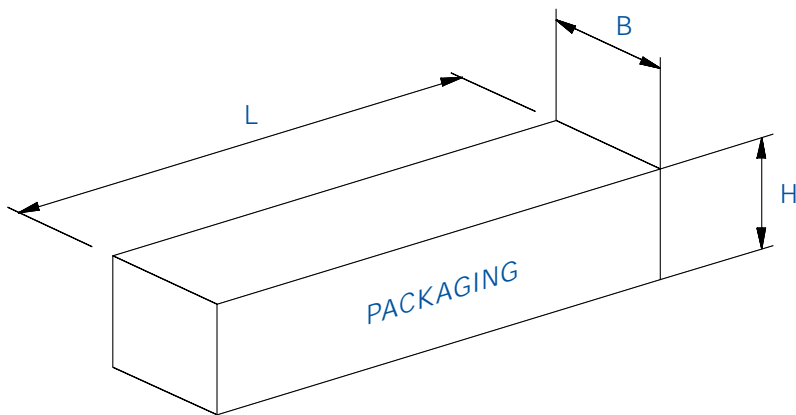
## Performance table at ~ 2850 rpm

PUMP MODEL		NUMBER OF STAGES	MOTOR POWER		INPUT POWER	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 3/4	-		4	0.55	0.75			0.85	20
VN 3/5	-	5	0.75	1	1	20	450	4.8	-
VN 3/6	-	6	0.75	1	1.2	20	450	5.6	-
VN 3/7	-	7	0.9	1.2	1.35	30	450	6.6	-
VN 3/8	VN 3/8T	8	1.1	1.5	1.55	30	450	7.2	2.7
VN 3/9	VN 3/9T	9	1.5	2	1.8	35	450	9	3
VN 3/10	VN 3/10T	10	1.5	2	2	35	450	9.7	3.3

- Single-phase motor: 220-240 V +/- 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 +/- 5% / 50 Hz. Thermal protection to be provided into the starter panel by the installer

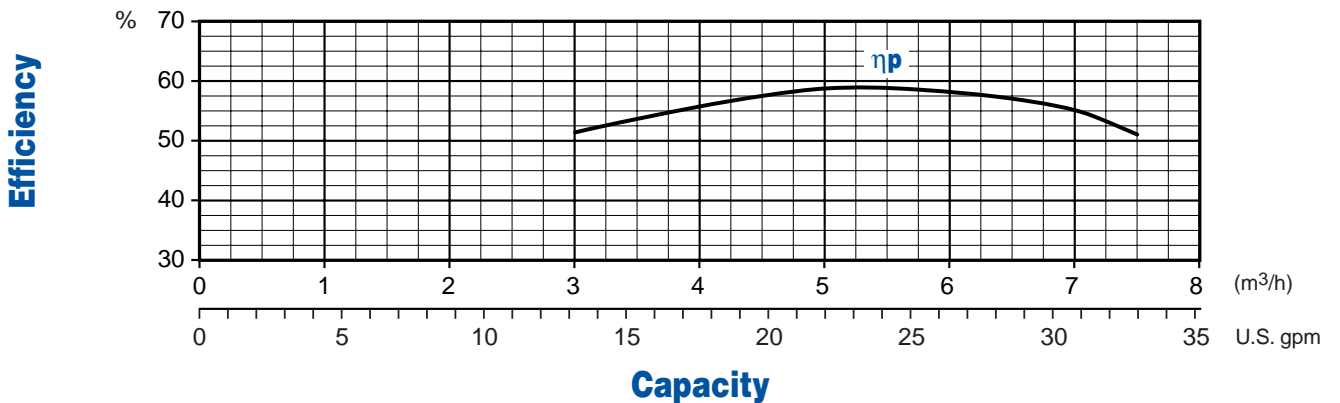
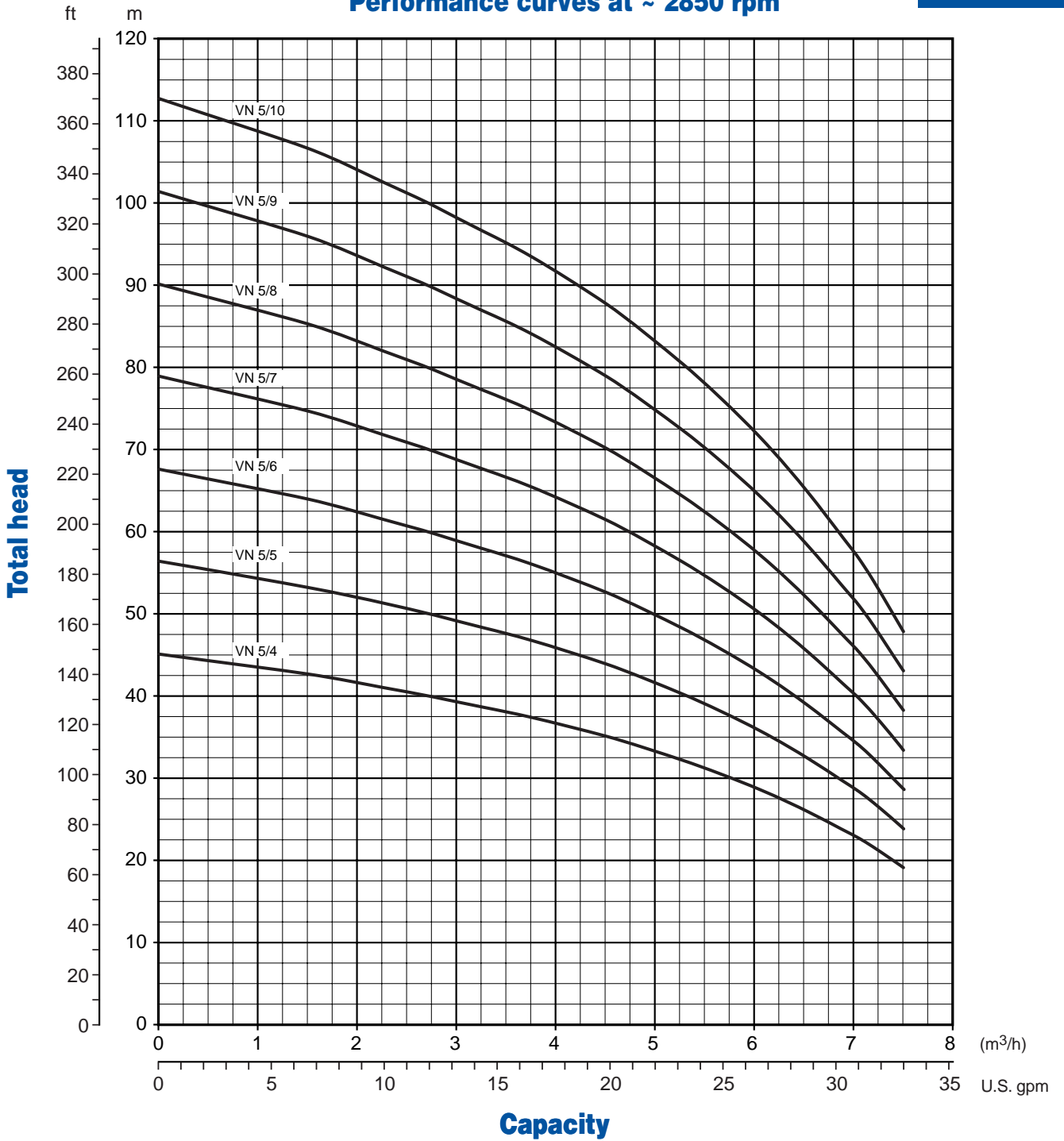
## Dimensions and weights

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 3/4	-	480	720	230	175	16.0	-
VN 3/5	-	504	720	230	175	18.0	-
VN 3/6	-	528	720	230	175	18.5	-
VN 3/7	-	552	720	230	175	20.0	-
VN 3/8	VN 3/8T	576	720	230	175	20.5	19.5
VN 3/9	VN 3/9T	650	800	230	195	23.5	21.5
VN 3/10	VN 3/10T	674	800	230	195	24.0	22.0





## Performance curves at ~ 2850 rpm



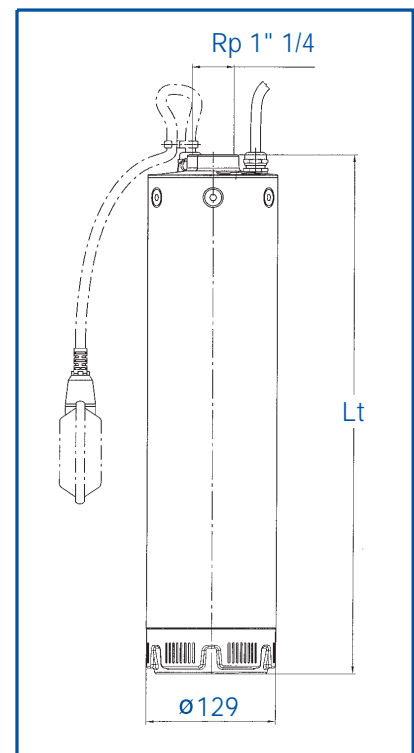
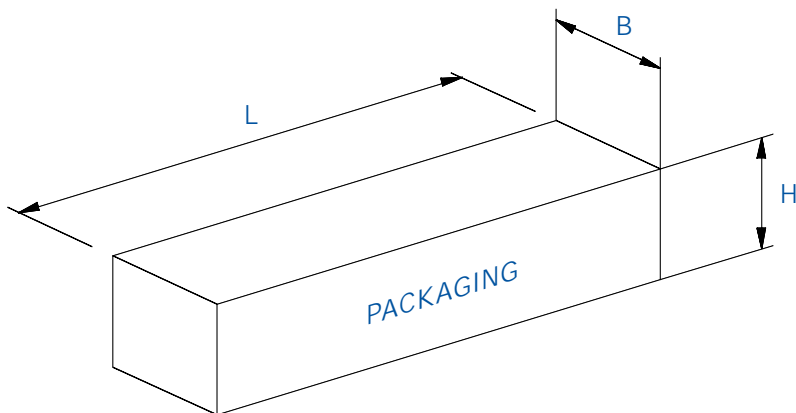
## Performance table at ~ 2850 rpm

PUMP MODEL		NUMBER OF STAGES	MOTOR POWER		INPUT POWER	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 5/4	-		4	0.75	1			1.15	20
VN 5/5	-	5	0.9	1.2	1.4	30	450	6.5	-
VN 5/6	VN 5/6T	6	1.1	1.5	1.65	30	450	7.6	2.8
VN 5/7	VN 5/7T	7	1.5	2	1.95	35	450	9.5	3.3
VN 5/8	VN 5/8T	8	1.5	2	2.2	35	450	10.5	3.5
VN 5/9	VN 5/9T	9	2.2	3	2.4	45	450	11.7	4.8
VN 5/10	VN 5/10T	10	2.2	3	2.65	45	450	12.7	5.1

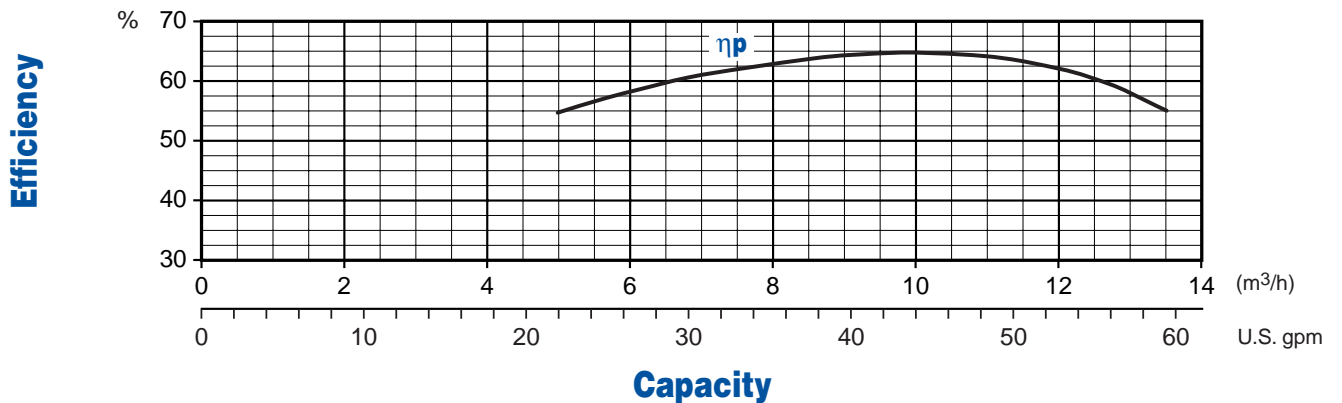
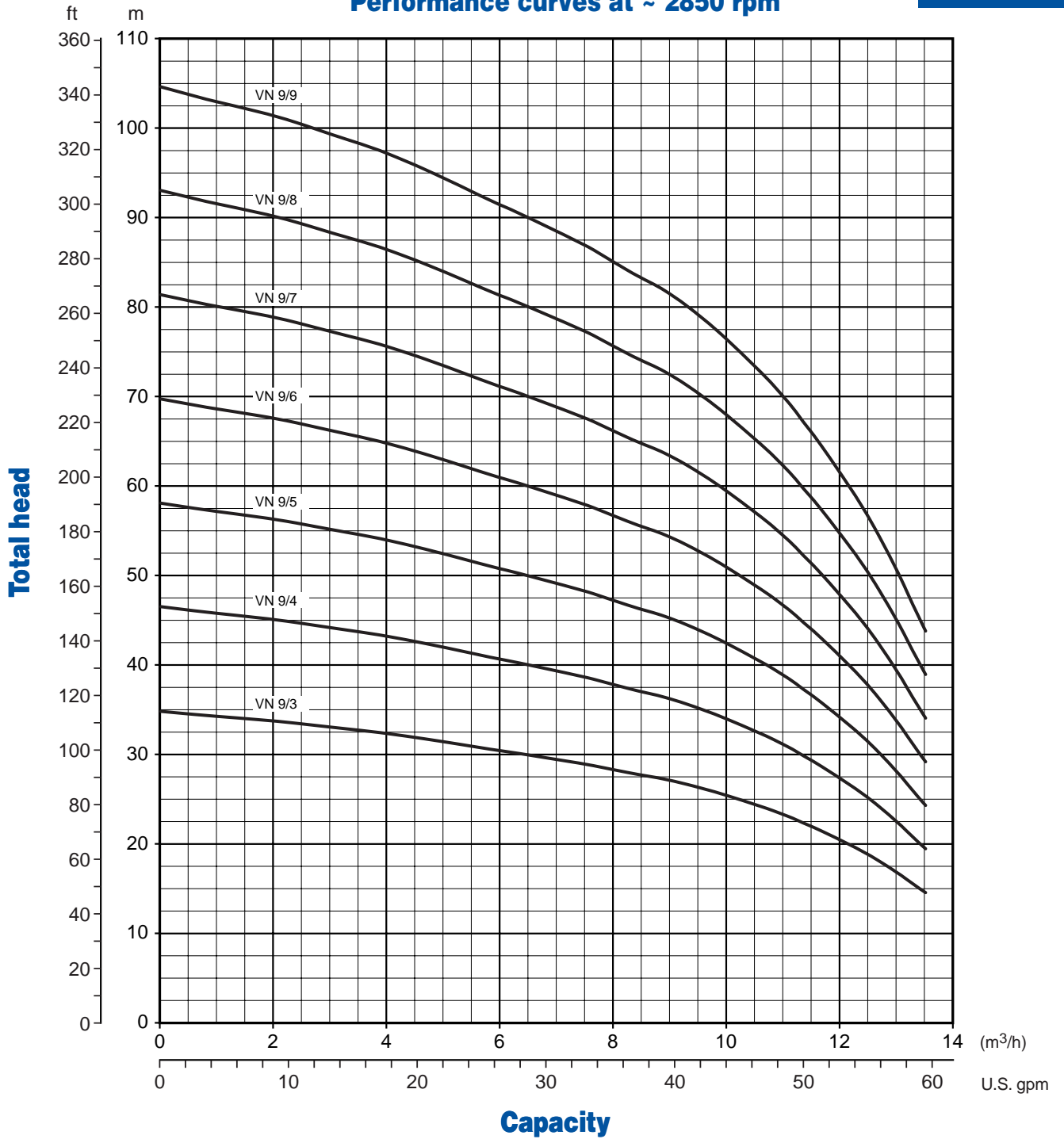
- Single-phase motor: 220-240 V +/- 5% / 50 Hz. Thermal protection built into the motor up to 1,1 kW. Thermal protection provided into the starter panel from 1,5 kW and above.
- Three-phase motors: 380-415 V +/- 5% / 50 Hz. Thermal protection to be provided into the starter panel by the installer

## Dimensions

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 5/4	-	480	720	230	175	17.5	-
VN 5/5	-	504	720	230	175	19.0	-
VN 5/6	VN 5/6T	528	720	230	175	19.5	18.5
VN 5/7	VN 5/7T	602	800	230	195	22.5	20.5
VN 5/8	VN 5/8T	626	800	230	195	23.0	21.0
VN 5/9	VN 5/9T	650	800	230	195	25.0	23.5
VN 5/10	VN 5/10T	674	800	230	195	25.5	24.0



## Performance curves at ~ 2850 rpm



## Performance table at ~ 2850 rpm

PUMP MODEL		NUMBER OF STAGES	MOTOR POWER		INPUT POWER	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			1.4	30
VN 9/4	VN 9/4T	4	1.5	2	1.9	35	450	9.5	3.2
VN 9/5	VN 9/5T	5	2.2	3	2.3	45	450	11.3	4.9
VN 9/6	VN 9/6T	6	2.2	3	2.7	45	450	12.8	5.2
-	VN 9/7T	7	3	4	3	-	-	-	6.2
-	VN 9/8T	8	3	4	3.4	-	-	-	6.7
-	VN 9/9T	9	3	4	3.8	-	-	-	7.3

- Single-phase motor: 220-240 V +/- 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 +/- 5% / 50 Hz. Thermal protection to be provided into the starter panel by the installer

## Dimensions

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	19.0
VN 9/5	VN 9/5T	614	800	230	195	23.5	22.0
VN 9/6	VN 9/6T	644	800	230	195	24.0	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

