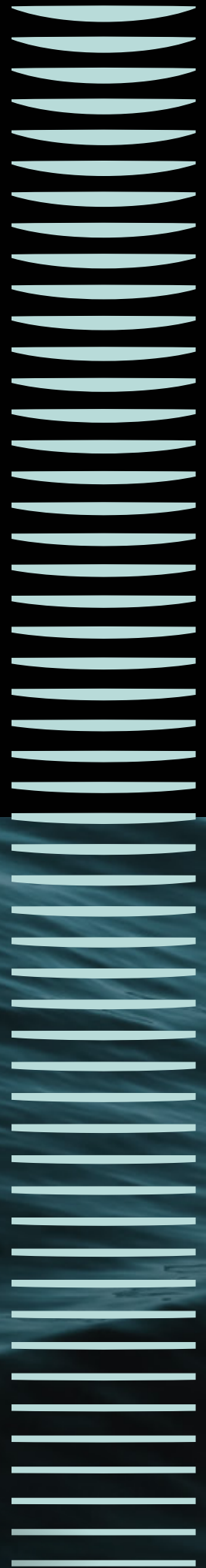


STAGE

VERTICAL MULTISTAGE CENTRIFUGAL PUMP



Contents

Vertical Multistage Centrifugal In-Line Pumps



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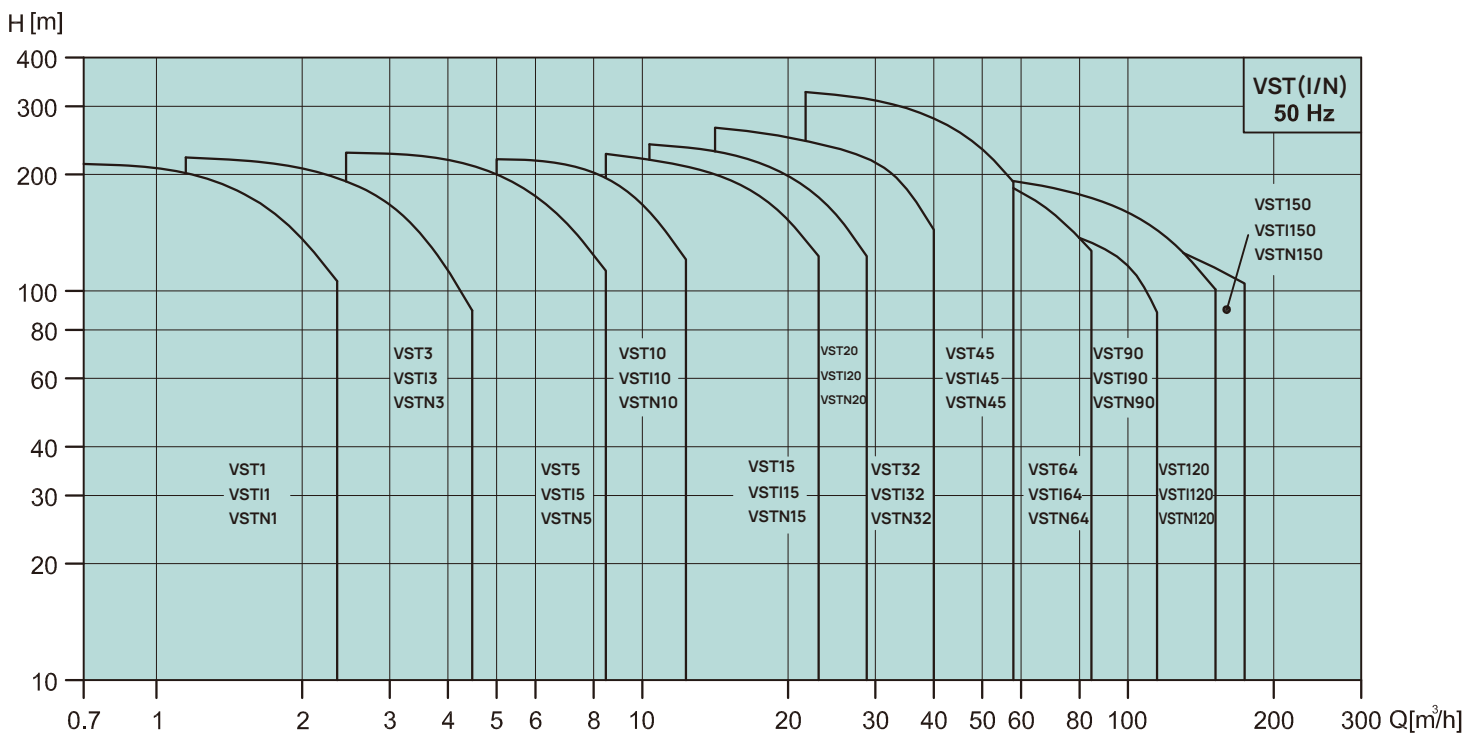
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Performance range

Vertical Multistage Centrifugal In-Line Pumps



VST, VSTI, VSTN Series Performance range 50 Hz



Product data

Vertical Multistage Centrifugal In-Line Pumps



Range	VST, VSTI, VSTN					
	1	3	5	10	15	20
50Hz						
Nominal flow [m ³ /h]	1.8	3	5.7	10	17	21
Flow range [m ³ /h]	0.7-2.4	1.2-4.5	2.5-8.5	5-13	8.5-23.5	10.5-29
Max. pressure [bar]	21.5	23	24	21.5	23	24.3
Fluid temperature [°C]	-15 to +120					
Motor power [kW]	0.37-2.2	0.37-3	0.37-5.5	0.37-7.5	1.1-15	1.1-18.5
Version						
VST: Cast iron and stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
VSTI: Stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
VSTN: Stainless steel EN 1.4401/AISI 316	•	•	•	•	•	•
Motor						
Mains connection 1- [V/Hz] (Permissible voltage tolerance ± 10%)	0.37-2.2 kW 220-240 V					
Mains connection 3- [V/Hz] (Permissible voltage tolerance ± 10%)	0.37-2.2 kW 220-240 V / 380-415 V 3 - 22 kW 220-240 V / 380-415 V 3 - 22 kW 380-415 V / 660-720 V					
Insulation class	F					
Enclosure class	IP 55					
Ambient temperature	50° C					
VST, VSTI, VSTN Pipe Connection						
Flange	DN 25 / DN 32	DN 25 / DN 32	DN 25 / DN 32	DN 40	DN 50	DN 50
Oval Flange	RP 1"	RP 1"	RP 1 ¼"	RP 1 ½"	RP 2"	RP 2"
VSTI, VSTN Pipe Connection						
Victaulic-connections	RP 1 ¼"	RP 1 ¼"	RP 1 ¼"	RP 2"	RP 2"	RP 2"
Mechanical Seals						
SiC/SiC	Standard					
Seals						
EPDM	Standard					
Viton						

* Flange standards : Refer to dimensional drawings

Product data

Vertical Multistage Centrifugal In-Line Pumps



50Hz

Range	VST, VSTI, VSTN					
	32	45	64	90	120	150
50Hz						
Nominal flow [m ³ /h]	30	45	64	90	120	150
Flow range [m ³ /h]	15-40	22-58	30-85	45-120	60-160	75-180
Max. pressure [bar]	27.5	33	21.8	20	20.4	18.7
Fluid temperature [°C]	-15 to +120					
Motor power [kW]	1.5-30	3-45	4-45	5.5-45	11-75	11-75
Version						
VST: Cast iron and stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
VSTI: Stainless steel EN 1.4301/AISI 304	•	•	•	•	•	•
VSTN: Stainless steel EN 1.4401/AISI 316	•	•	•	•	•	•
Motor						
Mains connection 1- [V/Hz] (Permissible voltage tolerance ± 10%)	0.37-2.2 kW 220-240 V					
Mains connection 3- [V/Hz] (Permissible voltage tolerance ± 10%)	0.37-2.2 kW 220-240 V / 380-415 V 3 - 22 kW 220-240 V / 380-415 V 3 - 22 kW 380-415 V / 660-720 V 30 - 75 kW 380-415 V / 660-720 V					
Insulation class	F					
Enclosure class	IP 55					
Ambient temperature	50 °C					
VST, VSTI, VSTN Pipe Connection						
Flange	DN 65	DN 80	DN100	DN100	DN125	DN125
VSTI, VSTN Pipe Connection						
Victaulic-connections	N/A	N/A	N/A	N/A	N/A	N/A
Mechanical Seals						
SiC/SiC	Standard					
Seals						
EPDM	Standard				0.37kW-45kW	
Viton					55kW-75kW	

* Flange standards : Refer to dimensional drawings

Product data

Vertical Multistage Centrifugal In-Line Pumps



Pump



The VST, VSTI and VSTN pumps are non-self priming vertical multistage pump of in-line design, flange or with Victaulic coupling with equally sized suction and discharge ports. Stage construction with stainless steel impellers, chambers and pressure casing. Pump stub shaft and motor shaft of the IEC-standards motor are directly close coupled. All pumps are equipped with a cartridge type mechanical seal for easy maintenance.

VST, VSTI and VSTN pumps have different pump sizes and various numbers of stages to provide the flow and the pressure required.

APPLICATIONS

WATER SUPPLY AND PRESSURE BOOSTING

Pressure boosting in buildings, hotels, residential complexes
Pressure booster stations, supply of water networks
Pressure boosting for industrial water supply

IRRIGATION AND AGRICULTURE

Greenhouses
Sprinkler irrigation
Field irrigation (flooding)

LIGHT INDUSTRY

Washing and cleaning systems
Car washing facilities
Fire fighting systems
Process water systems
Machine tools (cooling lubricants)

WATER TREATMENT

Water softeners and de-mineralization
Reverse Osmosis systems
Distillation systems
Filtration
Ultra-filtration systems

HEATING, VENTILATION AND AIR-CONDITIONING

Boilers
Induction heating
Heat exchangers
Refrigerators
Cooling towers and systems
Temperature control systems

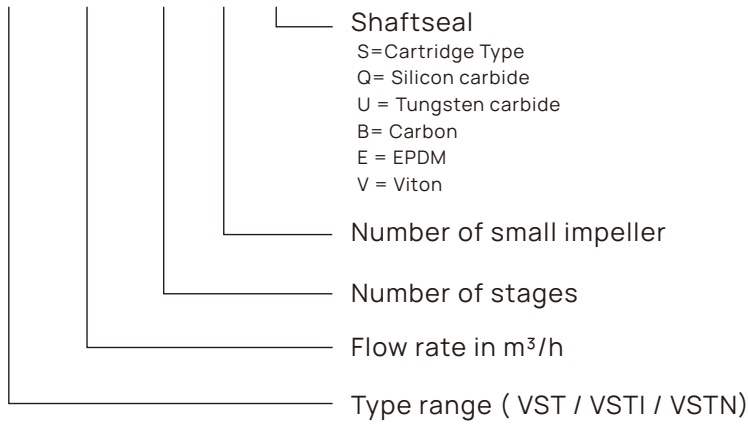
Product data

Vertical Multistage Centrifugal In-Line Pumps



Identification Code

VST - 10 - 5 - 1 - SQQV



Pump nameplate information

Type	①				
Model	②				
f	③	Hz	P2	④	kw
n	⑤	min ⁻¹	H _{max}	⑥	m
Q	⑦	m ³ /h	H	⑧	m
p _{max} /t _{max}	⑨		bar/°C	⑩	
Serial No.	⑪				

CE

- ① Pump Type - Seal Type
- ② Pump Model
- ③ Frequency
- ④ Rated Power
- ⑤ Speed
- ⑥ Maximum Head
- ⑦ Capacity
- ⑧ Head Range
- ⑨ Max. Operating Pressure / Max. temperature
- ⑩ Rotating Direction
- ⑪ Serial number

Motor nameplate information

STAGE					CE	
① INDUCTION MOTOR						
TYPE	②		FR. ③	POLES 2	IEC 60034	
OUTPUT	④	HP kW	RATING CONT.	INS. ⑤	IP ⑥	
⑦ Hz	△	⑧ V	⑨ A	E.F.F.% ⑩		
	Y	V	A	rpm	⑪	
BEARINGS	⑫			WEIGHT	kg	
SER.NO.	⑬			DATE		

- ① Phase
- ② Motor Model
- ③ Frame
- ④ Rated Power
- ⑤ Insulation
- ⑥ International Protection
- ⑦ Frequency
- ⑧ Voltage
- ⑨ Ampere
- ⑩ Efficiency
- ⑪ Revolutions Per Minute
- ⑫ Bearing type
- ⑬ Serial number

Product data

Vertical Multistage Centrifugal In-Line Pumps



Mechanical Seal

Standard Cartridge type mechanical seal made of Silicon Carbide/Silicon Carbide/EPDM or Viton. Based on the type of application, alternative materials are available for the seal and the elastomers. The cartridge type mechanical seal can be replaced in minutes without special tools and without dismantling the pump.



List of Materials

Q : Silicon carbide	E:EPDM
U : Tungsten carbide	V:Viton
B : Carbon	

Type of Seal

Seal Type	VST / VSTI / VSTN		
	1/2/3/4/5/10/15 /20/32/45/64/90	120/150	
		0.5-60HP	75-100HP
Mechanical Seals			
S: O-ring Seal Cartridge type	●	●	
B: Rubber bellows seal Cartridge type			●
QQ	●	●	●
UU	Optional	Optional	
QB	Optional	Optional	
QB	Optional	Optional	
Seals			
E	●	●	●
V	Optional	Optional	Optional

Minimum inlet pressure - NPSHA

Calculation of the inlet pressure "H" is recommended in these situations:

- The liquid temperature is high.
- The flow is significantly higher than the rated flow.
- Water is drawn from depths.
- Water is drawn through long pipes.
- Inlet conditions are poor.

To avoid cavitation, make sure that there is a minimum pressure on the suction side of the pump. The maximum suction lift "H" in feet can be calculated as follows:

$$H = P_b - \text{NPSHR} - H_f - H_v - H_s$$

P_b = Barometric pressure in feet absolute. (Barometric pressure can be set to 33.9 feet. At sea level. In closed systems, p_b indicates system pressure in feet.)

NPSHR = Net Positive Suction Head Required in feet. (To be read from the NPSHR curve at the highest flow the pump will be delivering.)

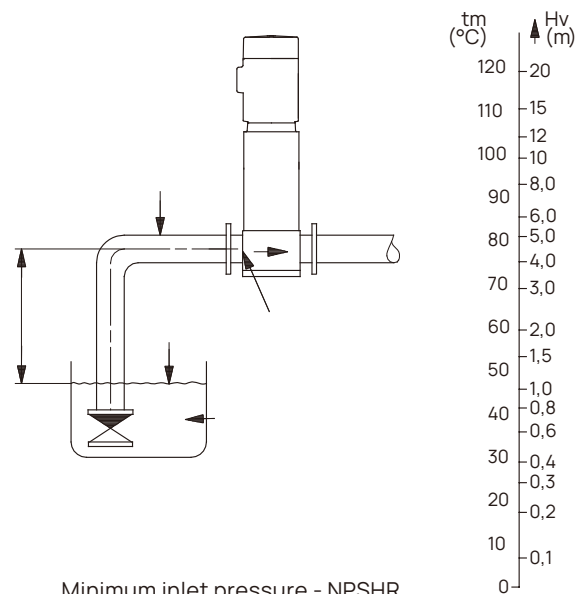
H_f = Friction loss in suction pipe in feet. (At the highest flow the pump will be delivering.)

H_v = Vapor pressure in feet. (To be read from the vapor pressure scale. " H_v " depends on the liquid temperature " T_m ").

H_s = Safety margin = minimum 2.0 feet.

If the "H" calculated is positive, the pump can operate at a suction lift of maximum "H" feet.

If the "H" calculated is negative, an inlet pressure of minimum "H" feet is required.



Minimum inlet pressure - NPSHR

Note: In order to avoid cavitation never, select a pump whose duty point lies too far to the right on the NPSHR curve.

Always check the NPSHR value of the pump at the highest possible flow.

Product data

Vertical Multistage Centrifugal In-Line Pumps



Motor

- Squirrel cage in short circuit, aluminum casing up to 22 KW, totally enclosed, fan-cooled, 2-pole standard motor.
- Electrical data
 - Enclosure class: IP55
 - Insulation class:F
 - Motor: IE3
- The motors have efficiency values that fall within the range normally referred to as high efficiency.
- Ambient temperature:Max. +50°C

Motor Data

50Hz

Motor Type				Nominal current in [A]					
Pole	HP	kW	Flange	Frame	1Ø	3Ø		3Ø	
					220-240V	△220-240V	Y 380-415V	△380-415V	Y 660-720V
2	0.5	0.37	B14	71A	25-25	1.7-1.9	1.0-1.1	-----	-----
	0.75	0.55		71B	4.0-3.5	2.6-2.9	1.5-1.7	-----	-----
	1.0	0.75		80A	5.1-4.1	3.4-3.4	2.0-2.0	-----	-----
	1.5	1.1		80B	8.0-6.9	4.8-5.0	2.8-2.9	-----	-----
	2.0	1.5		90S	9.5-8.9	6.2-6.6	3.6-3.8	-----	-----
	3.0	2.2		90L	13.4-12.7	8.8-9.4	5.1-5.4	-----	-----
	4.0	3.0		100L	-----	11.8-12.3	6.8-7.1	6.8-6.9	3.9-4.0
	5.5	4.0		112M	-----	15.1-15.2	8.7-8.8	8.7-8.3	5.0-4.8
	7.5	5.5	B5	132S	-----	18.7-18.0	10.8-10.4	10.9-10.8	6.3-6.2
	10	7.5		132S	-----	25.5-24.9	14.7-14.4	14.9-14.8	8.6-8.5
	15	11		160M	-----	38.8-39.1	22.4-22.6	22.9-23.8	13.2-13.7
	20	15		160M	-----	49.3-46.5	28.5-26.9	24.9-29.0	16.9-16.7
	25	18.5		160L	-----	60.2-55.4	34.8-32.0	35.2-33.5	20.3-19.3
	30	22		180M	-----	71.3-67.5	41.2-39.0	41.3-39.6	23.8-22.8
	40	30		200L	-----	-----	-----	55.4-50.7	31.9-29.2
	50	37		200L	-----	-----	-----	67.7-62.0	39.0-35.7
	60	45		225M	-----	-----	-----	82.3-75.4	47.4-43.4
	75	55		250M	-----	-----	-----	101-92.5	58.2-53.3
	100	75		280S	-----	-----	-----	134-123	77.2-70.7



Max. Operating Pressure and Inlet Pressures

Vertical Multistage Centrifugal In-Line Pumps

Maximum inlet pressure

The following table shows the maximum permissible inlet pressure. However, the current inlet pressure + the pressure against a closed valve must always be lower than the maximum permissible operating pressure.

If the maximum permissible operating pressure is exceeded, the bearing in the motor may be damaged and the life of the shaft seal reduced.

*Rule to follow : The inlet pressure+ the pressure against a closed valve < Max. Operating pressure.

50Hz

Pump type	Flange & PJE				Oval Flange		
	Stages	Max. Operating Pressure	Stages	Max. Inlet Pressures	Stages	Max. Operating Pressure	Max. Inlet Pressures
VST(I/N) 1	2 - 36	25 bar	2 - 36	10 bar	2 - 23	16 bar	10 bar
VST(I/N) 3	2 - 36	25 bar	2 - 29	10 bar	2 - 23	16 bar	10 bar
			31 - 36	15 bar	-	-	-
VST(I/N) 5	2 - 36	25 bar	2 - 16	10 bar	2 - 22	16 bar	10 bar
			18 - 36	15 bar	-	-	-
VST(I/N) 10	1 - 16	16 bar	1 - 6	8 bar	1 - 16	16 bar	8 bar
	17 - 22	25 bar	7 - 22	10 bar	-	-	-
VST(I/N) 15	1 - 10	16 bar	1 - 3	8 bar	1 - 7	10 bar	8 bar
	12 - 17	25 bar	4 - 17	10 bar	-	-	-
VST(I/N) 20	1 - 10	16 bar	1 - 3	8 bar	1 - 7	10 bar	8 bar
	12 - 17	25 bar	4 - 17	10 bar	-	-	-
VST(I/N) 32	(1-1) - 7	16 bar	(1-1) - 4	4 bar			
	(8-2) - 14	30 bar	(5-2) - 10	10 bar			
			(11-2) - 14	15 bar			
VST(I/N) 45	(1-1) - 5	16 bar	(1-1) - 2	4 bar			
	(6-2) - 11	30 bar	(3-2) - 5	10 bar			
	(12-2) - (13-2)	33 bar	(6-2) - (13-2)	15 bar			
VST(I/N) 64	(1-1) - 5	16 bar	(1-1) - (2-2)	4 bar			
	(6-2) - (8-1)	30 bar	(2-1) - (4-2)	10 bar			
			(4-1) - (8-1)	15 bar			
VST(I/N) 90	(1-1) - 4	16 bar	(1-1) - 1	4 bar			
	(5-2) - 6	30 bar	(2-1) - (3-2)	10 bar			
			3 - 6	15 bar			
VST(I/N) 120	1 - 7	30 bar	1 - (2-1)	10 bar			
			2 - (5-1)	15 bar			
			(6-1) - 7	20 bar			
VST(I/N) 150	(1-1) - 6	30 bar	(1-1) - 1	10 bar			
			(2-1) - (4-2)	15 bar			
			(5-2) - 6	20 bar			

Example of operating and inlet pressures

The values for operating and inlet pressures shown in the tables must not be considered individually but must always be compared, see the following examples:

Example 1:

The following pump type has been selected: VST 3-29
 Max. operating pressure: 25 bar
 Max. inlet pressure: 10 bar
 Discharge pressure against a closed valve: 18.6 bar , (see p.18)
 This pump is not allowed to start at an inlet pressure of 10 bar , but at an inlet pressure of 25 bar - 18.6 bar = 6.4 bar.

Example 2:

The following pump type has been selected: VST 10-2
 Maximum operating pressure: 16 bar.
 Maximum inlet pressure: 8 bar.
 Discharge pressure against a closed valve: 2 bar.
 This pump is allowed to start at an inlet pressure of 8 bar, as the discharge pressure against a closed valve is only 2 bar, which results in an operating pressure of 8 bar + 2 bar = 10 bar. On the contrary, the maximum operating pressure of this pump is limited to 16 bar as a higher operating pressure will require an inlet pressure of more than 8 bar.



Pumped Liquids

VST (I/N) pumps can handle a wide variety of liquids, each with its own characteristic.

VST(I)

Non-corrosive liquids

For fluid transfer, circulation and pressure boosting of cold or hot clean water.

VST(N)

Industrial liquids

Light acids

The fluids covered in the list are not complete. Data on the application limits of different pump materials when handling any of the listed fluids are considered to be the best choices. However, the table is intended as a general guide only, and cannot replace actual testing of the pumped fluids and pump materials under specific working conditions.

When choosing the pump version, sufficient attention should be given to the flow medium, such as density, solidification point, viscosity as well as ex-protection requirement. The limits of applicability of the pumps, based on pressure and temperature must also be considered.

● Recommended

Pumped fluid	"Fluid Concentration, temperature"	VST (I)		VST (N)	
		EPDM	Viton	EPDM	Viton
Acetic acid anhydride	25°C			●	
Alkaline cleaner		●			
Aluminium sulphate	10%, 25°C				●
Ammonia water (A. hydroxide)	20%, 40°C	●			
Ammonia hydrogen carbonate	10%, 40°C	●		●	
Benzoic acid	10%, 90°C				●
Boric acid	Unsaturated solution, 60°C				●
Butanol	60°C	●			
Calcium acetate	30%, 50°C	●			
Calcium hydroxide	Saturated solution, 50°C	●			
Chromic acid	1%, 20°C				●
Condensate	90°C	●			
Copper sulphate	Unsaturated solution, 60°C				●
Deionic (fully desalinated water)	50°C			●	
Ethanol	100%, 20°C	●			
Ethylene glycol/Diethylene glycol	40%, 70°C	●	●	●	●
Fixer	25°C				●
Formic acid	5%, 20°C			●	

Technical data

Vertical Multistage Centrifugal In-Line Pumps



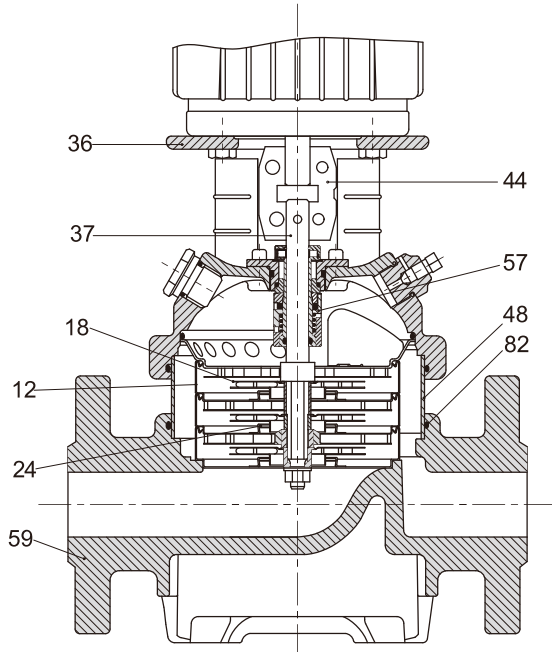
Pumped fluid	"Fluid Concentration, temperature"	VST (I)		VSTN	
		EPDM	Viton	EPDM	Viton
Fruit juice	50°C				●
Glycerine	50%, 50°C	●			
Heating oil (Light)		●			●
Hydraulic oil	100%, 100°C		●		
Isopropanol		●			
Lactic acid	10%, 20°C				●
Linoleic acid	100%, 20°C	●			
Linseed oil	60°C		●		
Liqueur	60°C				●
Maize oil	80°C		●		
Maleic acid	50%, 50°C				●
Methanol	100%, 20°C	●			
Motor oil	100%, 80°C	●			
Oil-water-mixture	100°C		●		
Oxalic acid	1%, 20°C			●	
Peanut oil	100%, 80°C		●		
Phosphoric acid	20%, 20°C			●	
Polyglycols	90°C		●		●
Polyethylene glycols	40%, 70°C	●			
Potassium carbonate	10%, 60°C	●			
Potassium hydrogen carbonate	10%, 60°C	●			
Potassium permanganate	5%, 20°C			●	
Potassium sulphate	Unsaturated solution, 80°C			●	
Rapeseed oil	100%, 80°C		●		
Silicone oil	100%		●		
Sodium carbonate	10%, 60°C			●	
Sodium hydroxide	25%, 50°C			●	
Sodium nitrate	Unsaturated solution, 80°C			●	
Sodium phosphate	5%, 100°C			●	
Sodium sulphate	10%, 60°C			●	
Sulphuric acid	5%, 25°C				●
Water					
Swimming pool water	35°C	● VSTI		●	
Deionic	50°C			●	
Distilled water	50°C			●	
Decarbonated water				●	
Soft water				●	
Heating water				●	
Boiler water				●	
Pure water				●	
Rinsing water		● VSTI		●	

Construction

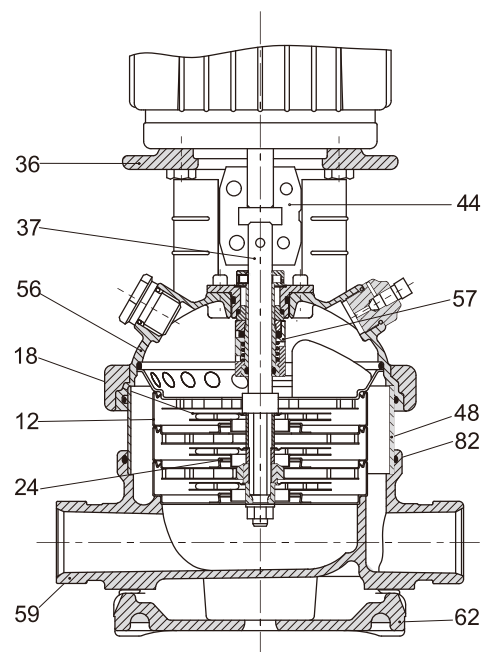
Vertical Multistage Centrifugal In-Line Pumps



VST-1,2,3,4,5,10,15,20



VST(I/N)-1,2,3,4,5,10,15,20



CONSTRUCTION

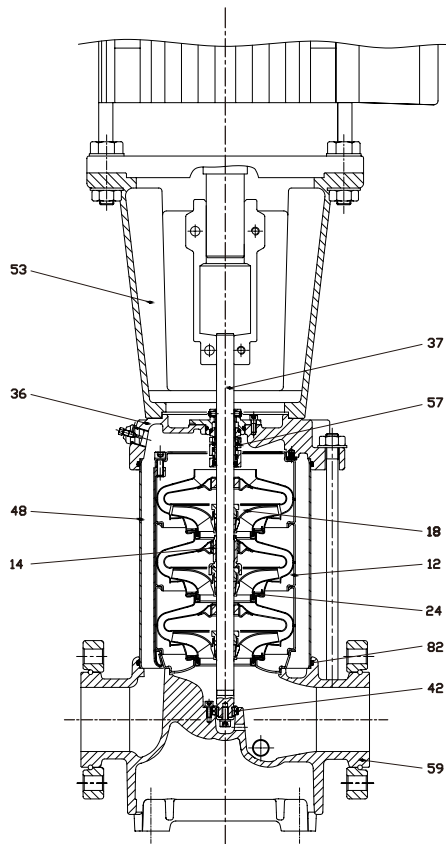
Pos.	Name	Material	VST 1,2,3,4,5,10,15,20		VSTI 1,2,3,4,5,10,15,20		VSTN 1,2,3,4,5,10,15,20	
			Standard		Standard		Standard	
			Europe	USA	Europe	USA	Europe	USA
36	Pump head	Cast Iron	EN-GJL-200	ASTM 25B	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12
56	Pump head cover	Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316
48	Outer Sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
82	O-ring for outer sleeve	EPDM						
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
24	Neck ring	PTFE						
59	Base	Cast Iron	EN-GJL-200	ASTM 25B	N/A			
	Base	Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
62	Base plate	Cast Iron	N/A		EN-GJL-200	ASTM 25B	EN-GJL-200	ASTM 25B
44	Coupling	Fe-Cu-C	SINT C11	MPIF FC0525	SINT C11	MPIF FC0525	SINT C11	MPIF FC0525
57	Mechanical seal	Cartridge type						

Construction

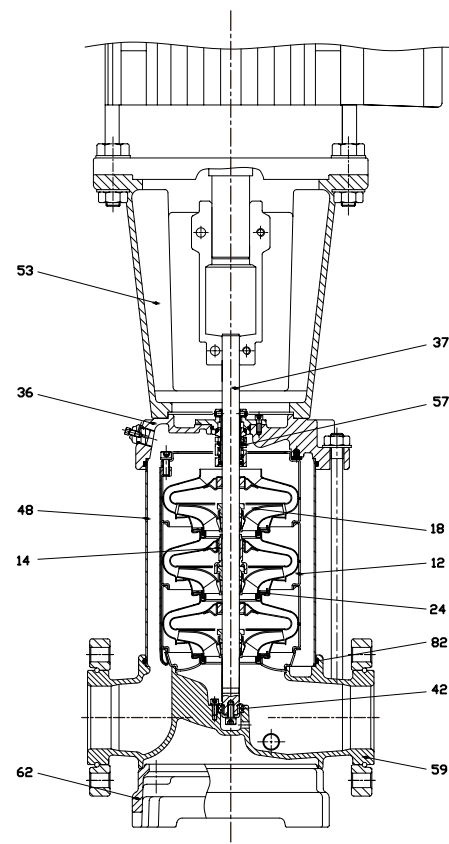
Vertical Multistage Centrifugal In-Line Pumps



VST-32,45,64,90



VST(I/N)-32,45,64,90



CONSTRUCTION

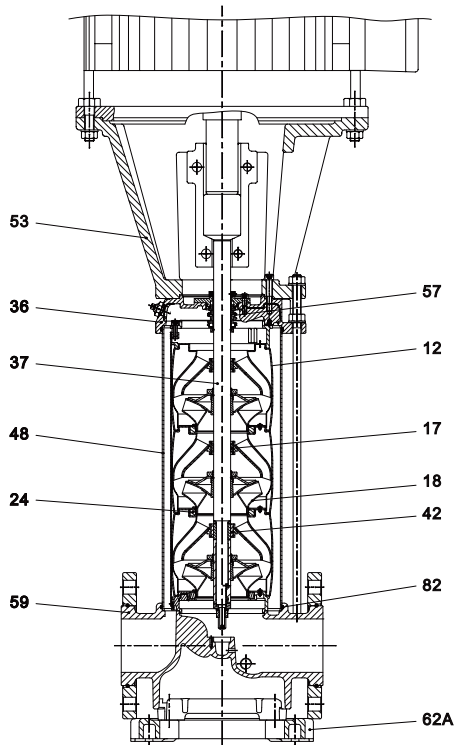
Pos.	Name	Material	VST 32,45,64,90		VSTI 32,45,64,90		VSTN 32,45,64,90	
			Standard		Standard		Standard	
			Europe	USA	Europe	USA	Europe	USA
36	Pump head	Cast Iron	EN-GJL-250	ASTM 35B				
		Stainless steel			1.4301	AISI 304	1.4401	AISI 316
53	Motor Bracket	Cast Iron	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316
48	Outer Sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
82	O-ring for outer sleeve	EPDM						
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
24	Neck ring	Carbon Fiber + POB + PTFE						
59	Base	Cast Iron	EN-GJL-250	ASTM 35B	N/A			
	Base	Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
62	Base plate	Cast Iron	N/A		EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B
57	Mechanical seal	Cartridge type						
14	Bearing ring		Bronze				POB+Graphite+PTFE	
42	Bottom bearing ring	Tungsten carbide/ Tungsten carbide						

Construction

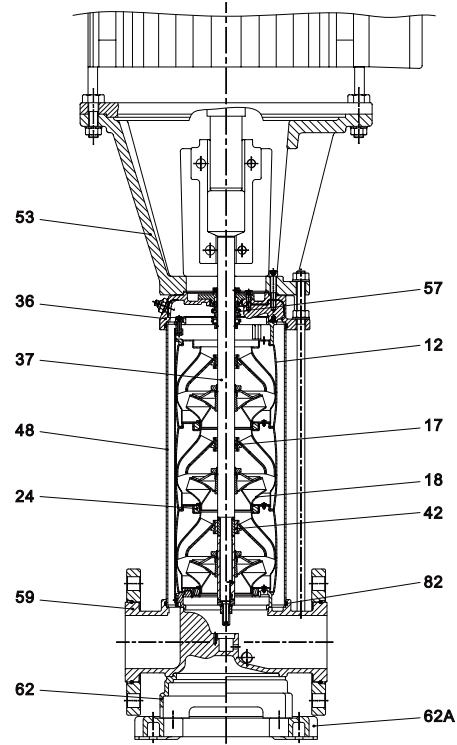
Vertical Multistage Centrifugal In-Line Pumps



VST-120,150



VST(I/N)-120,150



CONSTRUCTION

Pos.	Name	Material	VST 120,150		VSTI 120,150		VSTN 120,150	
			Standard		Standard		Standard	
			Europe	USA	Europe	USA	Europe	USA
36	Pump head	Cast Iron	EN-GJL-250	ASTM 35B	N/A			
		Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
53	Motor bracket (15HP~60HP)	Cast Iron	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B	EN-GJL-250	ASTM 35B
	Motor bracket (75HP~100HP)	Cast Iron	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12
17	bearing ring	PTFE						
18	Impeller	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
37	Shaft	Stainless steel	1.4057	AISI 431	1.4057	AISI 431	1.4401	AISI 316
48	Outer sleeve	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
82	O-ring for outer sleeve	EPDM						
12	Chamber	Stainless steel	1.4301	AISI 304	1.4301	AISI 304	1.4401	AISI 316
24	Neck ring	PTFE						
59	Base	Cast Iron	EN-GJL-250	ASTM 35B	N/A			
		Stainless steel	N/A		1.4301	AISI 304	1.4401	AISI 316
62	Base plate	Cast Iron	N/A		EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12
62A	Base plate	Cast Iron	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12	EN-GJS-450-10	ASTM 65-45-12
57	Mechanical seal	Cartridge type						
42	Bottom bearing ring	SiC / SiC						

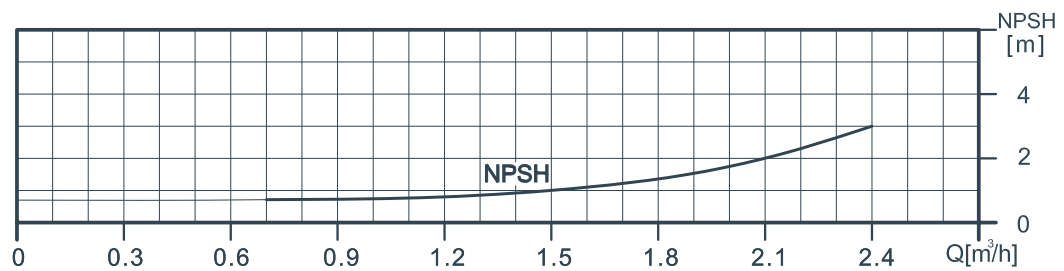
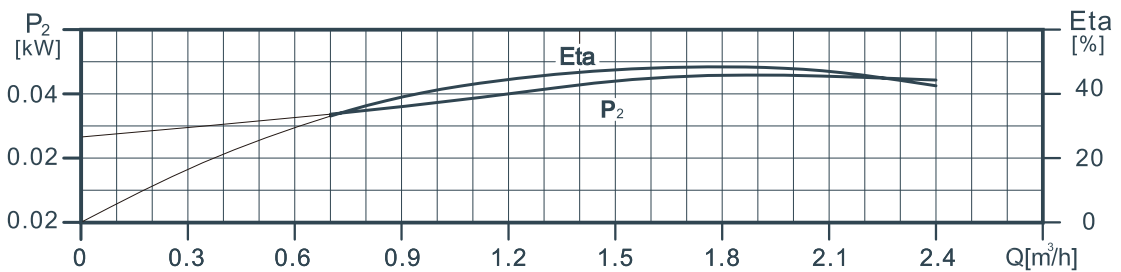
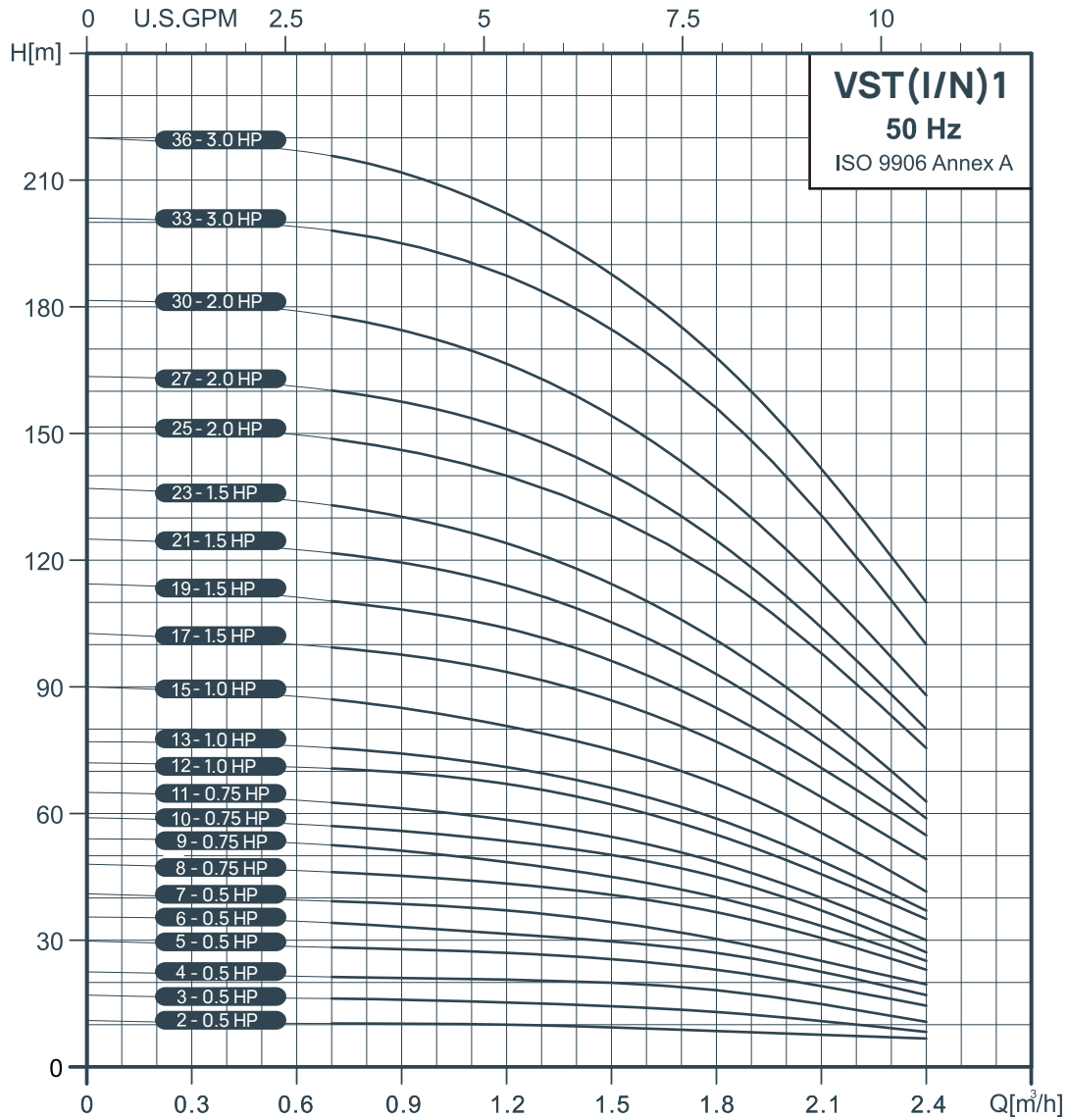
Performance Curves

VST 1

Vertical Multistage Centrifugal In-Line Pumps



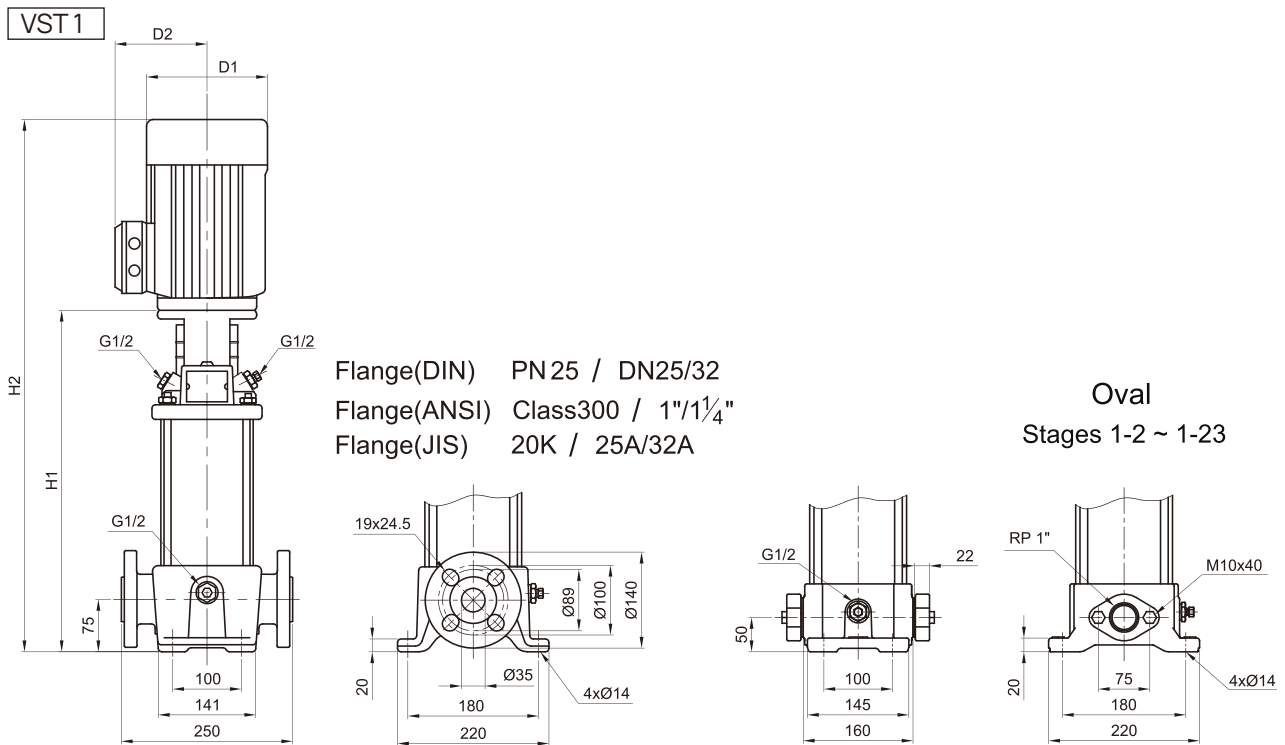
VST, VSTI, VSTN 1



Technical data

Vertical Multistage Centrifugal In-Line Pumps

VST1



VST1

50Hz	Motor		Nominal current [A]			Dimension [mm]						Net weight [kg]	
	P2		1ø	3ø		DIN flange		OVAL		D1	D2	DIN flange	OVAL
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	H1	H2	H1	H2	D1	D2	DIN flange	OVAL
VST1-2	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	279	474	254	449	141	115	23.4	19.3
VST1-3	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	279	474	254	449	141	115	23.4	19.3
VST1-4	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	297	492	272	467	141	115	23.8	19.7
VST1-5	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	315	510	290	485	141	115	24.2	20.1
VST1-6	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	333	528	308	503	141	115	24.5	20.4
VST1-7	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	351	546	326	521	141	115	24.9	20.8
VST1-8	0.55	0.75	4.0-3.5	2.6-2.9	1.5-1.7	369	564	344	539	141	115	25.8	21.7
VST1-9	0.55	0.75	4.0-3.5	2.6-2.9	1.5-1.7	387	582	362	557	141	115	26.1	22.0
VST1-10	0.55	0.75	4.0-3.5	2.6-2.9	1.5-1.7	405	600	380	575	141	115	26.5	22.4
VST1-11	0.55	0.75	4.0-3.5	2.6-2.9	1.5-1.7	423	618	398	593	141	115	26.9	22.8
VST1-12	0.75	1.0	5.1-4.1	3.4-3.4	2.0-2.0	447	682	422	657	141	115	29.4	25.3
VST1-13	0.75	1.0	5.1-4.1	3.4-3.4	2.0-2.0	465	700	440	675	141	115	29.8	25.7
VST1-15	0.75	1.0	5.1-4.1	3.4-3.4	2.0-2.0	501	736	476	711	141	115	30.5	26.4
VST1-17	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	537	826	512	801	177	141	37.9	33.8
VST1-19	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	573	862	548	837	177	141	38.7	34.6
VST1-21	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	609	898	584	873	177	141	39.4	35.3
VST1-23	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	645	934	620	909	177	141	40.2	36.1
VST1-25	1.5	2.0	9.5-8.9	6.2-6.6	3.6-3.8	697	992	-	-	177	141	45.0	-
VST1-27	1.5	2.0	9.5-8.9	6.2-6.6	3.6-3.8	733	1028	-	-	177	141	45.8	-
VST1-30	1.5	2.0	9.5-8.9	6.2-6.6	3.6-3.8	787	1082	-	-	177	141	46.9	-
VST1-33	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	841	1136	-	-	177	141	49.9	-
VST1-36	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	895	1190	-	-	177	141	51.0	-

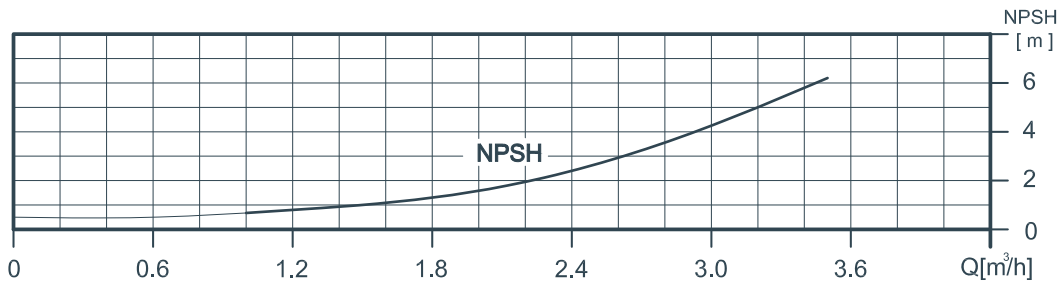
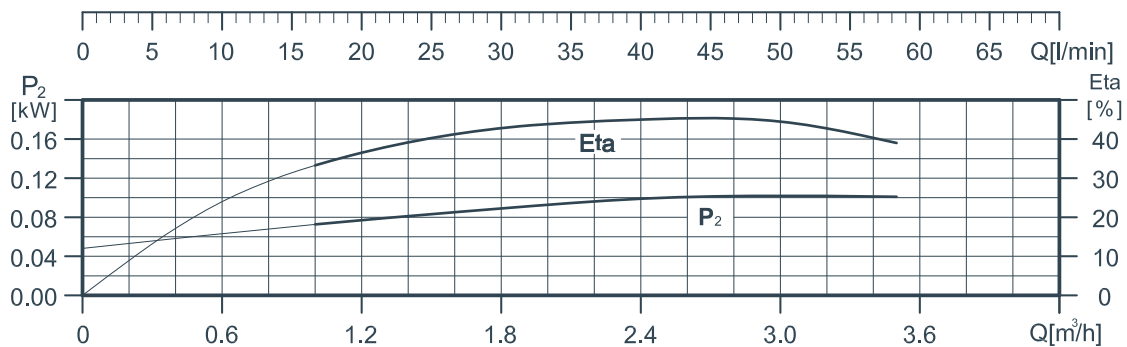
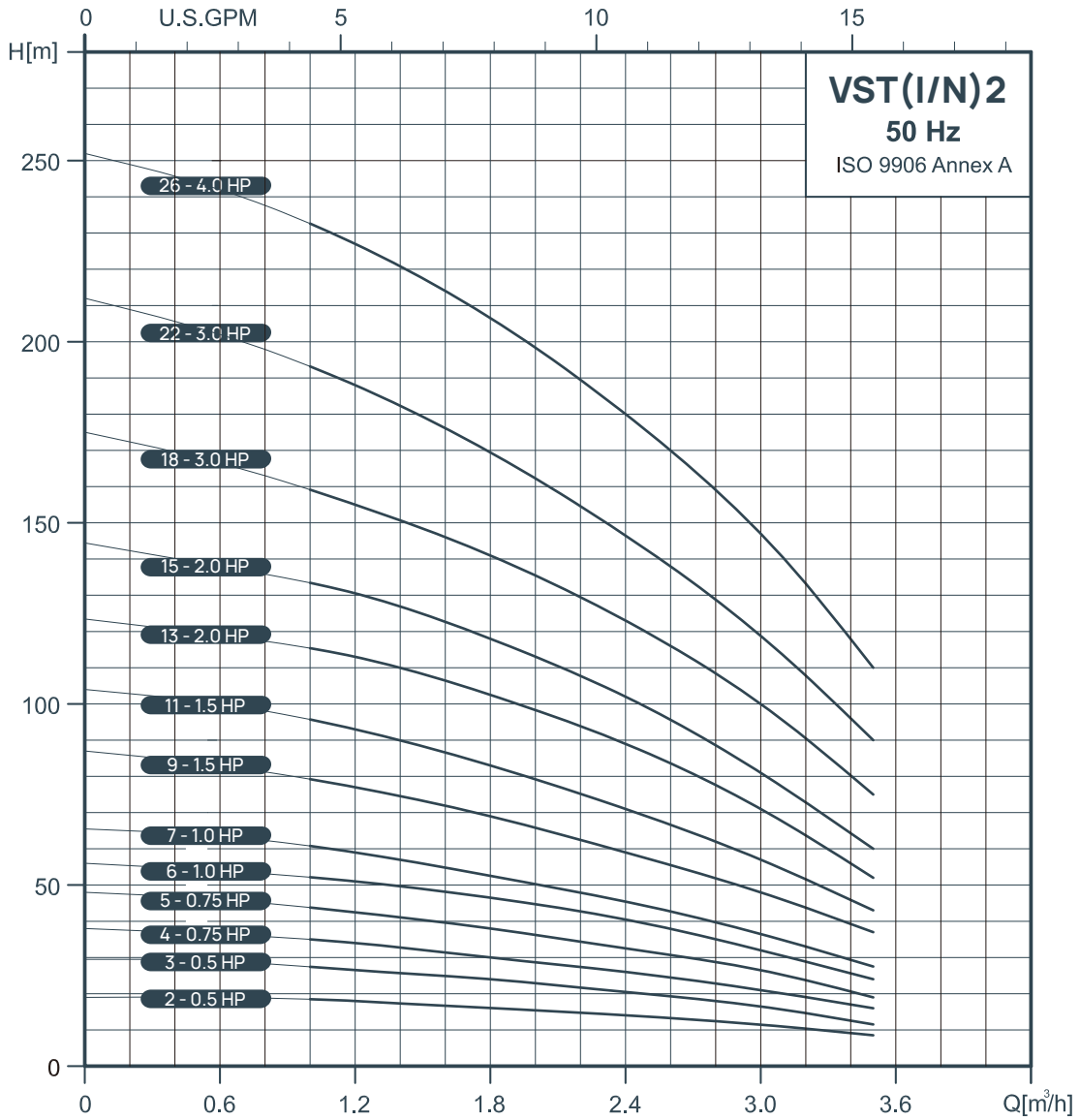
Performance Curves

Vertical Multistage Centrifugal In-Line Pumps

VST 2



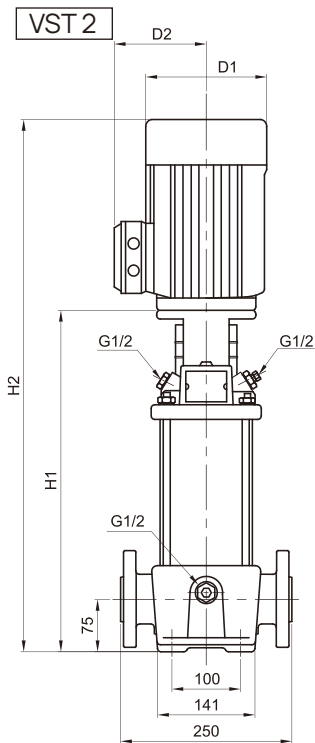
VST, VSTI, VSTN 2



Technical data

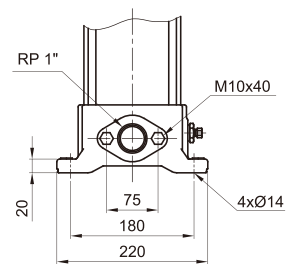
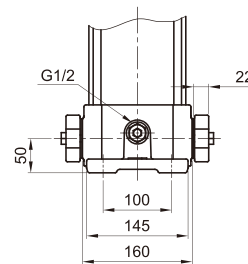
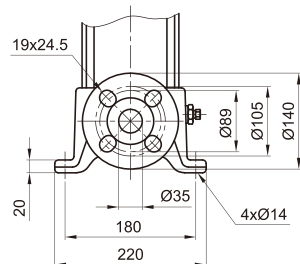
Vertical Multistage Centrifugal In-Line Pumps

VST 2



Flange(DIN) PN 25 / DN25/32
 Flange(ANSI) Class300 / 1"1/4"
 Flange(JIS) 20K / 25A/32A

Oval
 Stages 1-2 ~ 1-23



VST 2

50Hz	Motor		Nominal current [A]					Dimension [mm]					
	P2		1ø	3ø		3ø		Victaulic		DIN flange		D1	D2
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	Y380-415V	Y660-720V	H1	H2	H1	H2		
VST 2-2	0.37	0.5	1.7 - 1.9	1.0 - 1.1	1.0 - 1.1			257	452	282	477	141	115
VST 2-3	0.37	0.5	1.7 - 1.9	1.0 - 1.1	1.0 - 1.1			257	452	282	477	141	115
VST 2-4	0.37	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7			275	470	300	495	141	115
VST 2-5	0.37	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7			293	488	318	513	141	115
VST 2-6	0.37	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0			317	552	342	577	141	115
VST 2-7	0.37	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0			335	570	360	595	141	115
VST 2-9	0.55	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9			371	606	396	631	141	115
VST 2-11	0.55	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9			407	642	432	667	141	115
VST 2-13	0.55	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8			459	750	482	775	177	141
VST 2-15	0.55	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8			495	786	520	811	177	141
VST 2-18	0.75	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 4.1			549	840	574	865	177	141
VST 2-22	0.75	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 4.1			621	912	646	937	177	141
VST 2-26	0.75	4.0		11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	698	1014	723	1039	197	147

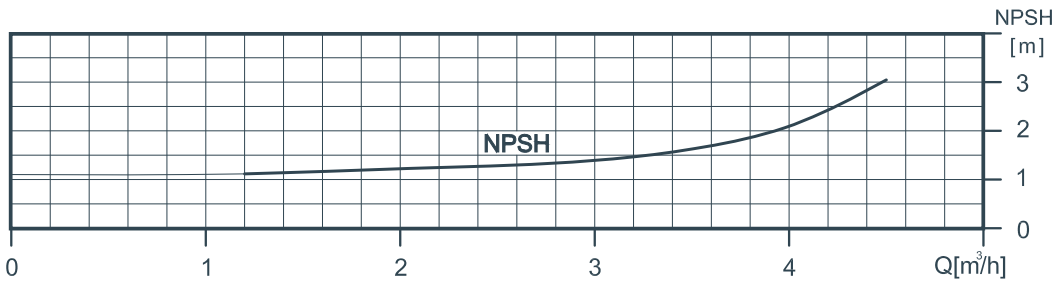
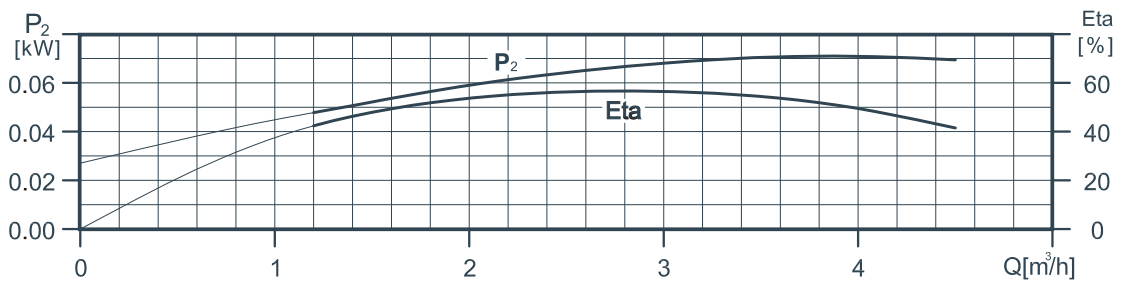
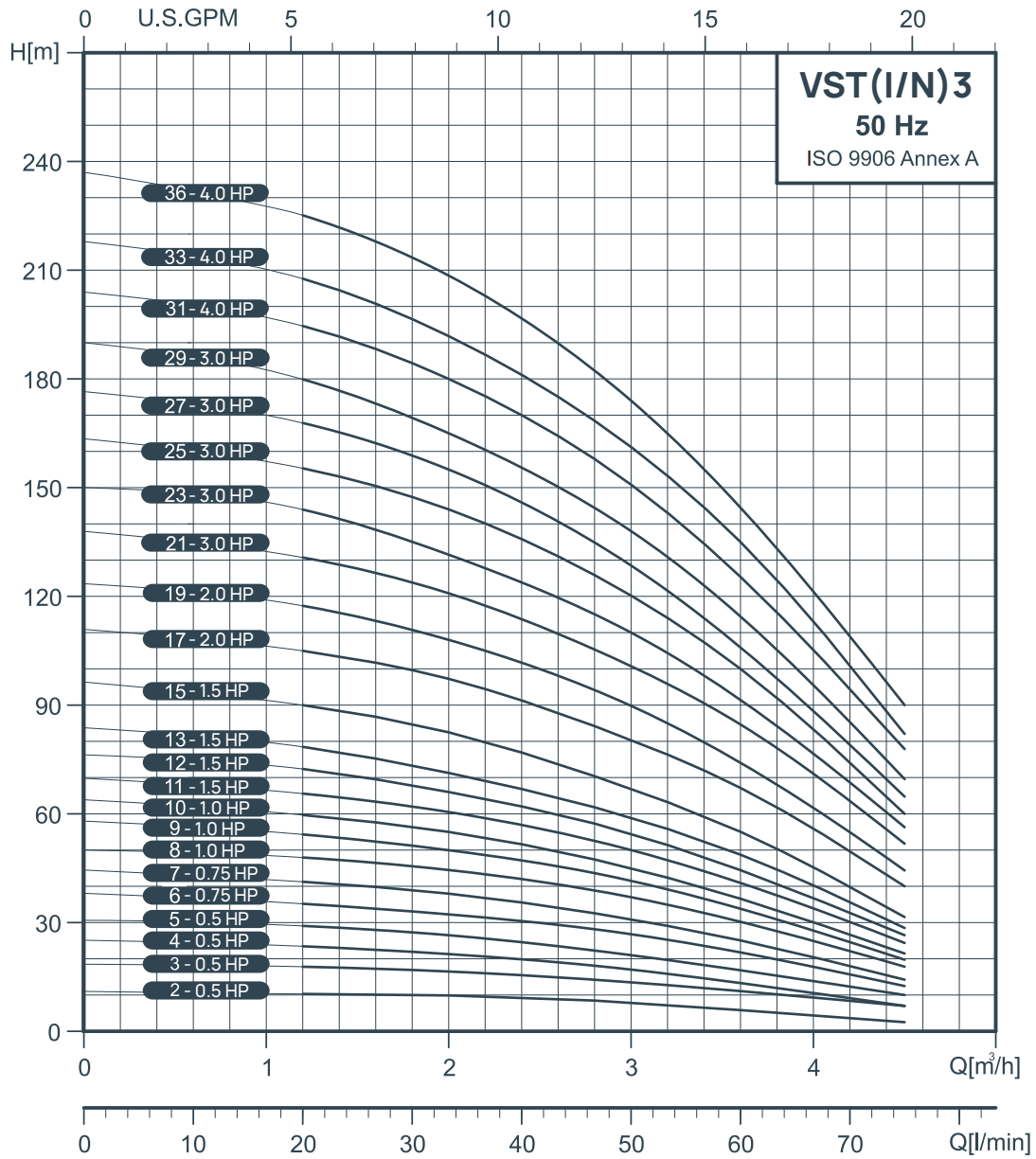
Performance Curves

VST 3

Vertical Multistage Centrifugal In-line Pumps

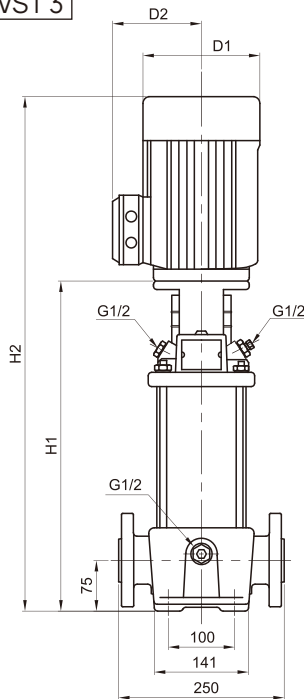


VST, VSTI, VSTN 3



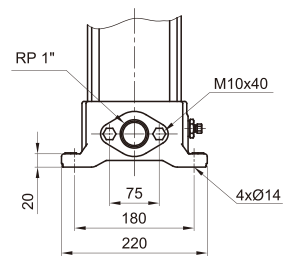
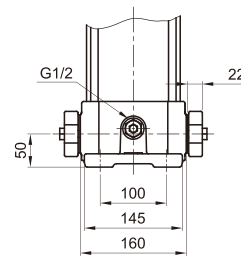
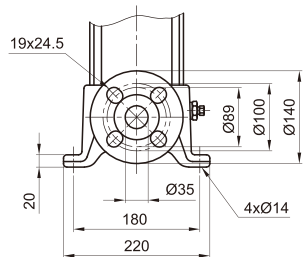


VST 3



Flange(DIN) PN25 / DN25/32
 Flange(ANSI) Class300 / 1"1¼"
 Flange(JIS) 20K / 25A/32A

Oval
 Stages 3-2 ~ 3-23



VST 3

50Hz	Motor		Nominal current [A]					Dimension [mm]				Net weight [kg]			
	P2	1ø	3ø	3ø	3ø	3ø	DIN flange		OVAL		DIN flange	OVAL			
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H1	H2	D1	D2		
VST 3-2	0.37	0.5	2.5 - 2.5	1.7 - 1.9	1.0 - 1.1	—	—	279	474	254	449	141	115	23.4	19.3
VST 3-3	0.37	0.5	2.5 - 2.5	1.7 - 1.9	1.0 - 1.1	—	—	279	474	254	449	141	115	23.4	19.3
VST 3-4	0.37	0.5	2.5 - 2.5	1.7 - 1.9	1.0 - 1.1	—	—	297	492	272	467	141	115	23.8	19.7
VST 3-5	0.37	0.5	2.5 - 2.5	1.7 - 1.9	1.0 - 1.1	—	—	315	510	290	485	141	115	24.2	20.1
VST 3-6	0.55	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7	—	—	333	528	308	503	141	115	25.0	20.9
VST 3-7	0.55	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7	—	—	351	546	326	521	141	115	25.4	21.3
VST 3-8	0.75	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0	—	—	375	610	350	585	141	115	27.9	23.8
VST 3-9	0.75	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0	—	—	393	628	368	603	141	115	28.3	24.2
VST 3-10	0.75	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0	—	—	411	646	386	621	141	115	28.7	24.6
VST 3-11	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	429	718	404	693	177	141	35.8	31.7
VST 3-12	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	447	736	422	711	177	141	36.1	32.0
VST 3-13	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	465	754	440	729	177	141	36.5	32.4
VST 3-15	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	501	790	476	765	177	141	37.2	33.1
VST 3-17	1.5	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8	—	—	553	848	528	823	177	141	42.0	37.9
VST 3-19	1.5	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8	—	—	589	884	564	859	177	141	42.8	38.7
VST 3-21	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	625	920	600	895	177	141	45.3	41.2
VST 3-23	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	661	956	636	931	177	141	46.1	42.0
VST 3-25	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	697	992	—	—	177	141	46.8	—
VST 3-27	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	733	1028	—	—	177	141	47.6	—
VST 3-29	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	769	1064	—	—	177	141	48.3	—
VST 3-31	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	809	1125	—	—	197	147	58.0	—
VST 3-33	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	845	1161	—	—	197	147	58.8	—
VST 3-36	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	899	1215	—	—	197	147	59.9	—

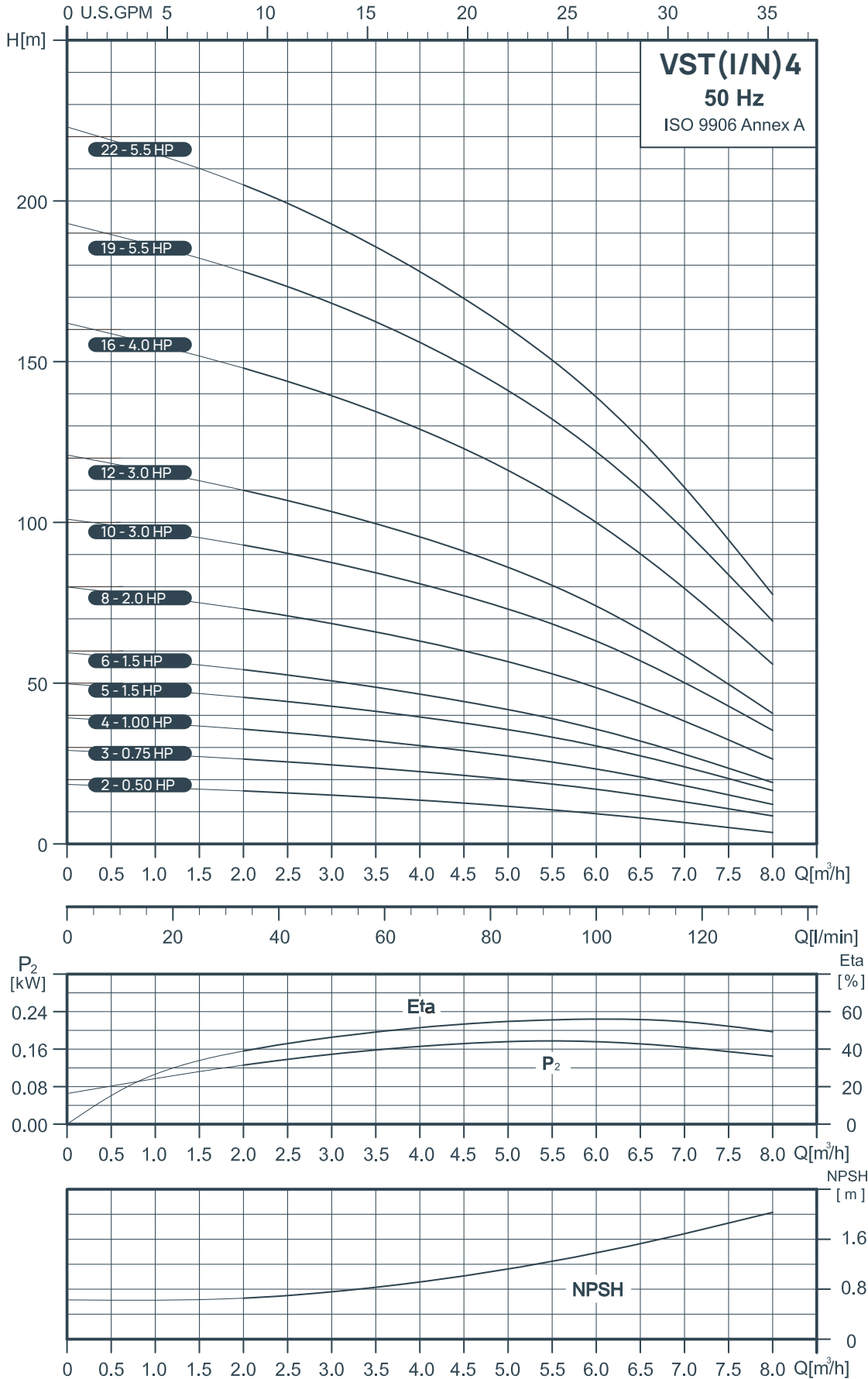
Performance Curves

VST 4

Vertical Multistage Centrifugal In-line Pumps

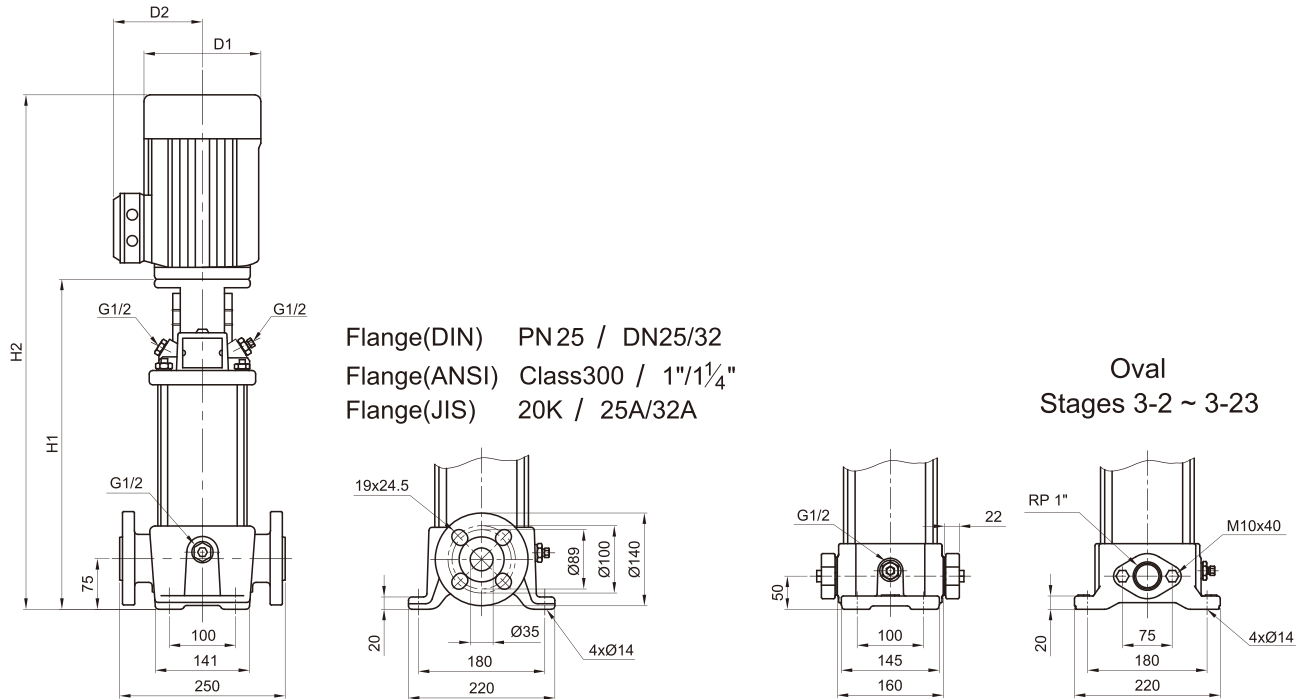


VST, VSTI, VSTN 4





VST 4



VST 4

50Hz	Motor		Nominal current [A]					Dimension [mm]					
	P2		1ø	3ø		3ø		DIN flange		OVAL		D1	D2
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H1	H2		
VST 4-2	0.37	0.50	1.7 - 1.9	1.0 - 1.1	1.0 - 1.1	—	—	257	452	282	477	141	115
VST 4-3	0.55	0.75	4.0 - 3.5	2.6 - 2.9	1.5 - 1.7	—	—	284	479	309	504	141	115
VST 4-4	0.75	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0	—	—	317	552	342	577	141	115
VST 4-5	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	344	579	369	604	141	115
VST 4-6	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	371	606	396	631	141	115
VST 4-8	1.5	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8	—	—	441	732	466	757	177	141
VST 4-10	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	495	786	520	811	177	141
VST 4-12	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	549	840	574	865	177	141
VST 4-16	3.0	4.0		11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	662	978	687	1003	197	147
VST 4-19	4.0	5.5		15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	743	1069	768	1094	220	161
VST 4-22	4.0	5.5		15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	824	1150	849	1175	220	161

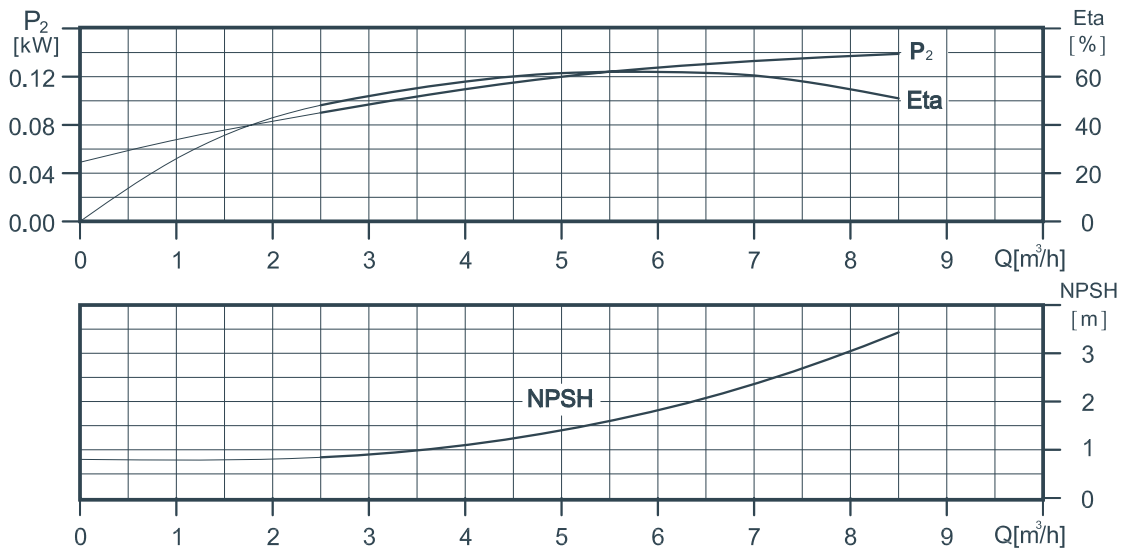
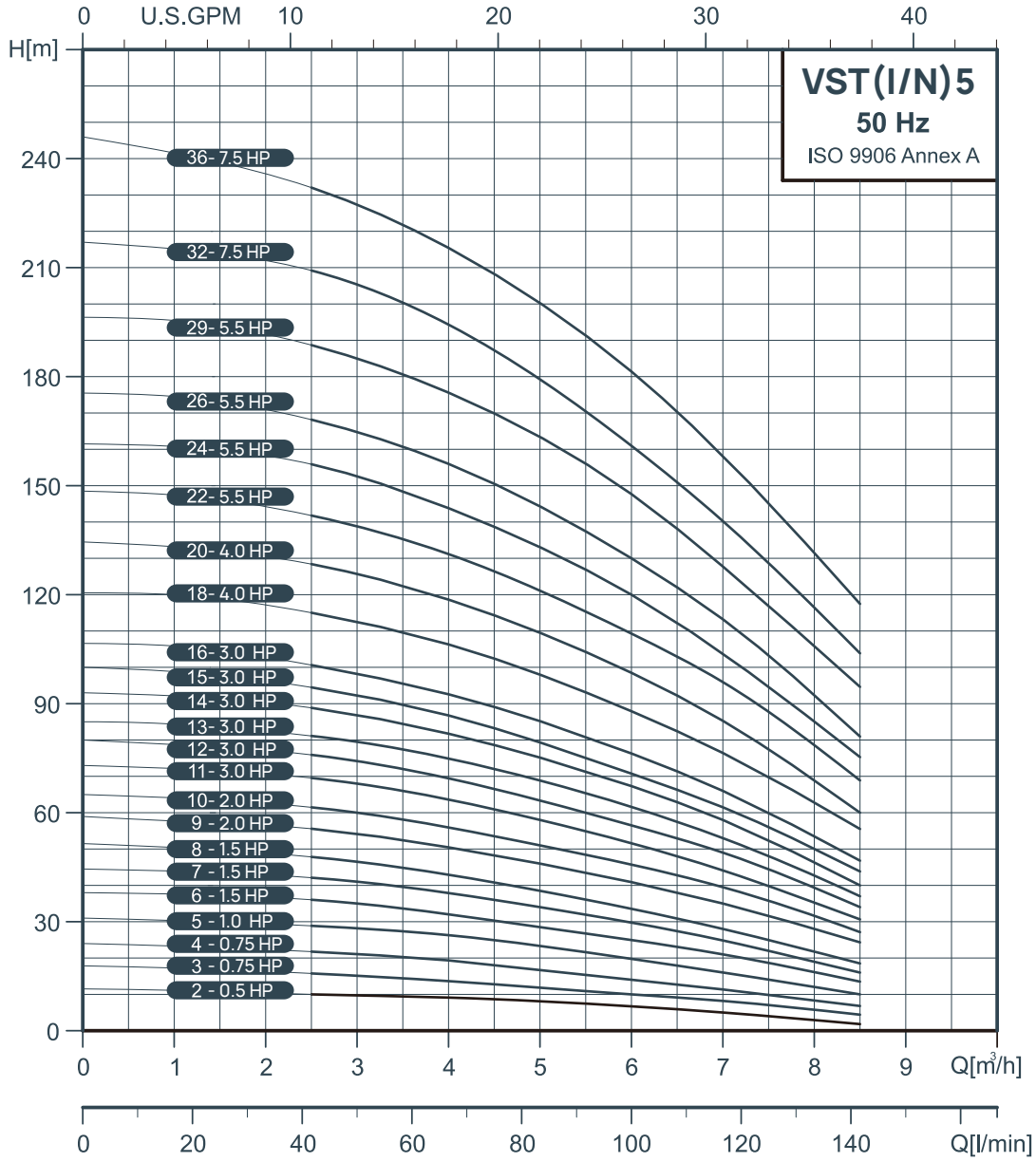
Performance Curves

VST 5

Vertical Multistage Centrifugal In-line Pumps



VST, VSTI, VSTN 5



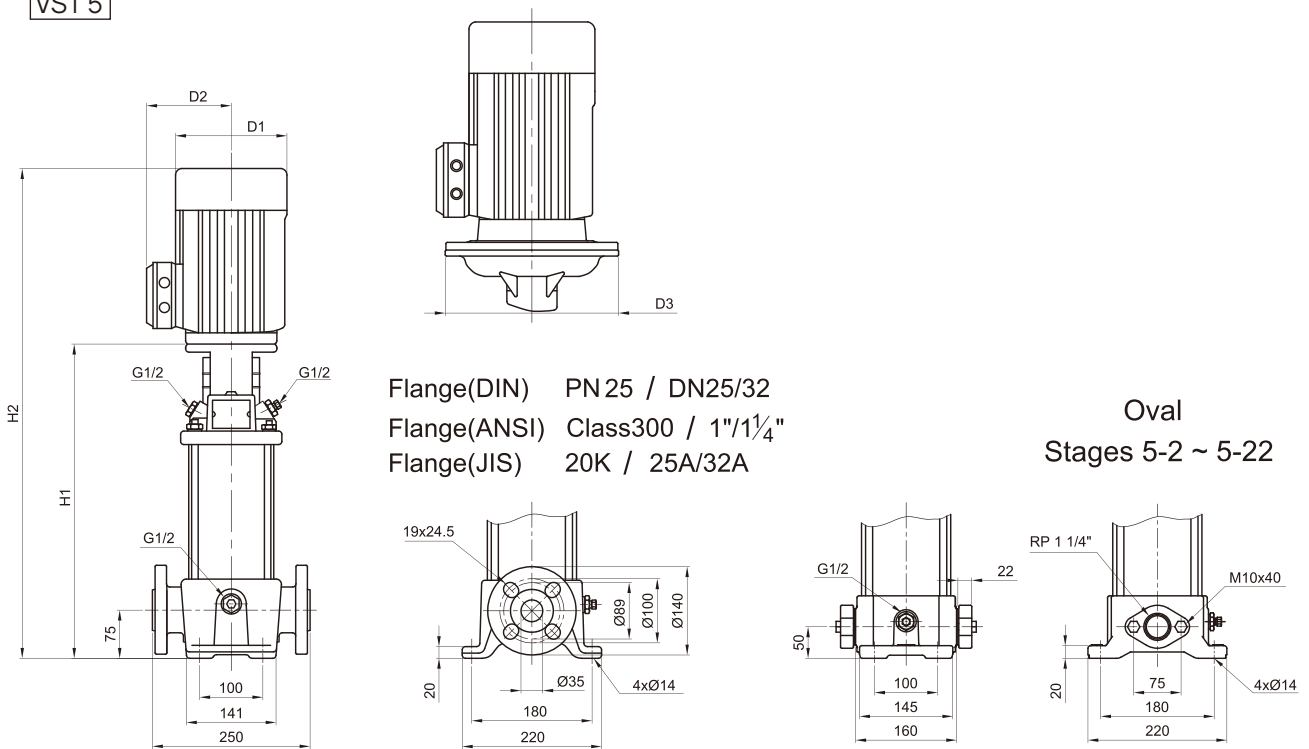
Technical data

VST 5

Vertical Multistage Centrifugal In-line Pumps



VST 5



VST 5

50Hz	Motor		Nominal current [A]					Dimension [mm]						Net weight [kg]		
	P2		1ø	3ø	3ø	3ø	DIN flange		OVAL		D1	D2	D3	DIN flange	OVAL	
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H1	H2	D1	D2	D3		
VST 5-2	0.37	0.5	2.5-2.5	1.7-1.9	1.0-1.1	-	-	279	474	254	449	141	115	-	23.3	19.0
VST 5-3	0.55	0.75	4.0-3.5	2.6-2.9	1.5-1.7	-	-	306	501	281	476	141	115	-	24.2	19.9
VST 5-4	0.55	0.75	4.0-3.5	2.6-2.9	1.5-1.7	-	-	333	528	308	503	141	115	-	24.8	20.5
VST 5-5	0.75	1.0	5.1-4.1	3.4-3.4	2.0-2.0	-	-	366	601	341	576	141	115	-	27.4	23.1
VST 5-6	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	-	-	393	682	368	657	177	141	-	34.7	30.4
VST 5-7	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	-	-	420	709	395	684	177	141	-	35.2	30.9
VST 5-8	1.1	1.5	8.0-6.9	4.8-5.0	2.8-2.9	-	-	447	736	422	711	177	141	-	35.7	31.4
VST 5-9	1.5	2.0	9.5-8.9	6.2-6.6	3.6-3.8	-	-	490	785	465	760	177	141	-	40.3	36.0
VST 5-10	1.5	2.0	9.5-8.9	6.2-6.6	3.6-3.8	-	-	517	812	492	787	177	141	-	40.9	36.6
VST 5-11	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	-	-	544	839	519	814	177	141	-	43.2	38.9
VST 5-12	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	-	-	571	866	546	841	177	141	-	43.7	39.4
VST 5-13	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	-	-	598	893	573	868	177	141	-	44.2	39.9
VST 5-14	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	-	-	625	920	600	895	177	141	-	44.8	40.5
VST 5-15	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	-	-	652	947	627	922	177	141	-	45.2	40.9
VST 5-16	2.2	3.0	13.4-12.7	8.8-9.4	5.1-5.4	-	-	679	974	654	949	177	141	-	45.8	41.5
VST 5-18	3.0	4.0	-	11.8-12.3	6.8-7.1	6.8-6.9	3.9-4.0	737	1053	712	1028	197	147	-	55.7	51.4
VST 5-20	3.0	4.0	-	11.8-12.3	6.8-7.1	6.8-6.9	3.9-4.0	791	1107	766	1082	197	147	-	56.9	52.6
VST 5-22	4.0	5.5	-	15.1-15.2	8.7-8.8	8.7-8.3	5.0-4.8	845	1171	820	1146	220	161	-	61.8	57.5
VST 5-24	4.0	5.5	-	15.1-15.2	8.7-8.8	8.7-8.3	5.0-4.8	899	1225	-	-	220	161	-	62.8	-
VST 5-26	4.0	5.5	-	15.1-15.2	8.7-8.8	8.7-8.3	5.0-4.8	953	1279	-	-	220	161	-	64.7	-
VST 5-29	4.0	5.5	-	15.1-15.2	8.7-8.8	8.7-8.3	5.0-4.8	1034	1360	-	-	220	161	-	66.6	-
VST 5-32	5.5	7.5	-	18.7-18.0	10.8-10.4	10.9-10.8	6.3-6.2	1145	1507	-	-	235	197	300	89.4	-
VST 5-36	5.5	7.5	-	18.7-18.0	10.8-10.4	10.9-10.8	6.3-6.2	1253	1615	-	-	235	197	300	91.9	-

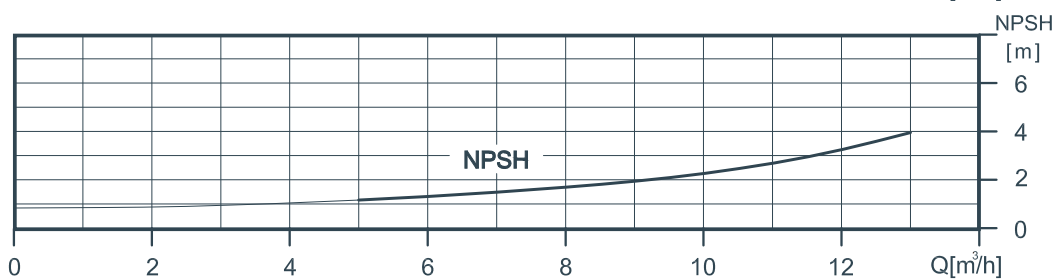
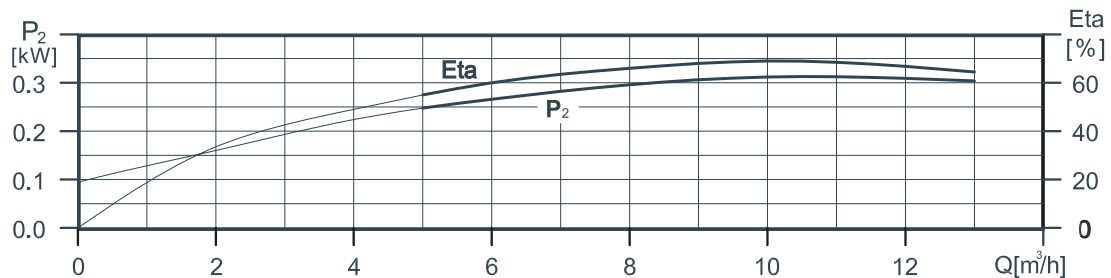
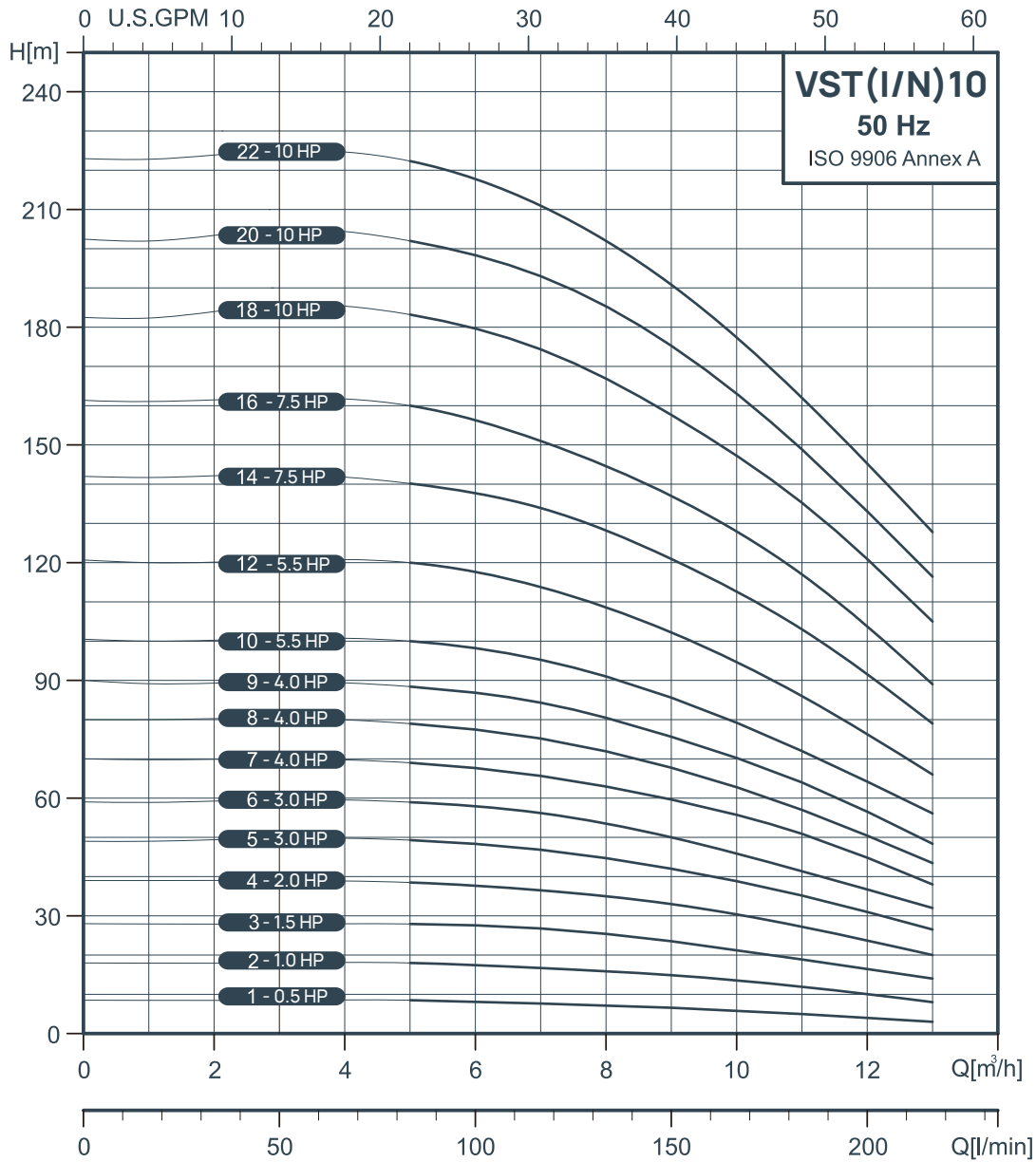
Performance Curves

VST 10

Vertical Multistage Centrifugal In-line Pumps

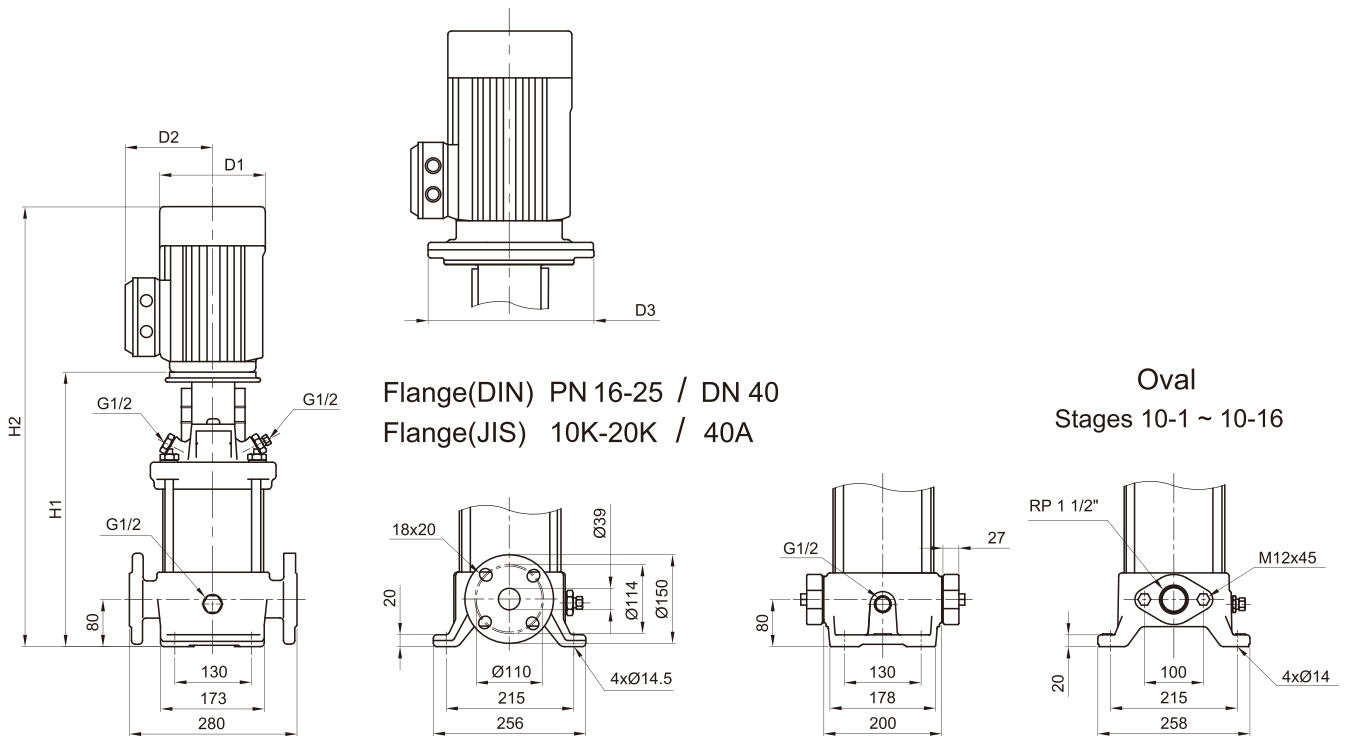


VST, VSTI, VSTN 10





VST10



Flange(DIN) PN 16-25 / DN 40
Flange(JIS) 10K-20K / 40A

Oval
Stages 10-1 ~ 10-16

VST 10

50Hz	Motor		Nominal current [A]					Dimension [mm]						Net weight [kg]		
	P2		1ø	3ø	3ø	3ø	DIN flange		OVAL		D1	D2	D3	DIN flange	OVAL	
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H1	H2	D1	D2	D3	DIN flange	OVAL
VST10-1	0.37	0.5	2.5 - 2.5	1.7 - 1.9	1.0 - 1.1	—	—	343	538	343	538	141	115	—	35.9	32.5
VST10-2	0.75	1.0	5.1 - 4.1	3.4 - 3.4	2.0 - 2.0	—	—	347	582	347	582	141	115	—	38.2	34.8
VST10-3	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	377	666	377	666	177	141	—	45.9	42.5
VST10-4	1.5	2.0	9.5 - 8.9	6.2 - 6.6	3.6 - 3.8	—	—	423	718	423	718	177	141	—	51.1	47.7
VST10-5	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	453	748	453	748	177	141	—	53.9	50.5
VST10-6	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	483	778	483	778	177	141	—	55.0	51.6
VST10-7	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	518	834	518	834	197	147	—	65.2	61.8
VST10-8	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	548	864	548	864	197	147	—	66.1	62.7
VST10-9	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	578	894	578	894	197	147	—	67.3	63.9
VST10-10	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	608	934	608	934	220	161	—	72.3	68.9
VST10-12	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	668	994	668	994	220	161	—	74.4	71.0
VST10-14	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	760	1122	760	1122	235	197	300	103.4	100.0
VST10-16	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	820	1182	820	1182	235	197	300	105.5	102.1
VST10-18	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	880	1285	—	—	235	197	300	112.5	—
VST10-20	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	940	1345	—	—	235	197	300	115.6	—
VST10-22	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	1000	1405	—	—	235	197	300	117.7	—

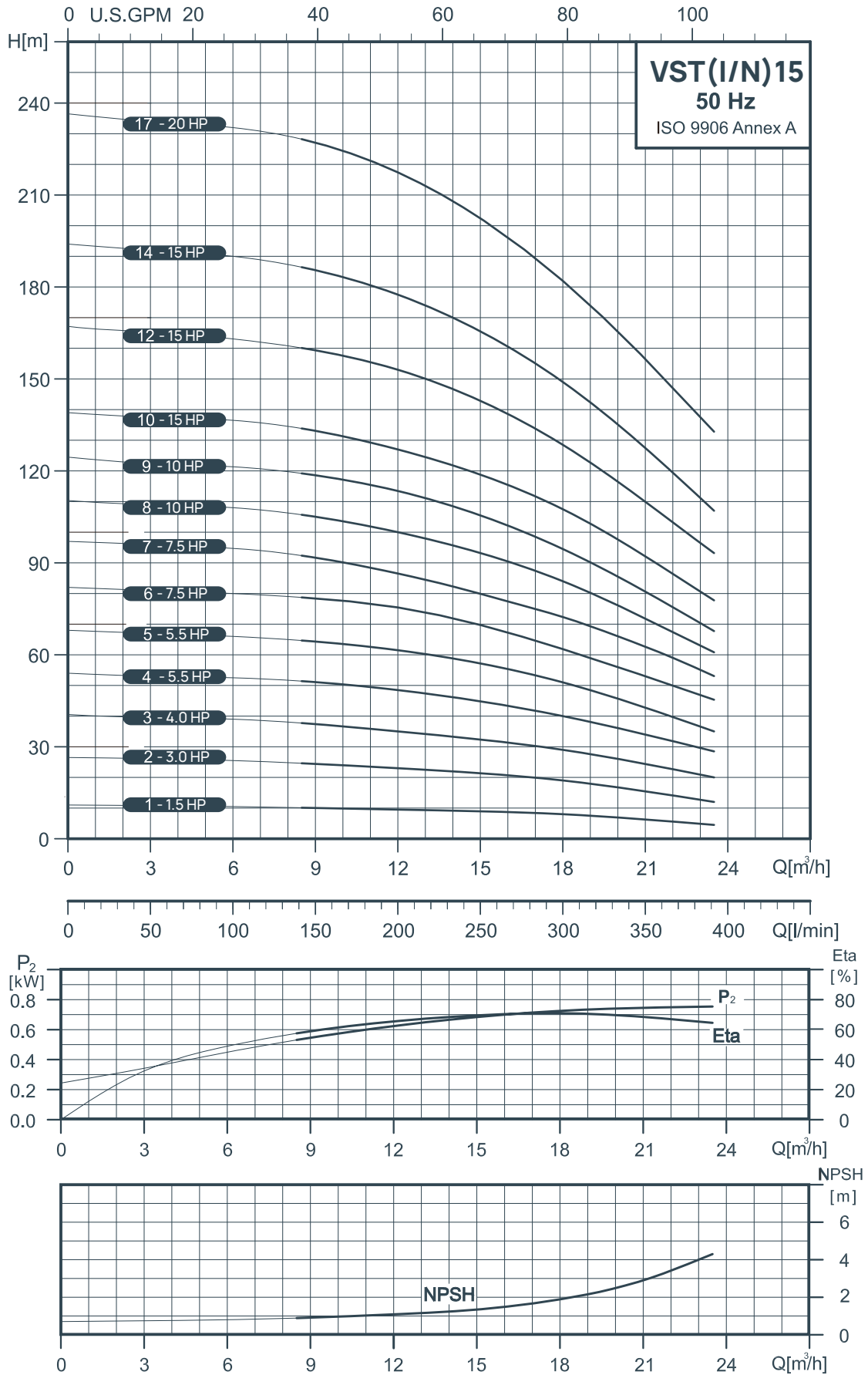
Performance Curves

VST15

Vertical Multistage Centrifugal In-line Pumps

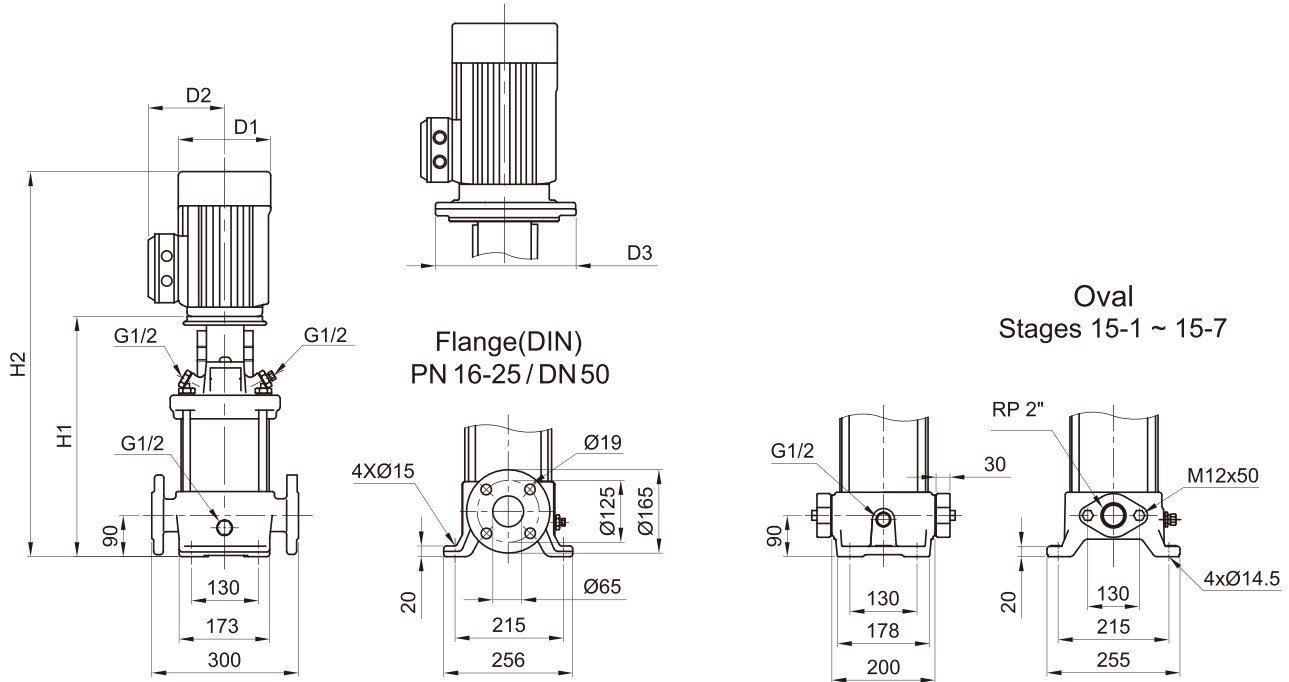


VST, VSTI, VSTN 15





VST 15



VST 15

50Hz	Motor		Nominal current [A]					Dimension [mm]						Net weight [kg]		
	P2	1ø	3ø	3ø	3ø	3ø	DIN flange		OVAL		D1	D2	D3	DIN flange	OVAL	
Pump type	[kW]	[HP]	220-240V	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2	H1						H2
VST15-1	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	400	689	400	689	177	141	—	49.4	47.8
VST15-2	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	415	710	415	710	177	141	—	55.7	54.0
VST15-3	3.0	4.0	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	465	781	465	781	197	147	—	66.3	64.7
VST15-4	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	510	836	510	836	220	161	—	71.7	70.1
VST15-5	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	555	881	555	881	220	161	—	73.2	71.6
VST15-6	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	632	994	632	994	235	197	300	101.6	100.0
VST15-7	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	677	1039	677	1039	235	197	300	103.1	101.5
VST15-8	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	722	1127	—	—	235	197	300	110.7	—
VST15-9	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	767	1172	—	—	235	197	300	112.2	—
VST15-10	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	889	1334	—	—	269	215	350	145.5	—
VST15-12	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	979	1424	—	—	269	215	350	148.5	—
VST15-14	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	1069	1514	—	—	269	215	350	151.8	—
VST15-17	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	1204	1694	—	—	269	215	350	167.5	—

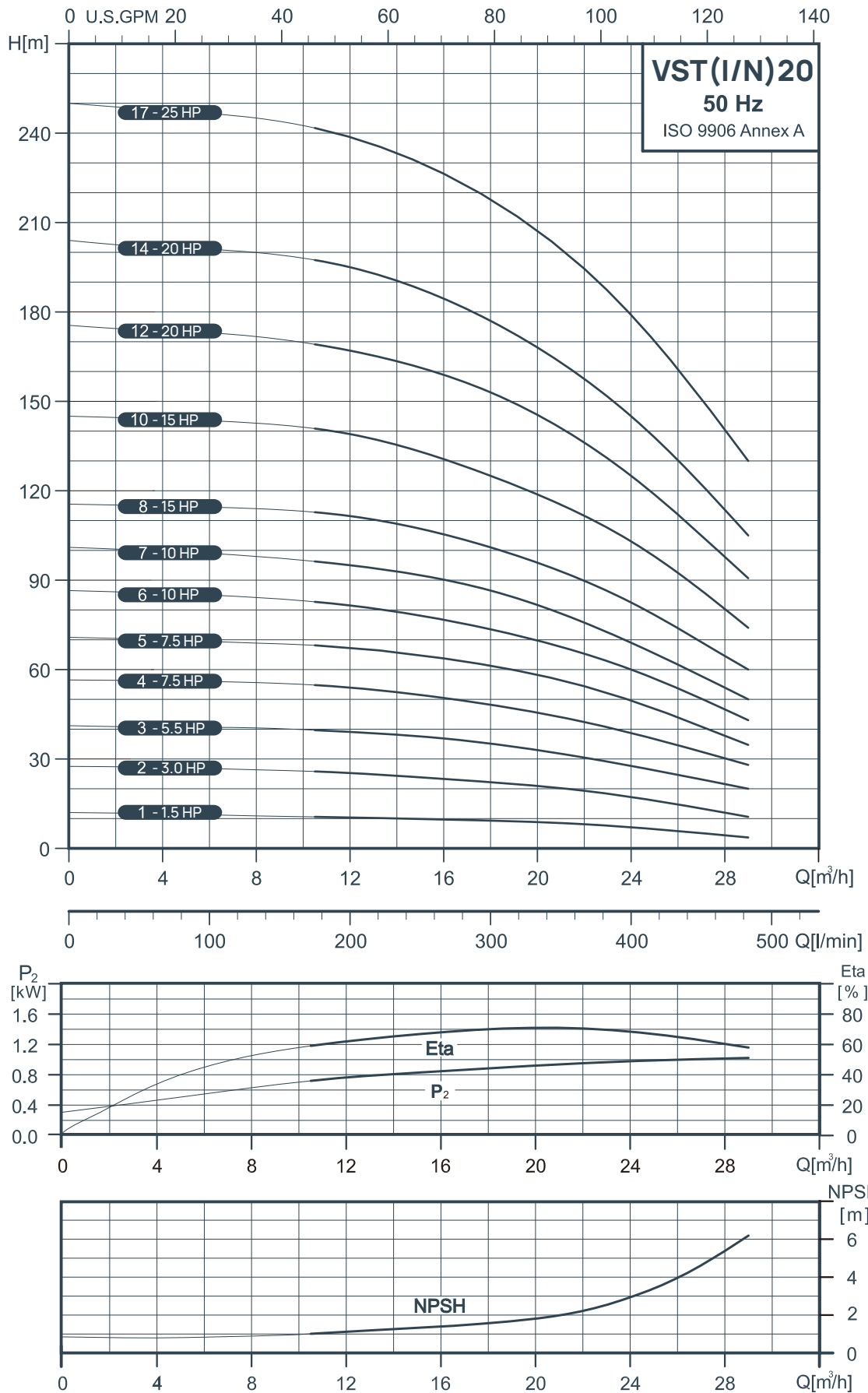
Performance Curves

VST 20

Vertical Multistage Centrifugal In-line Pumps

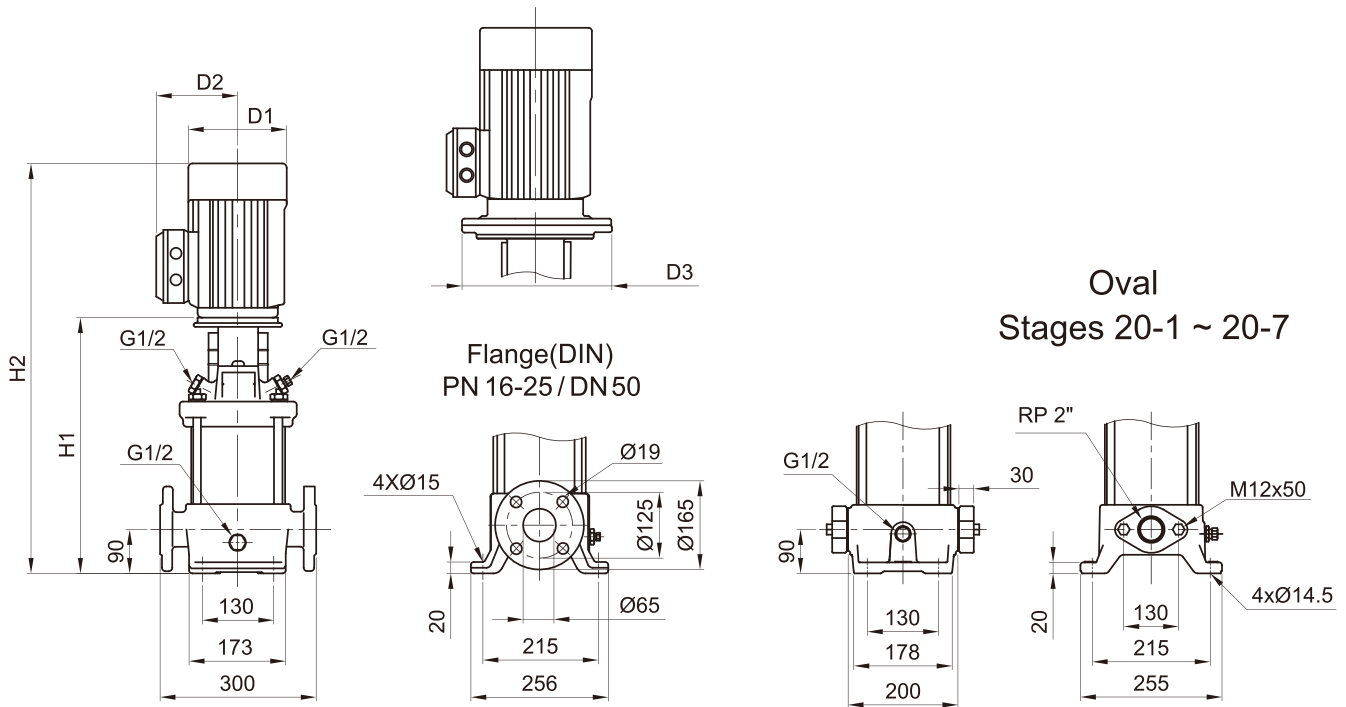


VST, VSTI, VSTN 20





VST 20



VST 20

50Hz	Motor		Nominal current [A]					Dimension [mm]						Net weight [kg]		
	P2		1ø	3ø	3ø	3ø	DIN flange		OVAL		D1	D2	D3	DIN flange	OVAL	
Pump type	[kW]	[HP]	220-240V	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H1				H2	DIN flange	OVAL
VST 20-1	1.1	1.5	8.0 - 6.9	4.8 - 5.0	2.8 - 2.9	—	—	400	689	400	689	177	141	—	49.5	47.9
VST 20-2	2.2	3.0	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	415	710	415	710	177	141	—	55.7	54.0
VST 20-3	4.0	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	465	791	465	791	220	161	—	70.3	68.7
VST 20-4	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	542	904	542	904	235	197	300	98.7	97.1
VST 20-5	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	587	949	587	949	235	197	300	100.1	98.5
VST 20-6	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	632	1037	632	1037	235	197	300	107.5	105.9
VST 20-7	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	677	1082	677	1082	235	197	300	109.0	107.4
VST 20-8	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	799	1244	—	—	269	215	350	142.6	—
VST 20-10	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	889	1334	—	—	269	215	350	145.5	—
VST 20-12	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	979	1469	—	—	269	215	350	159.1	—
VST 20-14	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	1069	1559	—	—	269	215	350	162.0	—
VST 20-17	18	25	—	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	1204	1744	—	—	318	241	350	199.4	—

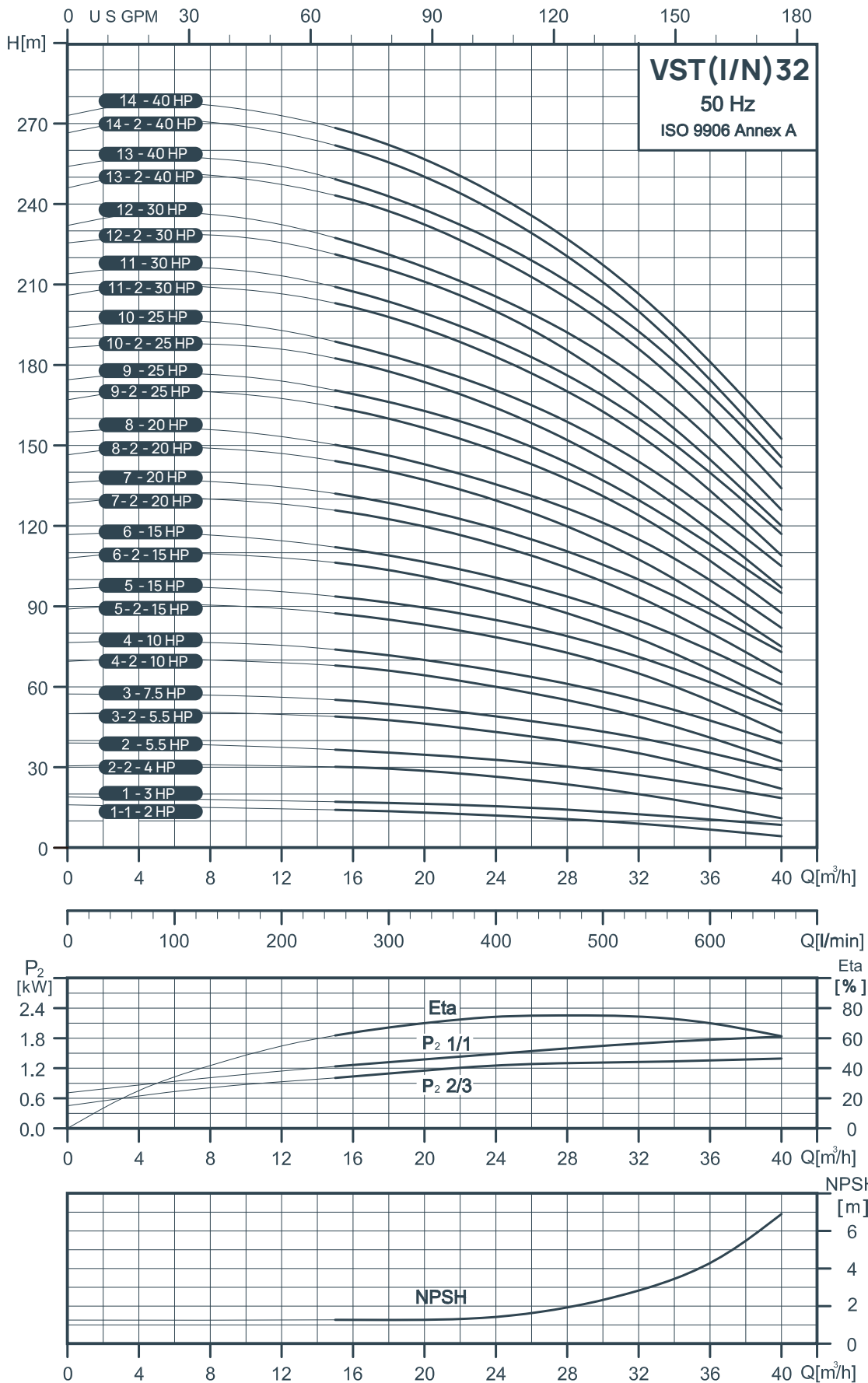
Performance Curves

VST32

Vertical Multistage Centrifugal In-line Pumps

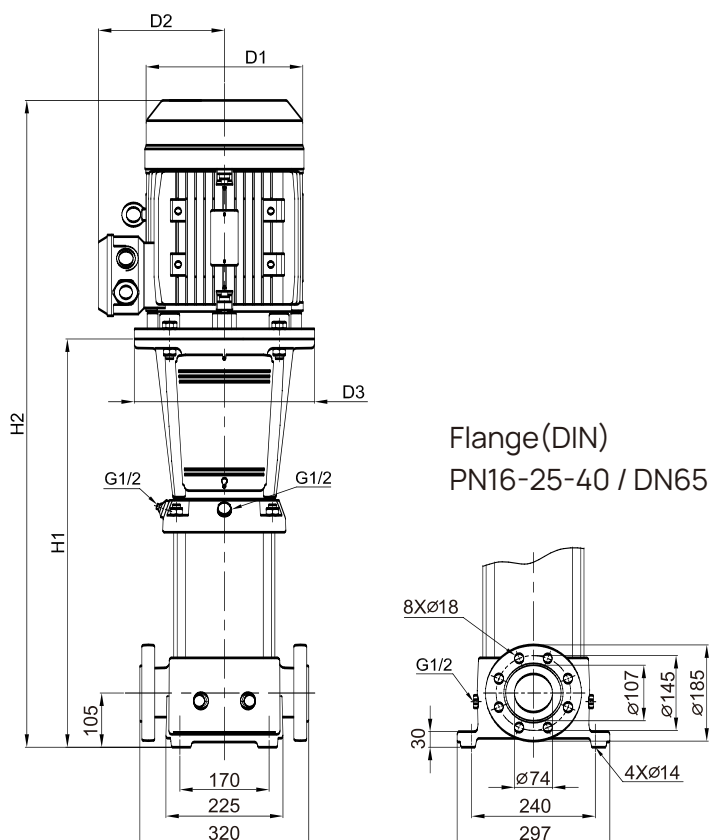


VST, VSTI, VSTN 32





VST 32



VST 32

50Hz	Motor		Nominal current [A]					Dimension [mm]					Net weight [kg]
	P2	[HP]	1ø	3ø		3ø	DIN flange		D1	D2	D3		
Pump type	[kW]	[HP]	220-240V	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2	D1	D2	D3	DIN flange
VST 32-1-1	1.5	2	6.2 - 6.6	9.5 - 8.9	3.6 - 3.8	—	—	504	799	177	141	280	72.5
VST 32-1	2.2	3	13.4 - 12.7	8.8 - 9.4	5.1 - 5.4	—	—	504	799	177	141	280	74.3
VST 32-2-2	3	4	—	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	574	890	197	147	280	85.6
VST 32-2	4	5.5	—	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	574	900	220	161	280	89.6
VST 32-3-2	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	644	1006	235	197	300	109.5
VST 32-3	5.5	7.5	—	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	644	1006	235	197	300	109.5
VST 32-4-2	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	714	1119	235	197	300	118.4
VST 32-4	7.5	10	—	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	714	1119	235	197	300	118.4
VST 32-5-2	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	894	1339	269	215	350	158.8
VST 32-5	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	894	1339	269	215	350	158.8
VST 32-6-2	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	964	1409	269	215	350	161.8
VST 32-6	11	15	—	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	964	1409	269	215	350	161.8
VST 32-7-2	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	1034	1524	269	215	350	175.5
VST 32-7	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	1034	1524	269	215	350	175.5
VST 32-8-2	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	1104	1594	269	215	350	178.6
VST 32-8	15	20	—	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	1104	1594	269	215	350	178.6
VST 32-9-2	18.5	25	—	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	1174	1714	318	241	350	214.6
VST 32-9	18.5	25	—	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	1174	1714	318	241	350	214.6
VST 32-10-2	18.5	25	—	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	1244	1784	318	241	350	217.7
VST 32-10	18.5	25	—	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	1244	1784	318	241	350	217.7
VST 32-11-2	22	30	—	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	1314	1854	318	241	350	232.8
VST 32-11	22	30	—	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	1314	1854	318	241	350	232.8
VST 32-12-2	22	30	—	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	1384	1924	318	241	350	234.8
VST 32-12	22	30	—	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	1384	1924	318	241	350	234.8
VST 32-13-2	30	40	—	—	—	55.4 - 50.7	31.9 - 29.2	1454	2114	390	295	400	341.2
VST 32-13	30	40	—	—	—	55.4 - 50.7	31.9 - 29.2	1454	2114	390	295	400	341.2
VST 32-14-2	30	40	—	—	—	55.4 - 50.7	31.9 - 29.2	1524	2184	390	295	400	344.3
VST 32-14	30	40	—	—	—	55.4 - 50.7	31.9 - 29.2	1524	2184	390	295	400	344.3

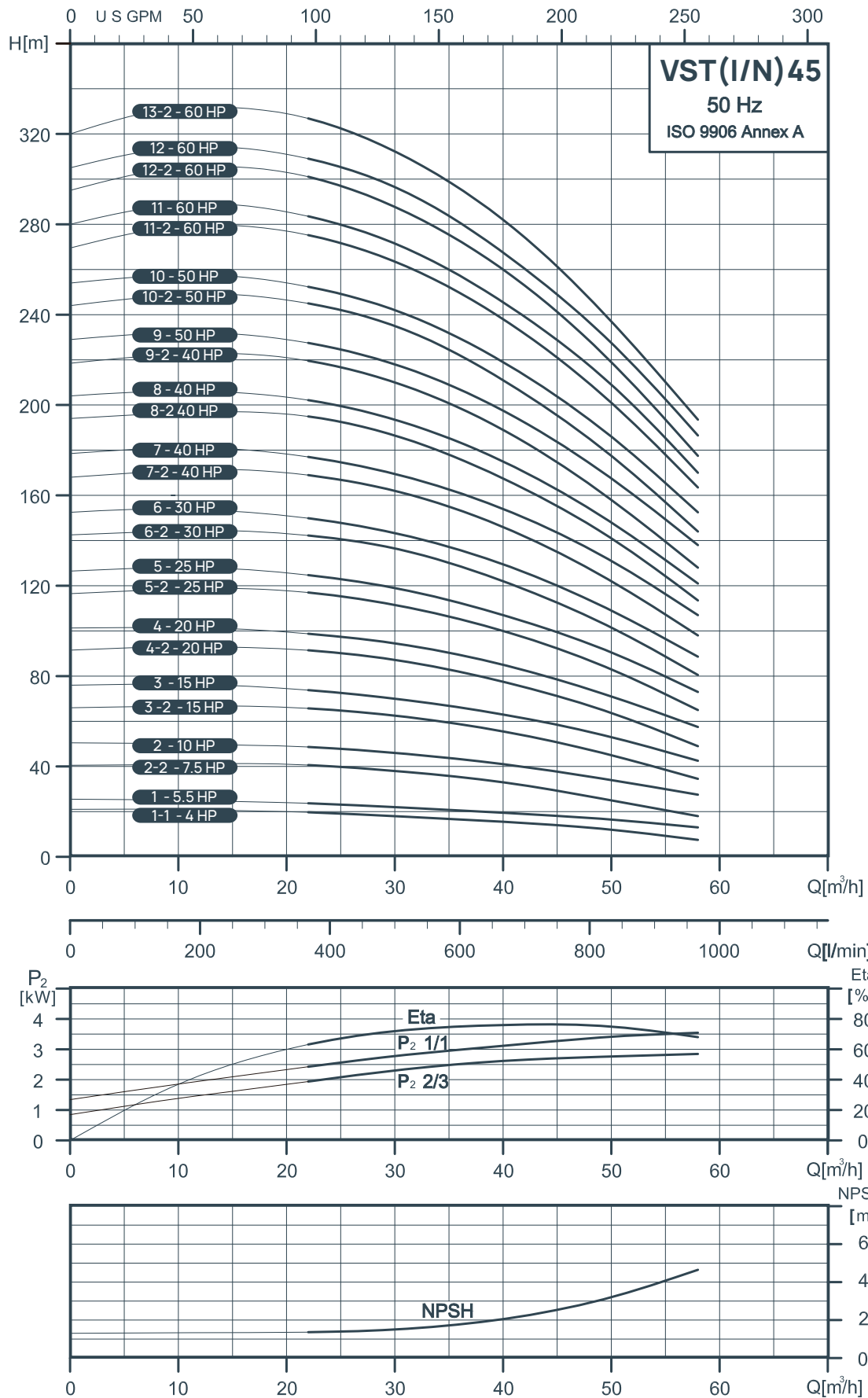
Performance Curves

VST 45

Vertical Multistage Centrifugal In-line Pumps

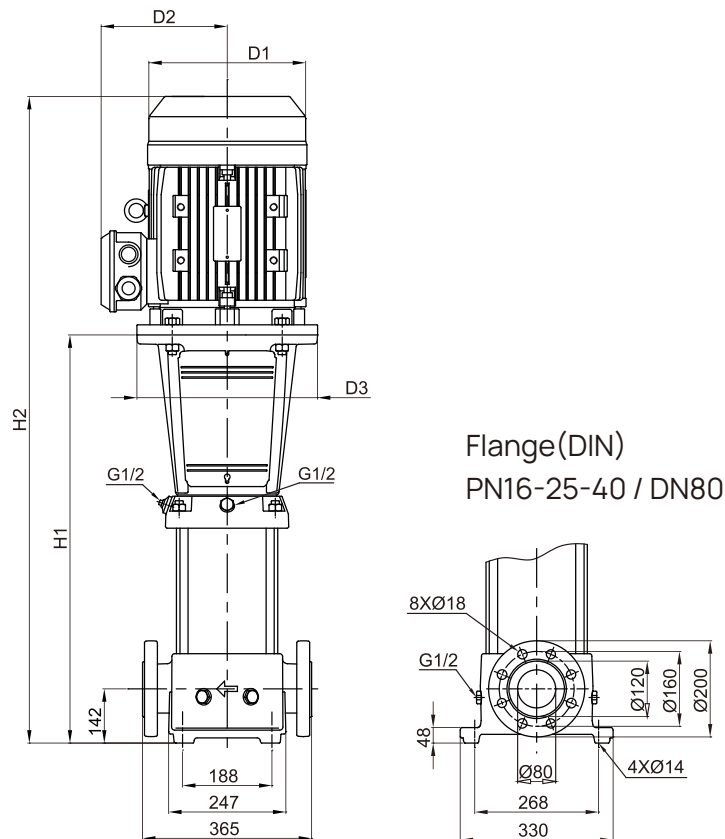


VST, VSTI, VSTN 45





VST 45



VST 45

50Hz	Motor		Nominal current [A]				Dimension [mm]					Net weight [kg]
	P2		3ø		3ø		DIN flange		D1	D2	D3	
Pump type	[kW]	[HP]	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	D1	D2	D3	DIN flange
VST 45-1-1	3	4	11.8 - 12.3	6.8 - 7.1	6.8 - 6.9	3.9 - 4.0	561	877	197	147	280	93.1
VST 45-1	4	5.5	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	561	887	220	161	280	97.1
VST 45-2-2	5.5	7.5	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	641	1003	235	197	300	117.6
VST 45-2	7.5	10	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	641	1046	235	197	300	123.5
VST 45-3-2	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	831	1276	269	215	350	164.5
VST 45-3	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	831	1276	269	215	350	164.5
VST 45-4-2	15	20	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	911	1401	269	215	350	178.9
VST 45-4	15	20	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	911	1401	269	215	350	178.9
VST 45-5-2	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	991	1531	318	241	350	215.6
VST 45-5	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	991	1531	318	241	350	215.6
VST 45-6-2	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	1071	1611	318	241	350	231.1
VST 45-6	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	1071	1611	318	241	350	231.1
VST 45-7-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1151	1811	390	295	400	359.5
VST 45-7	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1151	1811	390	295	400	359.5
VST 45-8-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1231	1891	390	295	400	343.2
VST 45-8	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1231	1891	390	295	400	343.2
VST 45-9-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1311	1971	390	295	400	347.0
VST 45-9	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1311	1971	390	295	400	365.0
VST 45-10-2	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1391	2051	390	295	400	368.7
VST 45-10	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1391	2051	390	295	400	368.7
VST 45-11-2	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1471	2161	446	325	450	448.5
VST 45-11	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1471	2161	446	325	450	448.5
VST 45-12-2	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1551	2241	446	325	450	452.5
VST 45-12	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1551	2241	446	325	450	452.5
VST 45-13-2	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1631	2321	446	325	450	455.9

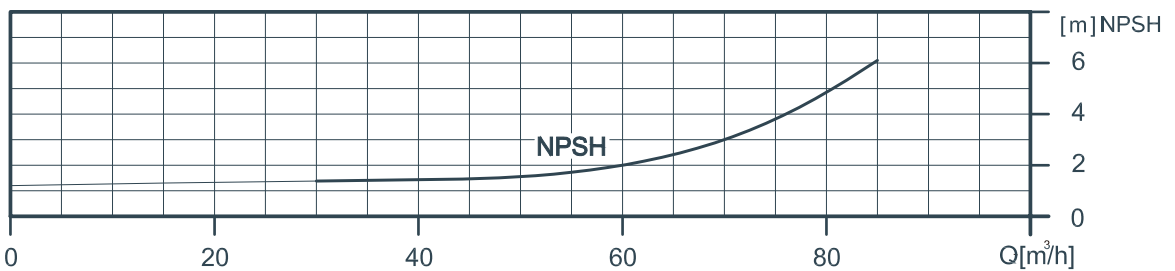
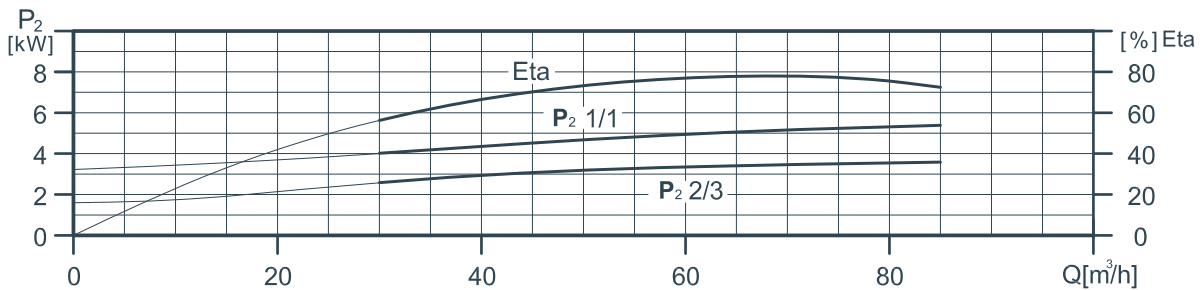
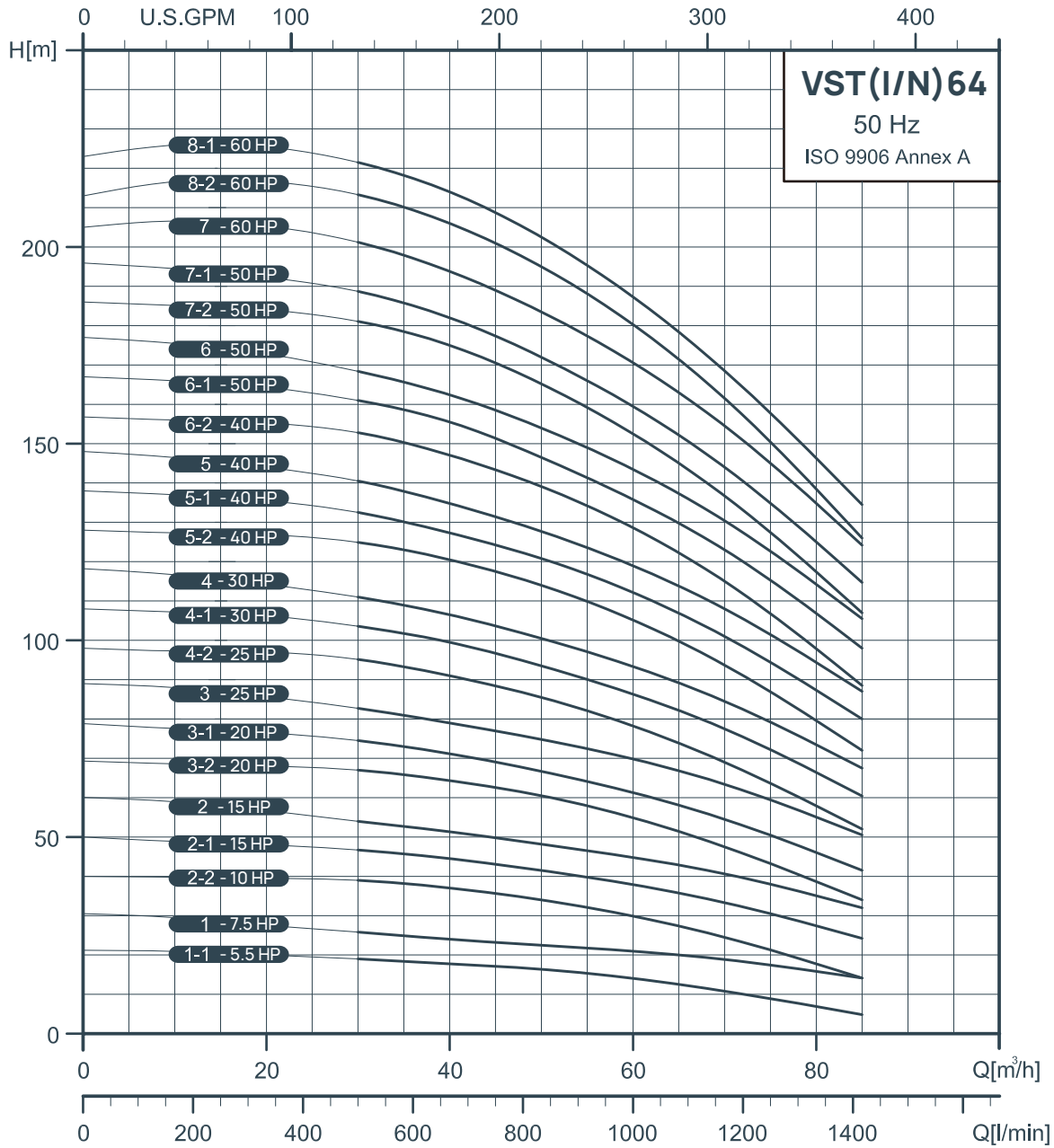
Performance Curves

VST 64

Vertical Multistage Centrifugal In-line Pumps

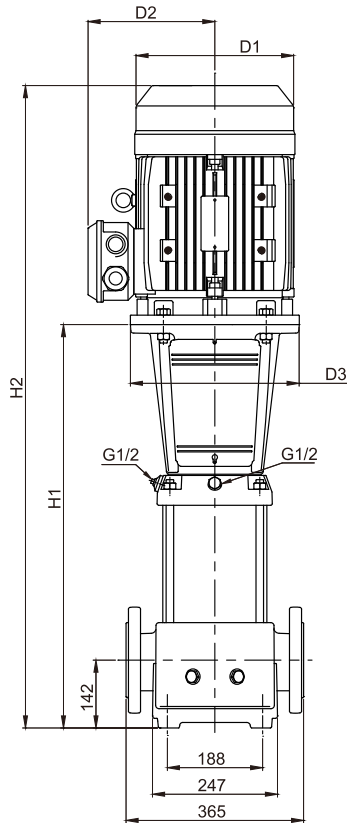


VST, VSTI, VSTN 64

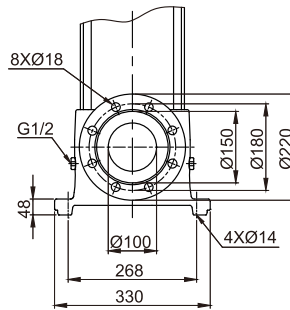




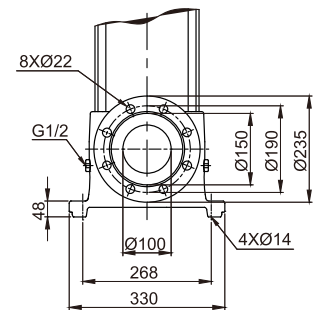
VST 64



Flange (DIN)
PN16 / DN100



Flange (DIN)
PN25-40 / DN100



VST 64

50Hz	Motor		Nominal current [A]				Dimension [mm]					Net weight [kg]
	Pump type	P2		3ø		3ø		DIN flange		D1	D2	
[kW]		[HP]	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2	DIN flange			
VST 64-1-1	4	5.5	15.1 - 15.2	8.7 - 8.8	8.7 - 8.3	5.0 - 4.8	563	889	220	161	280	90.9
VST 64-1	5.5	7.5	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	563	925	235	197	300	107.6
VST 64-2-2	7.5	10	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	646	1051	235	197	300	117.6
VST 64-2-1	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	756	1201	269	215	350	154.8
VST 64-2	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	756	1201	269	215	350	154.8
VST 64-3-2	15	20	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	838	1328	269	215	350	170.0
VST 64-3-1	15	20	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	838	1328	269	215	350	170.0
VST 64-3	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	838	1378	318	241	350	202.9
VST 64-4-2	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	921	1461	318	241	350	206.9
VST 64-4-1	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	921	1461	318	241	350	219.7
VST 64-4	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	921	1461	318	241	350	219.7
VST 64-5-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1003	1663	390	295	400	327.3
VST 64-5-1	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1003	1663	390	295	400	327.3
VST 64-5	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1003	1663	390	295	400	327.3
VST 64-6-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1086	1746	390	295	400	331.2
VST 64-6-1	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1086	1746	390	295	400	349.2
VST 64-6	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1086	1746	390	295	400	349.2
VST 64-7-2	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1168	1828	390	295	400	353.3
VST 64-7-1	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1168	1828	390	295	400	353.3
VST 64-7	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1172	1862	446	325	450	429.4
VST 64-8-2	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1255	1945	446	325	450	433.5
VST 64-8-1	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1255	1945	446	325	450	433.5

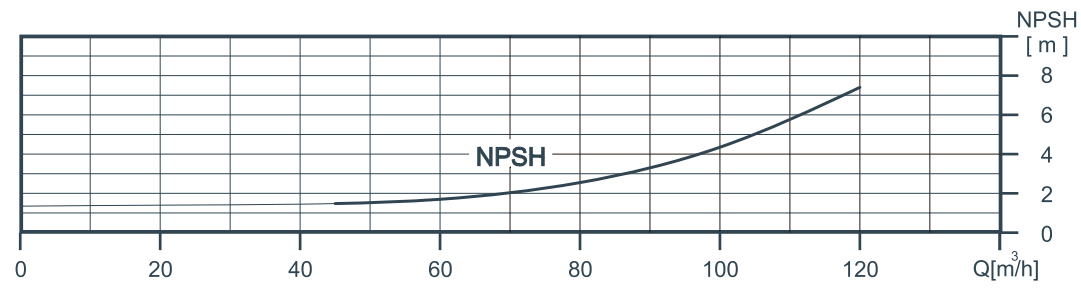
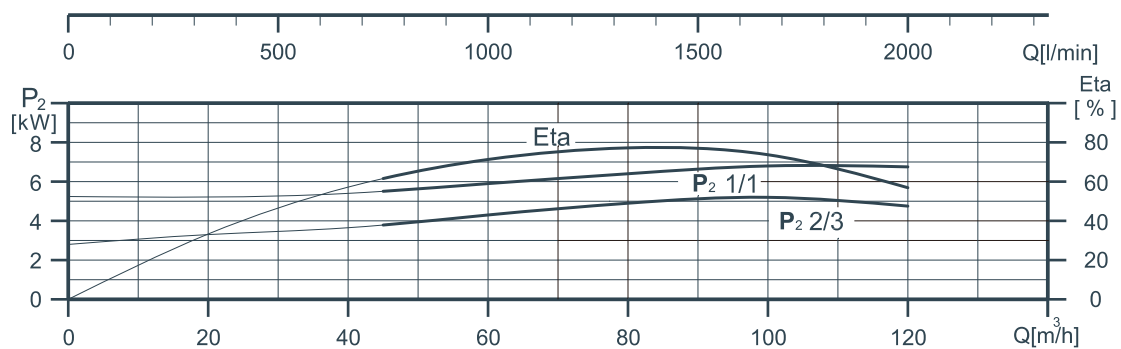
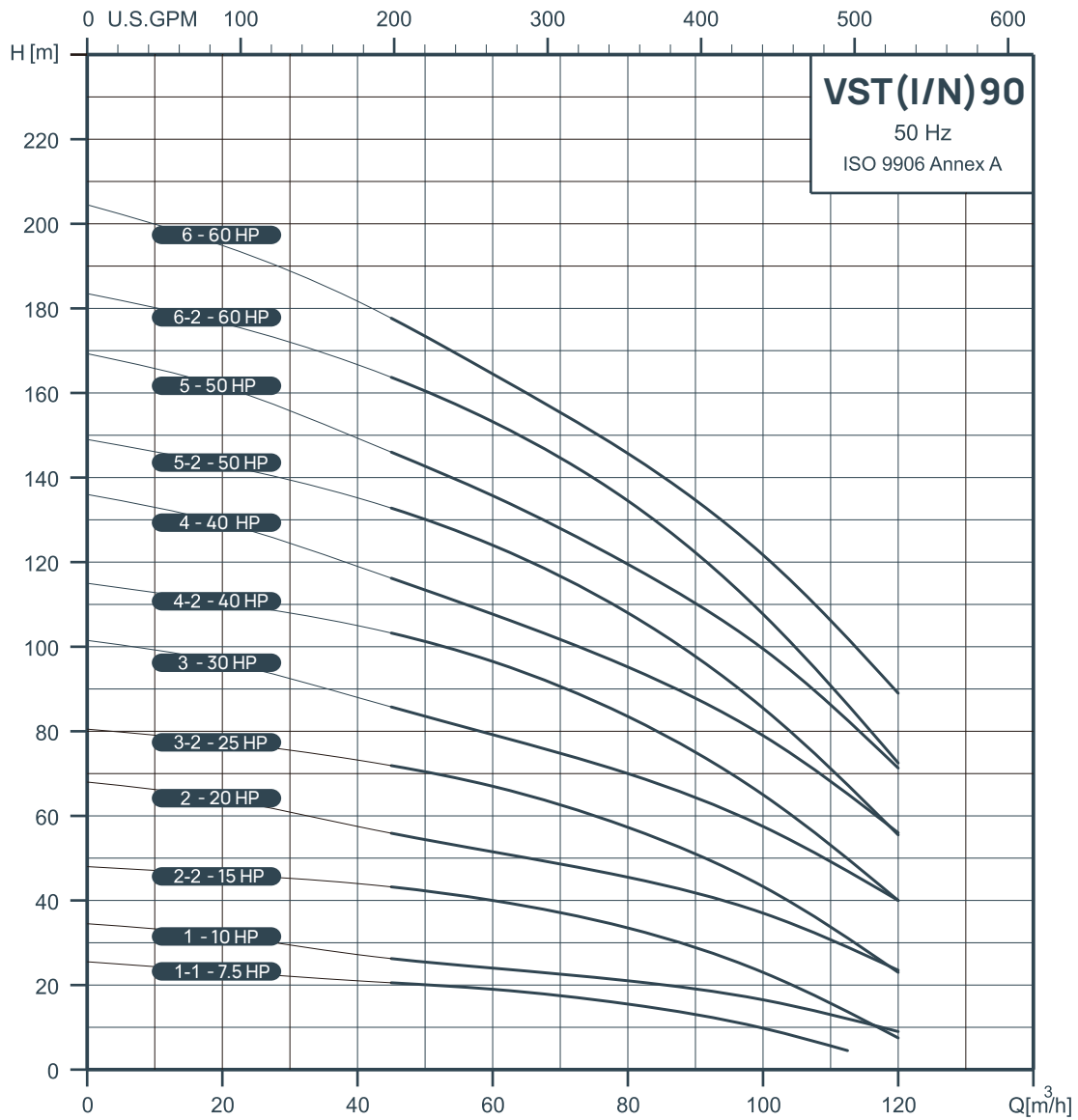
Performance Curves

VST 90

Vertical Multistage Centrifugal In-line Pumps



VST, VSTI, VSTN 90



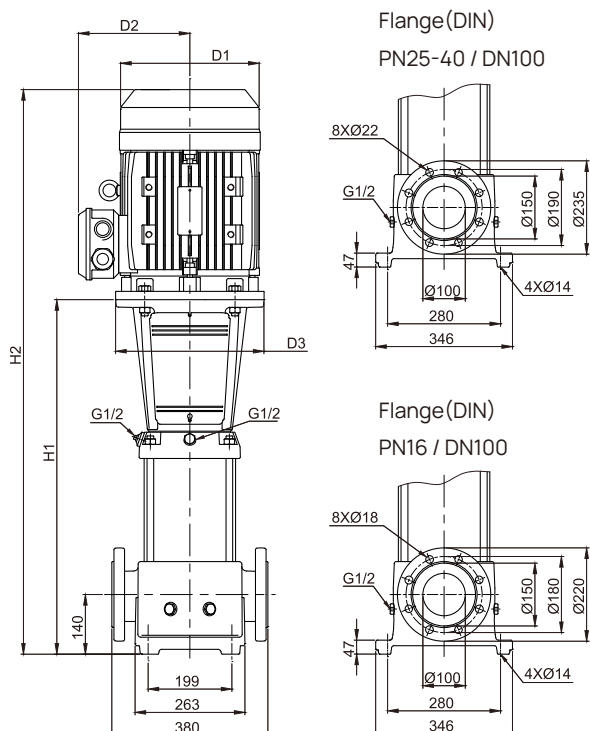
Technical data

VST 90

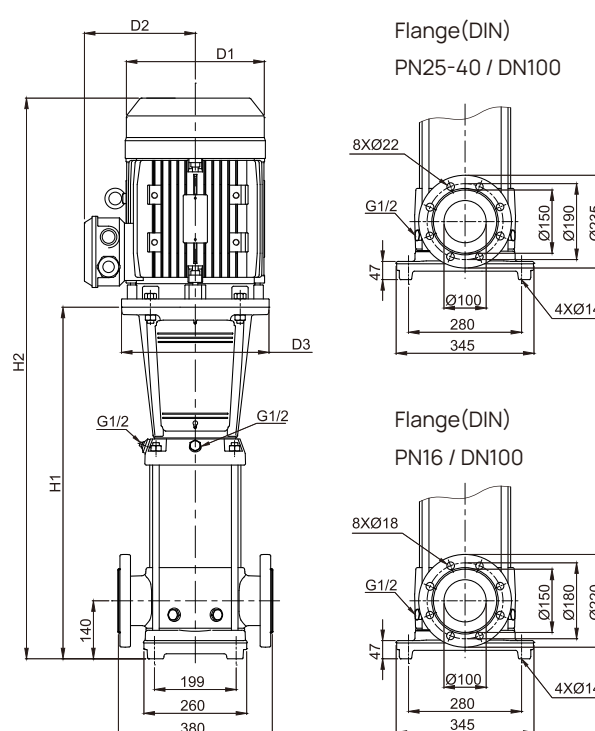
Vertical Multistage Centrifugal In-line Pumps



VST 90



VSTI / VSTN 90



VST 90

50Hz	Motor		Nominal current [A]				Dimension [mm]			Net weight [kg]		
	P2		3ø		3ø	DIN flange		D1	D2		D3	
Pump type	[kW]	[HP]	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2				DIN flange
VST 90-1-1	5.5	7.5	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	572	934	235	197	300	115.0
VST 90-1	7.5	10	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	572	977	235	197	300	120.9
VST 90-2-2	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	774	1219	269	215	350	163.5
VST 90-2	15	20	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	774	1264	269	215	350	174.1
VST 90-3-2	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	866	1406	318	241	350	212.2
VST 90-3	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	866	1406	318	241	350	225.0
VST 90-4-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	958	1618	390	295	400	333.9
VST 90-4	30	40	-	-	55.4 - 50.7	31.9 - 29.2	958	1618	390	295	400	333.9
VST 90-5-2	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1050	1710	390	295	400	356.6
VST 90-5	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1050	1710	390	295	400	356.6
VST 90-6-2	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1142	1832	446	325	450	437.9
VST 90-6	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1142	1832	446	325	450	437.9

VSTI, VSTN 90

50Hz	Motor		Nominal current [A]				Dimension [mm]			Net weight [kg]		
	P2		3ø		3ø	DIN flange		D1	D2		D3	
Pump type	[kW]	[HP]	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2				DIN flange
VSTI(N) 90-1-1	5.5	7.5	18.7 - 18.0	10.8 - 10.4	10.9 - 10.8	6.3 - 6.2	576	938	235	197	300	111.4
VSTI(N) 90-1	7.5	10	25.5 - 24.9	14.7 - 14.4	14.9 - 14.8	8.6 - 8.5	576	981	235	197	300	117.3
VSTI(N) 90-2-2	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	778	1223	269	215	350	159.7
VSTI(N) 90-2	15	20	49.3 - 46.5	28.5 - 26.9	24.9 - 29.0	16.9 - 16.7	778	1268	269	215	350	170.3
VSTI(N) 90-3-2	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	870	1410	318	241	350	208.4
VSTI(N) 90-3	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	870	1410	318	241	350	221.2
VSTI(N) 90-4-2	30	40	-	-	55.4 - 50.7	31.9 - 29.2	962	1622	390	295	400	329.9
VSTI(N) 90-4	30	40	-	-	55.4 - 50.7	31.9 - 29.2	962	1622	390	295	400	329.9
VSTI(N) 90-5-2	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1054	1714	390	295	400	355.0
VSTI(N) 90-5	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1054	1714	390	295	400	355.0
VSTI(N) 90-6-2	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1146	1836	446	325	450	436.1
VSTI(N) 90-6	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1146	1836	446	325	450	436.1

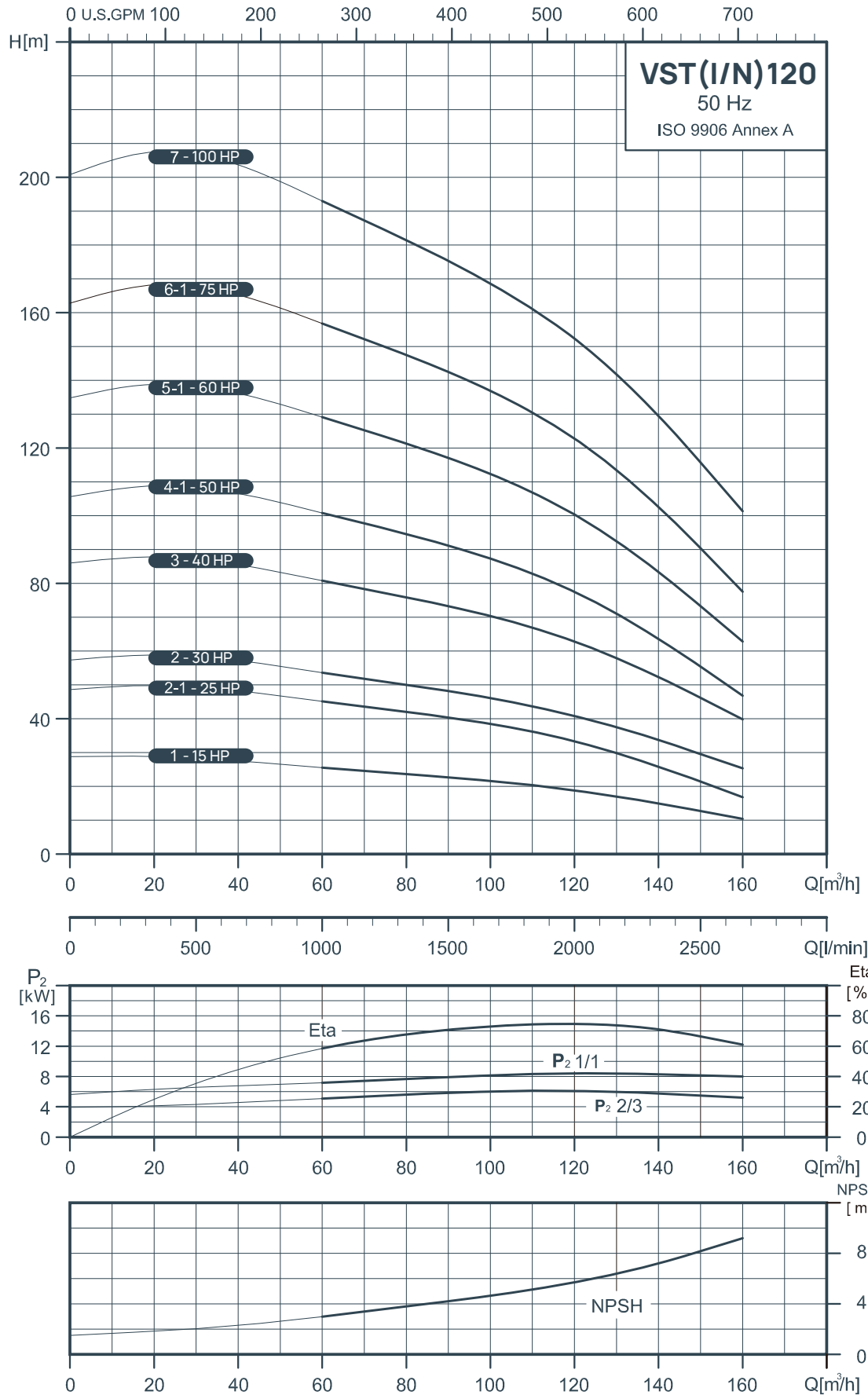
Performance Curves

VST 120

Vertical Multistage Centrifugal In-line Pumps

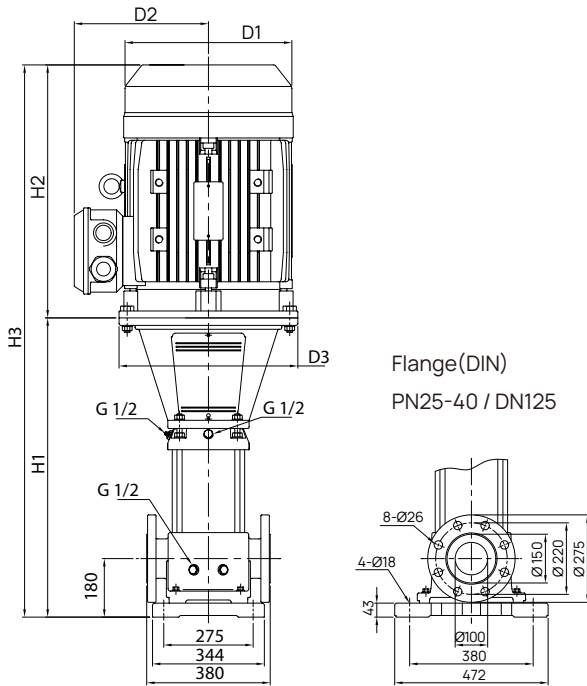


VST, VSTI, VSTN 120

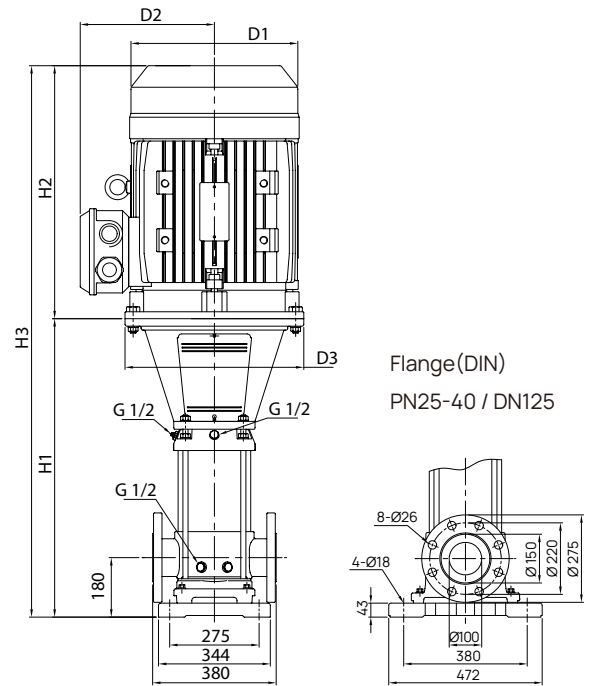




VST 120



VSTI / VSTN 120



VST 120

50Hz	Motor		Nominal current [A]				Dimension [mm]						Net weight [kg]
	P2		3ø		3ø		DIN flange			D1	D2	D3	
Pump type	[kW]	[HP]	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H3	D1	D2	D3	DIN flange
VST 120-1	11	15	38.8 - 391	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	834	445	1279	269	215	350	195.6
VST 120-2-1	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	990	540	1530	318	241	350	249.1
VST 120-2	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	990	540	1530	318	241	350	265.8
VST 120-3	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1145	660	1805	390	295	400	375.5
VST 120-4-1	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1301	660	1961	390	295	400	403.5
VST 120-5-1	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1460	690	2150	446	325	450	489.6
VST 120-6-1	55	75	-	-	101 - 92.5	58.2 - 53.3	1642	770	2412	485	355	550	619.8
VST 120-7	75	100	-	-	134 - 123	77.2 - 70.7	1797	845	2642	550	410	550	746.4

VSTI, VSTN 120

50Hz	Motor		Nominal current [A]				Dimension [mm]						Net weight [kg]
	P2		3ø		3ø		DIN flange			D1	D2	D3	
Pump type	[kW]	[HP]	△220-240V	Y380-415V	△380-415V	Y660-720V	H1	H2	H3	D1	D2	D3	DIN flange
VSTI(N) 120-1	11	15	38.8 - 391	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	837	445	1282	329	215	350	179.8
VSTI(N) 120-2-1	18.5	25	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	993	540	1533	318	241	350	233.5
VSTI(N) 120-2	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	993	540	1533	318	241	350	250.1
VSTI(N) 120-3	30	40	-	-	55.4 - 50.7	31.9 - 29.2	1149	660	1809	390	295	400	359.9
VSTI(N) 120-4-1	37	50	-	-	67.7 - 62.0	39.0 - 35.7	1304	660	1964	390	295	400	388.1
VSTI(N) 120-5-1	45	60	-	-	82.3 - 75.4	47.4 - 43.4	1463	690	2153	446	325	450	474.3
VSTI(N) 120-6-1	55	75	-	-	101 - 92.5	58.2 - 53.3	1645	770	2415	485	355	550	604.8
VSTI(N) 120-7	75	100	-	-	134 - 123	77.2 - 70.7	1800	845	2645	550	410	550	731.5

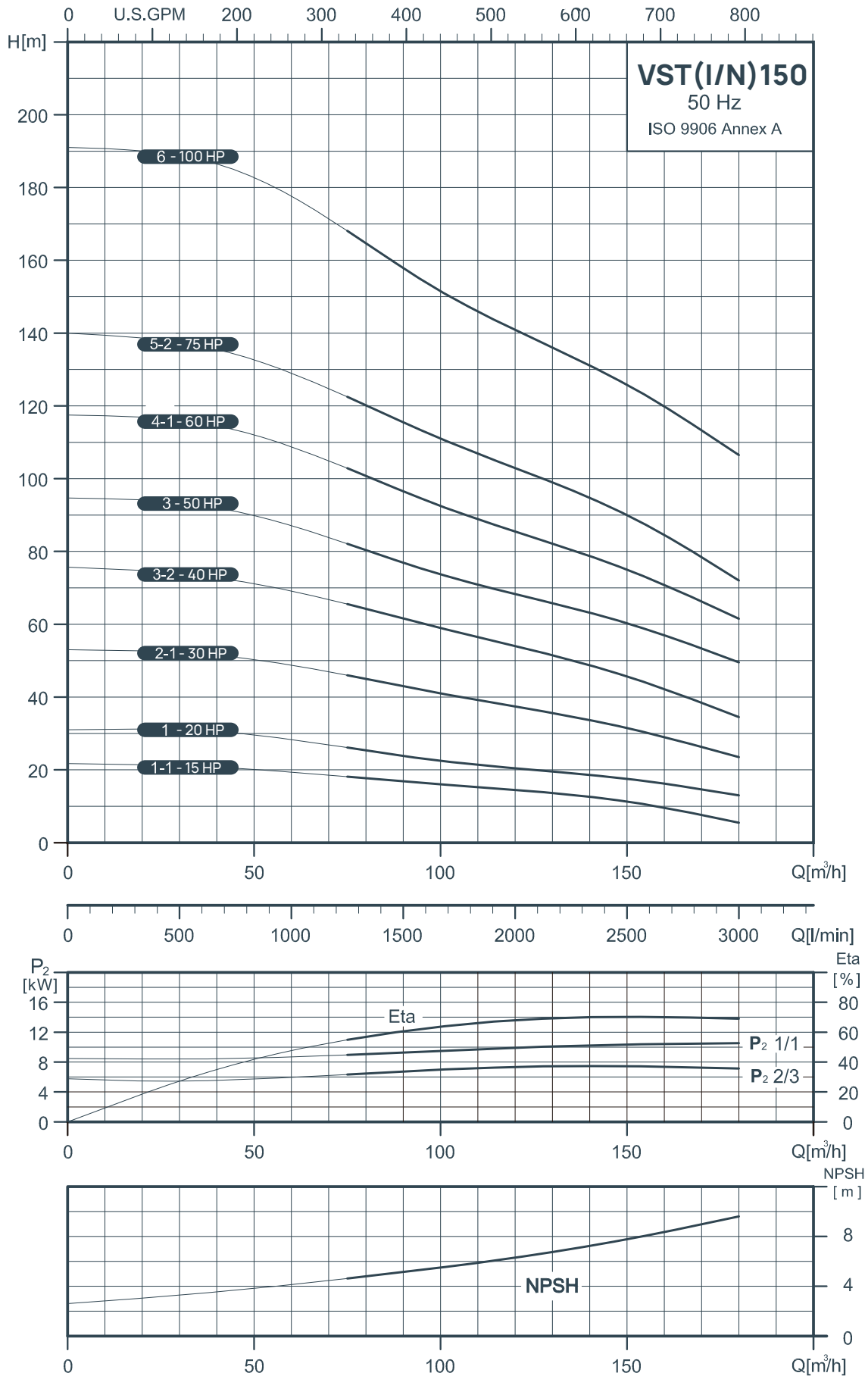
Performance Curves

VST 150

Vertical Multistage Centrifugal In-line Pumps

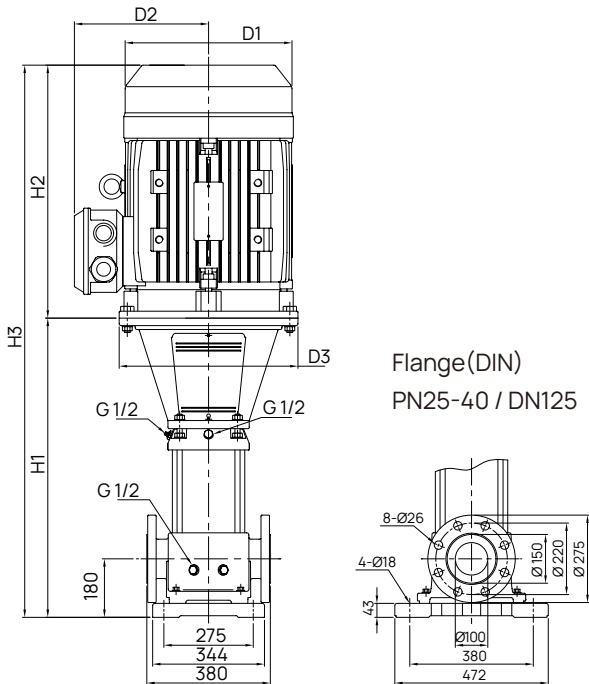


VST, VSTI, VSTN 150



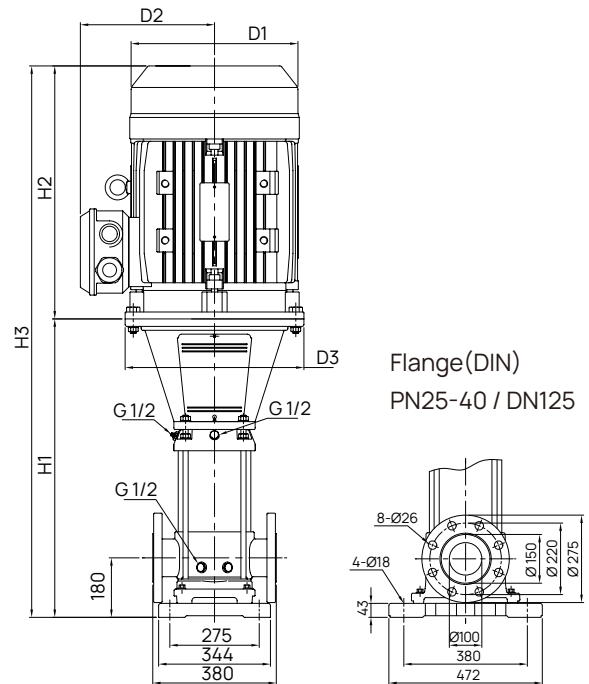


VST 150



Flange(DIN)
PN25-40 / DN125

VSTI / VSTN 150



Flange(DIN)
PN25-40 / DN125

VST 150

50Hz	Motor		Nominal current [A]				Dimension [mm]					Net weight [kg]	
	P2		3ø		3ø		DIN flange			D1	D2		D3
Pump type	[kW]	[HP]	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2	H3	D1	D2	D3	DIN flange
VST 150-1-1	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	834	445	1279	269	215	350	195.5
VST 150-1	15	20	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	834	490	1324	269	215	350	206.1
VST 150-2-1	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	990	540	1530	318	241	350	261.8
VST 150-3-2	30	40	—	—	55.4 - 50.7	31.9 - 29.2	1145	660	1805	390	295	400	375.3
VST 150-3	37	50	—	—	67.7 - 62.0	39.0 - 35.7	1145	660	1805	390	295	400	393.4
VST 150-4-1	45	60	—	—	82.3 - 75.4	47.4 - 43.4	1305	690	1995	446	325	450	479.4
VST 150-5-2	55	75	—	—	101 - 92.5	58.2 - 53.3	1486	770	2256	485	355	550	609.7
VST 150-6	75	100	—	—	134 - 123	77.2 - 70.7	1642	845	2487	550	410	550	736.0

VSTI, VSTN 150

50Hz	Motor		Nominal current [A]				Dimension [mm]					Net weight [kg]	
	P2		3ø		3ø		DIN flange			D1	D2		D3
Pump type	[kW]	[HP]	Δ220-240V	Y380-415V	Δ380-415V	Y660-720V	H1	H2	H3	D1	D2	D3	DIN flange
VSTI(N) 150-1-1	11	15	38.8 - 39.1	22.4 - 22.6	22.9 - 23.8	13.2 - 13.7	837	445	1282	269	215	350	179.2
VSTI(N) 150-1	15	20	60.2 - 55.4	34.8 - 32.0	35.2 - 33.5	20.3 - 19.3	837	490	1327	269	215	350	189.8
VSTI(N) 150-2-1	22	30	71.3 - 67.5	41.2 - 39.0	41.3 - 39.6	23.8 - 22.8	993	540	1533	318	241	350	245.6
VSTI(N) 150-3-2	30	40	—	—	55.4 - 50.7	31.9 - 29.2	1148	660	1808	390	295	400	359.2
VSTI(N) 150-3	37	50	—	—	67.7 - 62.0	39.0 - 35.7	1148	660	1808	390	295	400	377.2
VSTI(N) 150-4-1	45	60	—	—	82.3 - 75.4	47.4 - 43.4	1308	690	1998	446	325	450	463.4
VSTI(N) 150-5-2	55	75	—	—	101 - 92.5	58.2 - 53.3	1489	770	2259	485	355	550	595.8
VSTI(N) 150-6	75	100	—	—	134 - 123	77.2 - 70.7	1645	845	2490	550	410	550	720.5

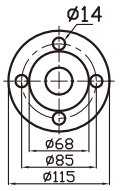
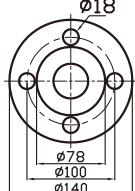
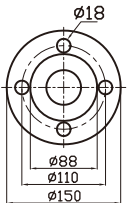
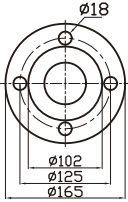
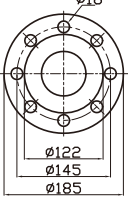
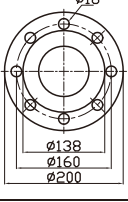
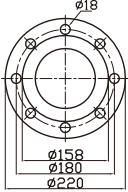
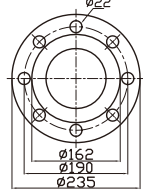
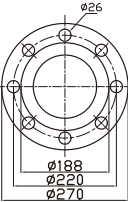


Pipework connections

For pipework connection, various sets of counter flanges and couplings are available.

Counter flanges for VST(I/N)

A set consists of one counter flange, one gasket, bolts, nuts, washers

Counter flange	Pump type	Nominal Rated Diameter	Description	Rated Pressure	Pipework connection
 DN 25 / PN25-40	VST(I/N) 1 VST(I/N) 3 VST(I/N) 5	DN 25	Threaded	25-40 bar	RP 1"
 DN 32 / PN25-40		DN 32	Threaded	25-40 bar	RP 1 1/4"
	VST(I/N) 10	DN 40	Threaded	25-40 bar	Rp 1 1/2"
	VST(I/N) 15 VST(I/N) 20	DN 50	Threaded	25-40 bar	Rp 2"
	VST(I/N) 32	DN 65	Threaded	25-40 bar	Rp 2 1/2"
	VST(I/N) 45	DN 80	Threaded	25-40 bar	Rp 3"
 DN 100 / PN16	VST(I/N) 64 VST(I/N) 90	DN 100	Threaded	16 bar	Rp 4"
 DN 100 / PN25-40		DN 100	Threaded	25-40 bar	Rp 4"
	VST(I/N) 120 VST(I/N) 150	DN 125	Threaded	25-40 bar	Rp 5"

The material of counter is in Steel(S45C), SS 304 and SS 316 available.

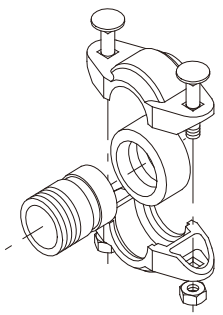
Accessories

Vertical Multistage Centrifugal In-line Pumps



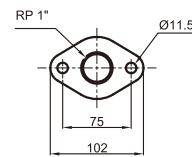
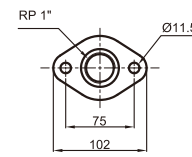
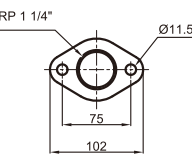
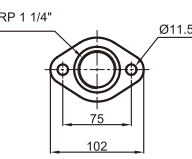
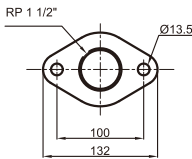
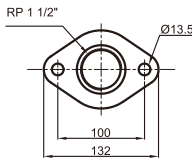
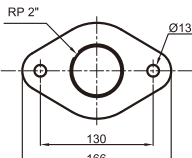
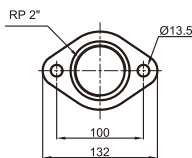
PJE couplings for VSTI(N)

A set consists of two coupling halves, one gasket, one pipe stud(threaded), bolts and nuts

Victaulic-connections	Pump type	Coupling & pipe stud	Max Pressure	Description	Rubber	Pipework connection
	VSTI 1 / 3 / 5	304 SS	80 bar	Threaded	EPDM	R 1 1/4"
	VSTN 1 / 3 / 5	316 SS				
	VSTI 10 / 15 / 20	304 SS	70 bar	Threaded	EPDM	R 2"
	VSTN 10 / 15 / 20	316 SS				

Oval flanges for VST (I/N)

A set consists of one OVAL flange, one gasket, two bolts

Counter flange	Description	Max Pressure	Gasket	Pipework connection	
 <p>VST 1.3</p>	 <p>VST (I/N) 1.3</p>	Threaded	16 bar	Non Asbestos	RP 1"
 <p>VST 5</p>	 <p>VST (I/N) 5</p>	Threaded	16 bar	Non Asbestos	RP 1 1/4"
 <p>VST 10</p>	 <p>VST (I/N) 10</p>	Threaded	16 bar	Non Asbestos	RP 1 1/2"
 <p>VST 15.20</p>	 <p>VST (I/N) 15.20</p>	Threaded	10 bar	Non Asbestos	RP 2"

The material of counter is in Steel(S45C), SS 304 and SS 316 available.

Note



Note





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