

Submersible Pumps



About Us

Sales

Goodspeed Environmental Services supply high quality products that comply with the technical and commercial parameters required for each specific application.

The 4" VSP pump series is carefully designed and manufactured for maximum resistant against sand and other impurities providing a long life and trouble free operations. The Floating Impeller design ensures an excellent resistance to wear and tear against sand and other impurities.

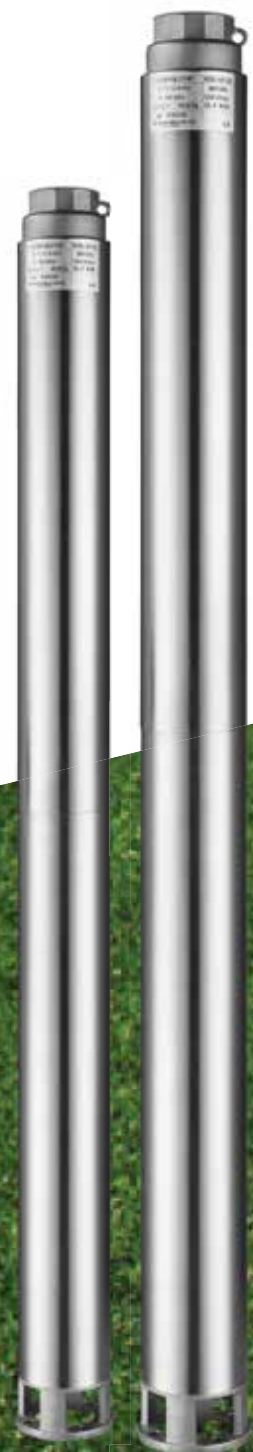
The Discharge Head and Motor adapter are made of precision-cast stainless steel ensuring maximum resistance to corrosion, strength and rigid coupling to the motor.

The Non-Return Valve is integrated in the discharge outlet to support the weight of the water column and to protect against water hammer, thus safeguarding impellers and diffusers.

Important information:

This document should be read in conjunction with the technical manual from the suppliers.

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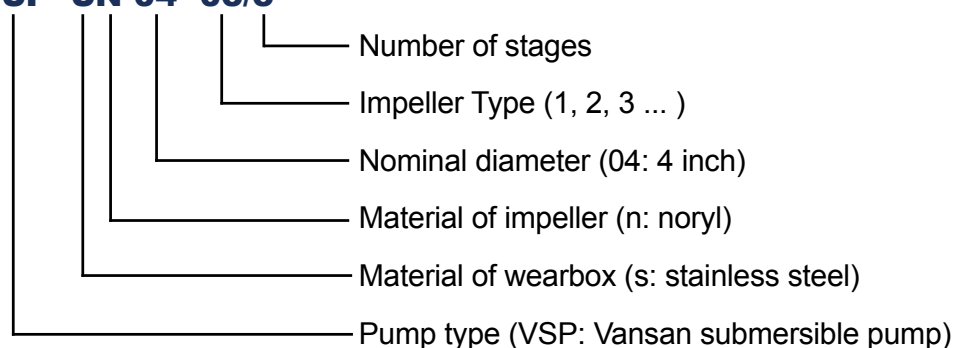


Features

- **Powered for Continuous Operation.** All ratings within working limits of the motor. Pump can be operated continuously without damage to the motor.
 - **Sand Resistant Construction.** Field proven for over four decades, face clearance design and floating impellers for an extremely abrasion resistant configuration.
 - **Stainless Steel Metal Parts.** Bowls, Casing, Discharge Head, Motor Adapter, Shaft, Coupling, Bushings, Cable Guard, Strainer. Check Valve are constructed of a corrosion resistant, non-toxic and non-leaching stainless steel.
 - **FDA Compliant Non-Metallic Parts.** Impellers, Diffusers and Bearing Spiders are constructed of a glass filled engineered composite. The material is corrosion resistant and non-toxic.
 - **Discharged Head.** High profile precision cast stainless steel for superior strength and durability. Cast in loop for safety line.
 - **Motor Adapter.** Precision cast stainless steel is extremely rigid for accurate alignment of wet end to motor. Generous space for removal of motor mounting nuts with regular open-end wrench.
 - **Bowls.** Stainless steel for superior and abrasive resistance.
 - **Built in Check Valve.** Built in check valve constructed of stainless steel and low compression, FDA compliant, BUNA rubber of excellent abrasive resistance and quite, efficient operation.
 - **Urethane Upper and Intermediate Bearings.** Fluted design for free passage of abrasives and excellent resistance to sand damage.
 - **Stainless Steel Casing.** Polished stainless steel is attractive and durable in the most corrosive water.
 - **Hex Shaft Design.** Six sided shafts for positive impeller drive.
 - **Shaft Coupling.** Exposed for ease of field alignment to motor shaft and to check pump rotation.
 - **Strainer.** Non collapsible stainless steel with generous water passage for maximum design flow.
- Capacity up to 25 m³/h
 - Rated motor power output up to 7.5 KW
 - Maximum water temperature from 0 °C to 35 °C
 - Maximum overall diameter of the pump inclusive of cable guard is 97.5 mm
 - Maximum permissible quantity of suspended sand of 150g/m³
 - Radial and mixed flow impeller
 - Delivery port - 1.25", 1.5", 2"

Product Identification Code

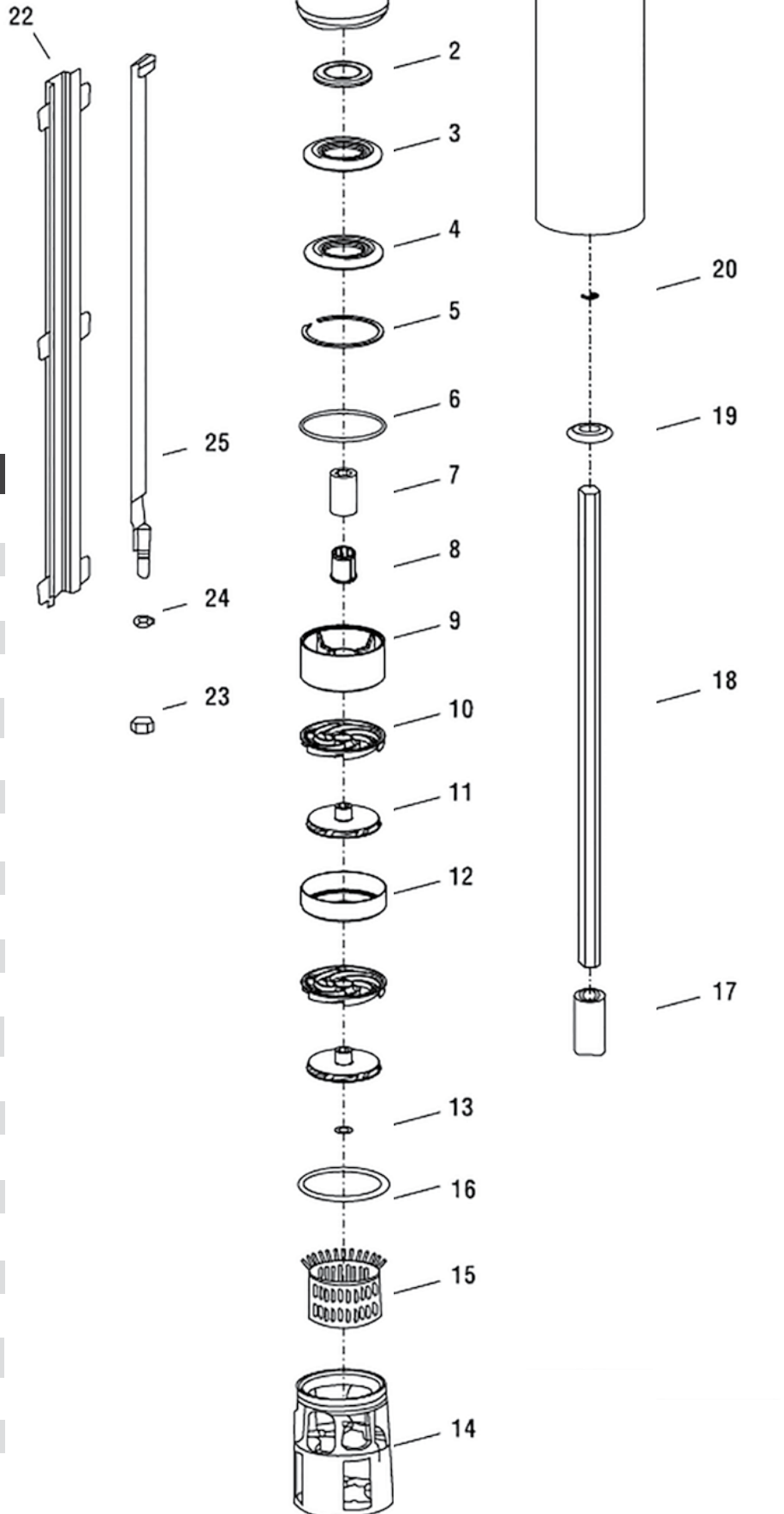
VSP SN 04 03/5



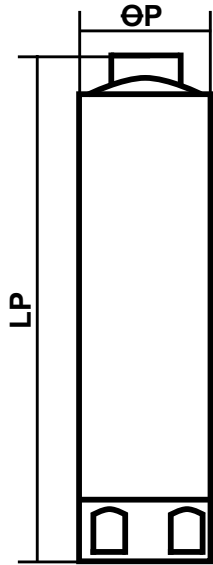
Cross Sectional Drawings



No	Part Name	Material
1	Top Bracket	Stainless Steel
2	Valve Cap	Stainless Steel
3	Valve Seat Retainer	Rubber
4	Valve Seat	Stainless Steel
5	Valve Locking Ring	Stainless Steel
6	Adapter Ring	Noryl
7	Top Bushing	Stainless Steel
8	Top Bearing	Polyurethane
9	Top Diffuser	Noryl
10	Diffuser	Noryl
11	Impeller	Noryl
12	Wear Box	Stainless Steel
13	Shim	Stainless Steel
14	Suction Case	Stainless Steel
15	Filter	Stainless Steel
16	O-ring	Rubber
17	Coupling	Stainless Steel
18	Shaft	Stainless Steel
19	Clip Ring	Stainless Steel
20	Shim	Stainless Steel
21	Jacket Pipe	Stainless Steel
22	Cable Guard	Stainless Steel
23	Nut	Stainless Steel
24	Gasket	Stainless Steel
25	Strap	Stainless Steel



Technical Specifications - VSP SN 401 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 1 1/4"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

0,3 - 1,5 m³/h

Delivery head

275 - 53 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

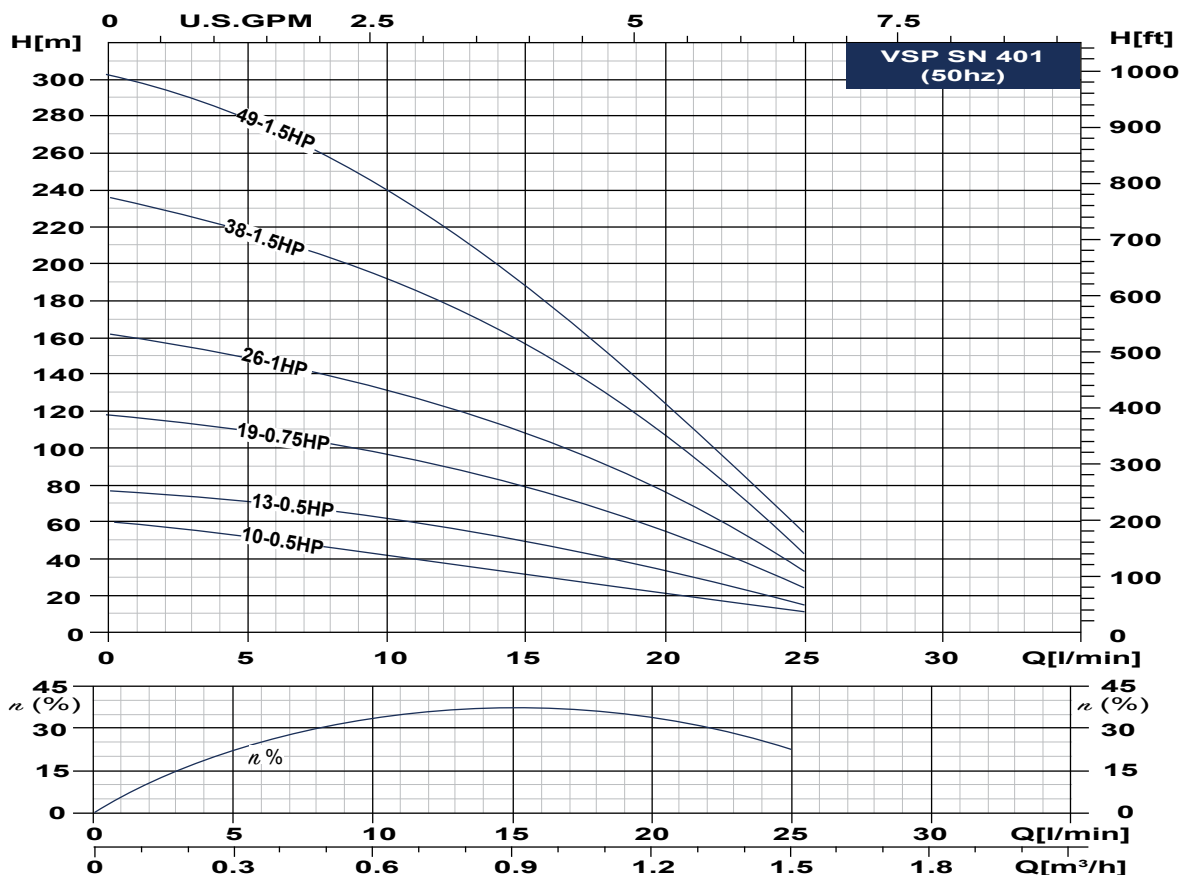
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

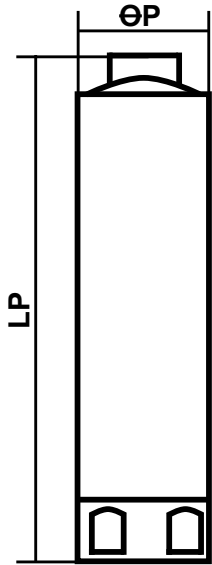
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	0.3	0.6	0.9	1.2	1.5
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg							
VSP SN 401 / 10	10	4"	0.37	0.50	324	1.25"	3.3		60	55	46	38	26	11
VSP SN 401 / 13	13	4"	0.37	0.50	377	1.25"	3.7		78	72	62	50	38	14
VSP SN 401 / 19	19	4"	0.55	0.75	481	1.25"	4.7	Head(m)	118	108	95	79	58	21
VSP SN 401 / 26	26	4"	0.75	1.00	642	1.25"	5.8		161	147	130	107	74	28
VSP SN 401 / 38	38	4"	1.10	1.50	864	1.25"	8.2		235	215	188	156	103	41
VSP SN 401 / 49	49	4"	1.50	2.00	1052	1.25"	10.5		325	302	268	219	151	68
									0	5	10	15	20	25
									0	5	10	15	20	25



Technical Specifications - VSP SN 402 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 1 1/4"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

1,5 - 3 m³/h

Delivery head

215 x- 38 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

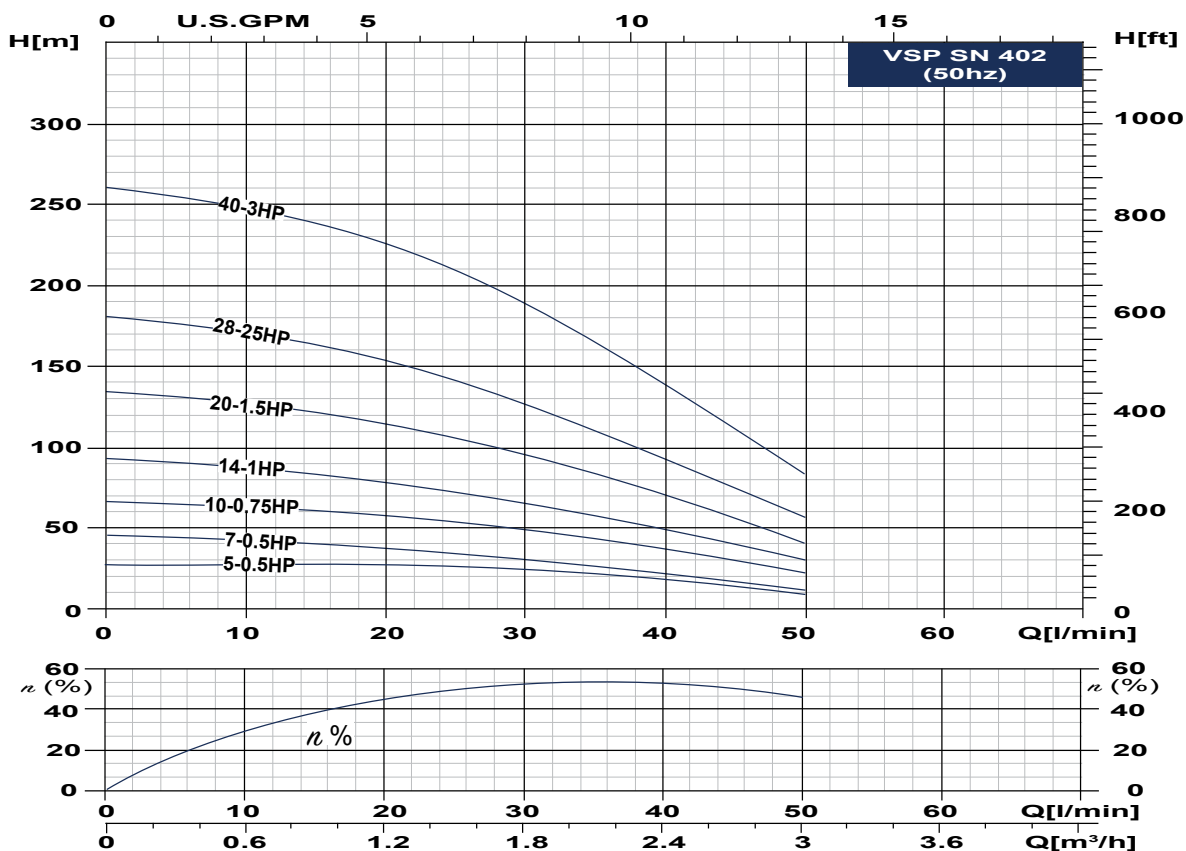
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

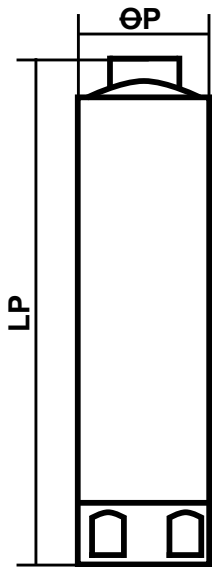
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	1.5	1.8	2.1	2.4	2.7	3
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 402 / 05	5	4"	0.37	0.50	280	1.25"	2.9	32	25	24	21	17	13	10	
VSP SN 402 / 07	7	4"	0.37	0.50	280	1.25"	2.9	45	35	33	29	24	19	14	
VSP SN 402 / 10	10	4"	0.55	0.75	332	1.25"	3.5	66	52	49	44	38	29	21	
VSP SN 402 / 14	14	4"	0.75	1.00	402	1.25"	4.2	92	76	69	62	53	41	29	
VSP SN 402 / 20	20	4"	1.10	1.50	507	1.25"	5.3	132	109	99	88	76	58	41	
VSP SN 402 / 28	28	4"	1.50	2.00	680	1.25"	7.1	180	151	138	122	105	81	58	
VSP SN 402 / 40	40	4"	2.20	3.00	914	1.25"	10.1	260	215	199	174	150	116	83	



Technical Specifications - VSP SN 403 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 1 1/4"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

2,1 - 4,2 m³/h

Delivery head

166 - 49 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

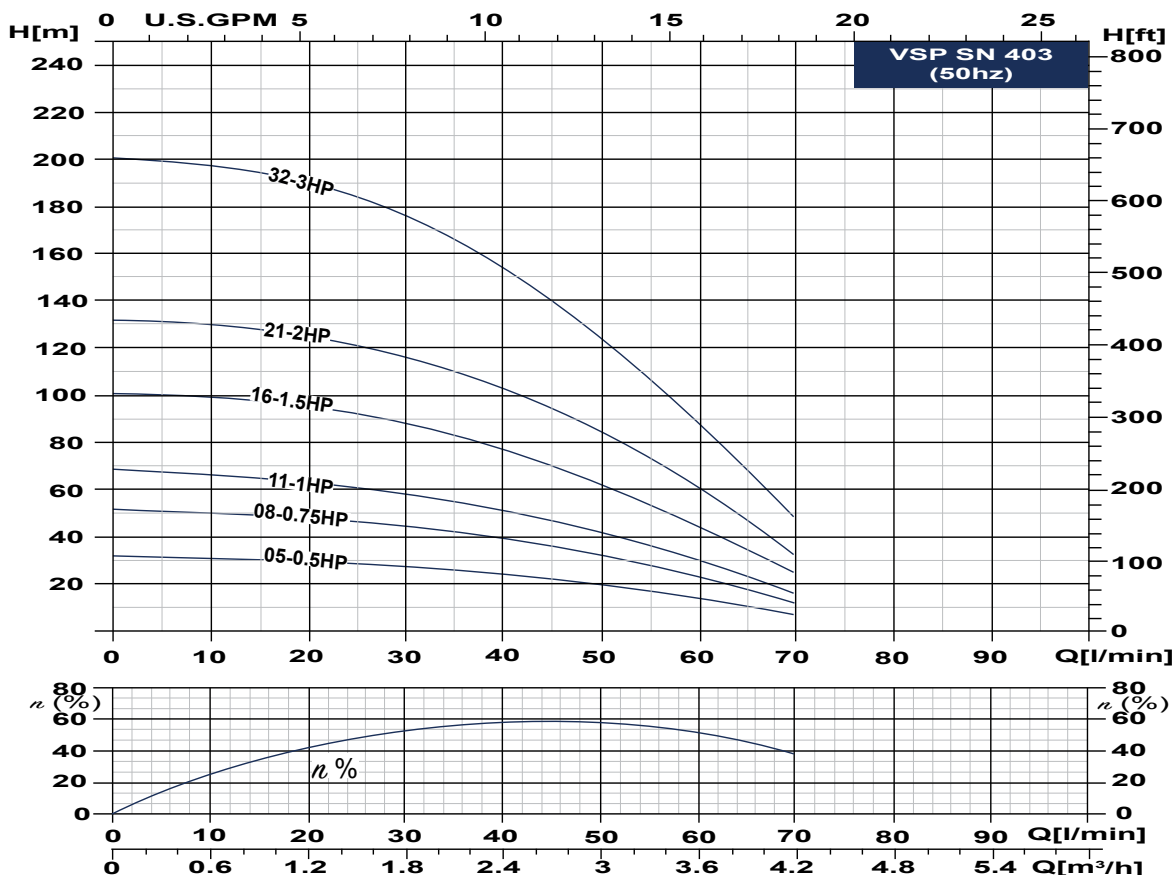
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

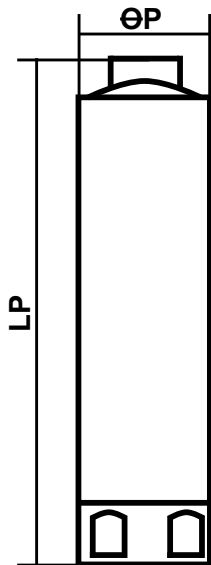
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages							Head(m)						
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg	l/min	0	2.1	2.4	2.7	3.0	3.6
VSP SN 403 / 05	5	4"	0.37	0.50	236	1.25"	2.5	31	25	23	21	19	14	7
VSP SN 403 / 08	8	4"	0.55	0.75	289	1.25"	2.9	51	42	38	35	32	22	12
VSP SN 403 / 11	11	4"	0.75	1.00	342	1.25"	3.4	69	57	52	48	45	31	16
VSP SN 403 / 16	16	4"	1.10	1.50	430	1.25"	4.2	100	83	76	70	64	45	24
VSP SN 403 / 21	21	4"	1.50	2.00	519	1.25"	5.0	131	109	99	92	85	59	32
VSP SN 403 / 32	32	4"	2.20	3.00	749	1.25"	7.1	200	166	152	141	126	91	49



Technical Specifications - VSP SN 404 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 1 1/4"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

3,0 - 6,0 m³/h

Delivery head

245 - 70 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

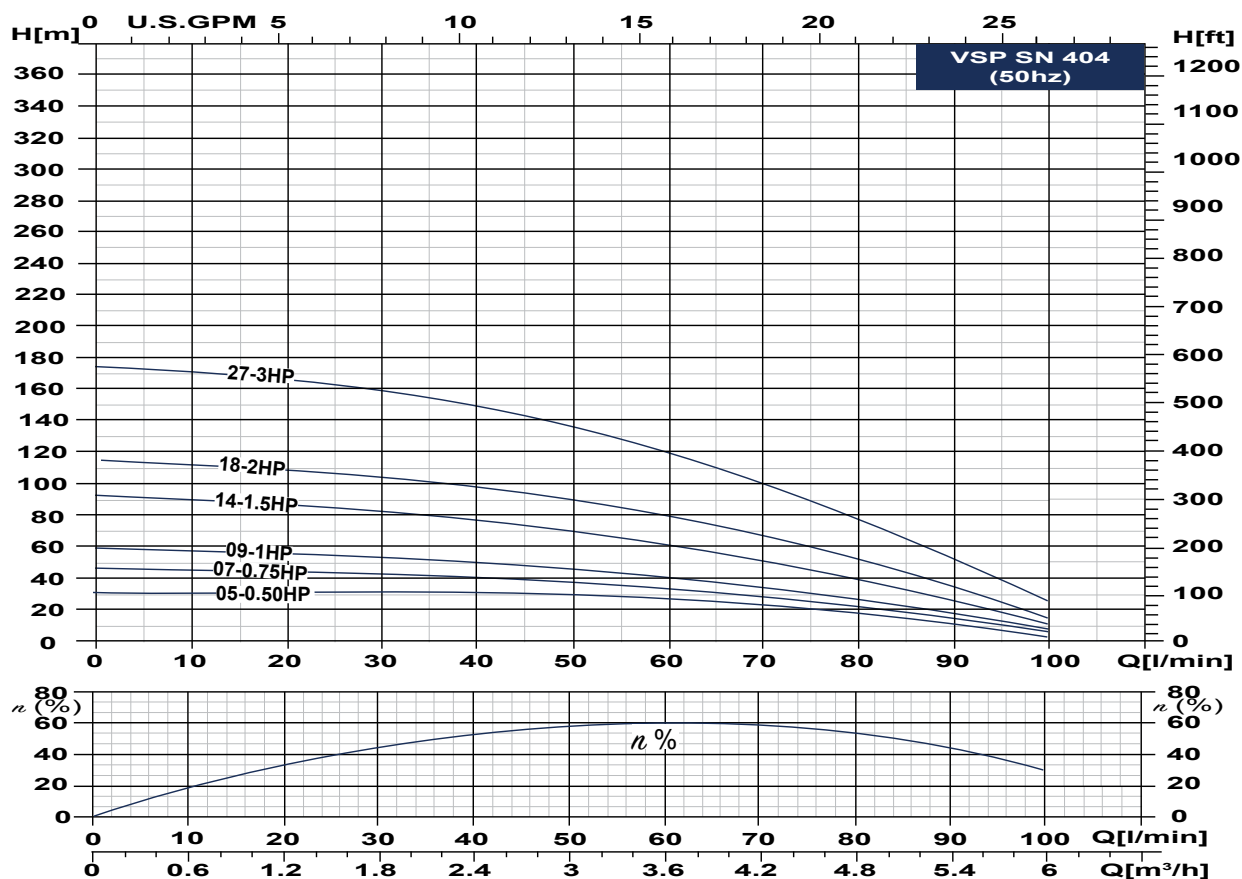
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

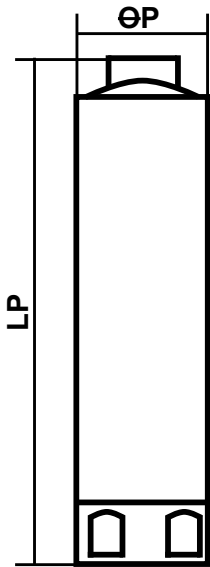
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	3	3.6	4.2	4.8	5.4	6.0
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 404 / 05	5	4"	0.37	0.50	301	1.25"	3.0	Head(m)	31	23	21	17	13	9	3
VSP SN 404 / 07	7	4"	0.55	0.75	301	1.25"	3.0		45	35	31	27	20	13	6
VSP SN 404 / 09	9	4"	0.75	1.00	344	1.25"	3.3		58	45	40	34	26	17	8
VSP SN 404 / 14	14	4"	1.10	1.50	452	1.25"	4.1		91	70	63	53	41	27	12
VSP SN 404 / 18	18	4"	1.50	2.00	538	1.25"	4.7		117	89	80	67	54	35	15
VSP SN 404 / 27	27	4"	2.20	3.00	767	1.25"	6.2		175	133	120	101	81	53	25



Technical Specifications - VSP SN 405 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 1 1/4"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

3,6 - 6 m³/h

Delivery head

233 - 110 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

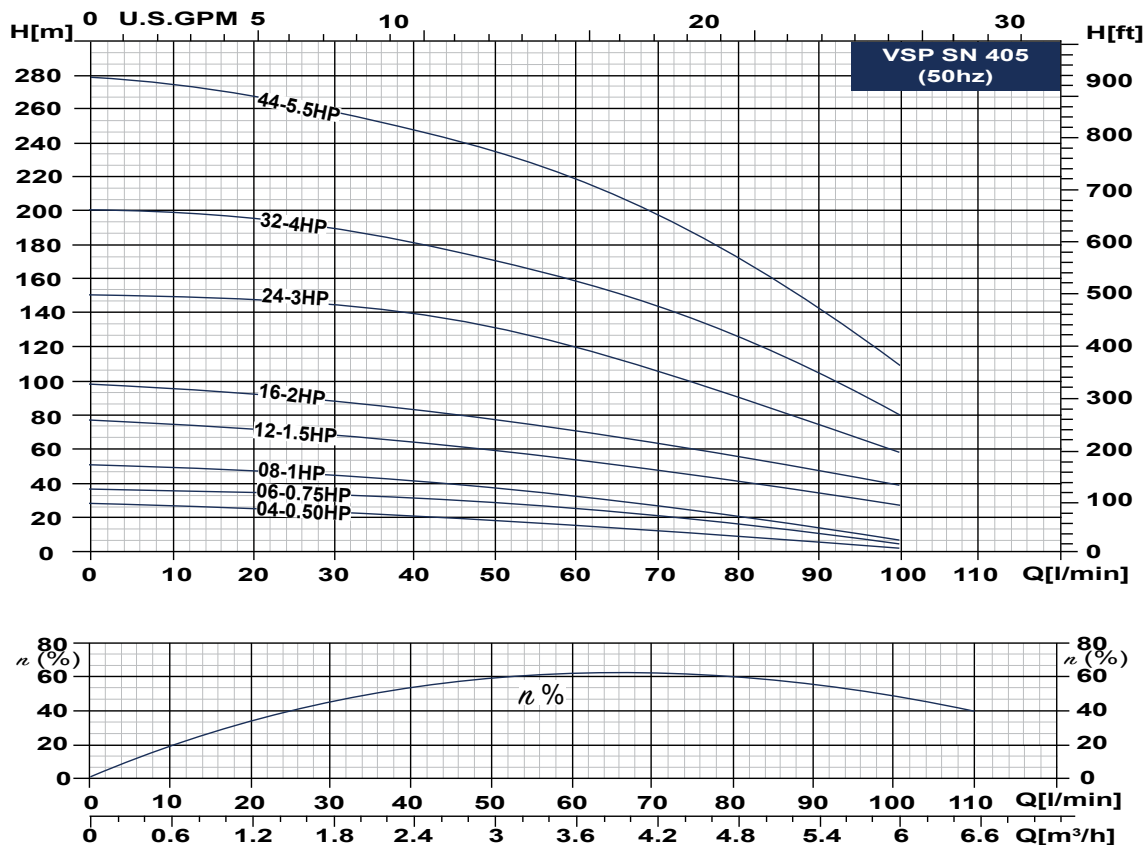
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

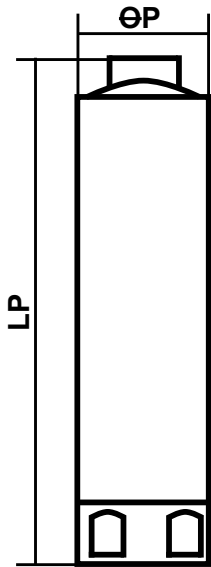
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	3	3.6	4.2	4.8	5.4	6.0
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 405 / 06	6	4"	0.55	0.75	296	1.25"	2.9	37	32	30	26	24	20	12	
VSP SN 405 / 08	8	4"	0.75	1.00	345	1.25"	3.3	50	43	40	35	32	26	18	
VSP SN 405 / 12	12	4"	1.10	1.50	433	1.25"	4.1	74	64	59	53	47	39	30	
VSP SN 405 / 16	16	4"	1.50	2.00	542	1.25"	5.0	99	85	79	70	62	52	40	
VSP SN 405 / 24	24	4"	2.20	3.00	777	1.25"	6.6	149	129	119	108	94	78	60	
VSP SN 405 / 32	32	4"	3.00	4.00	965	1.25"	8.7	198	170	159	144	125	104	80	
VSP SN 405 / 44	44	4"	4.00	5.50	1.296	1.25"	11.2	272	233	216	198	172	143	110	



Technical Specifications - VSP SN 406 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 2"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

5,4 - 8,4 m³/h

Delivery head

228 - 67 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

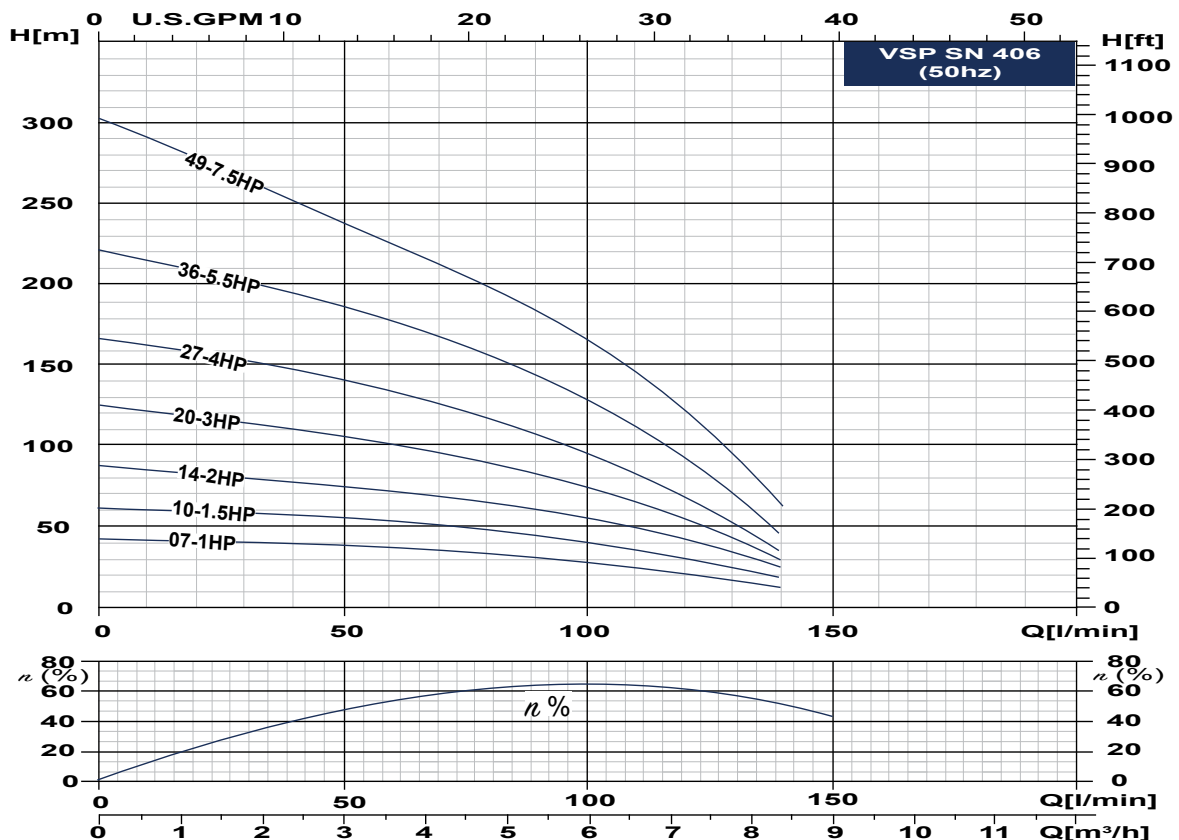
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

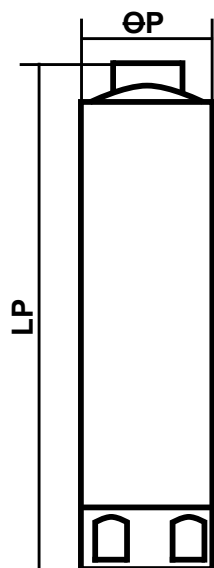
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	4.2	4.8	5.4	6	7.2	8.4
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 406 / 07	7	4"	0.75	1.00	390	2"	3.7	42	32	30	27	25	18	10	
VSP SN 406 / 10	10	4"	1.10	1.50	483	2"	4.6	60	46	43	40	36	26	14	
VSP SN 406 / 14	14	4"	1.50	2.00	607	2"	5.7	86	65	60	56	50	36	19	
VSP SN 406 / 20	20	4"	2.20	3.00	831	2"	7.5	123	94	86	81	72	53	28	
VSP SN 406 / 27	27	4"	3.00	4.00	1048	2"	9.6	165	126	116	109	96	70	36	
VSP SN 406 / 36	36	4"	4.00	5.50	1318	2"	12.2	221	168	154	146	129	93	49	
VSP SN 406 / 49	49	4"	5.50	7.50	1802	2"	15.9	301	228	210	199	175	127	67	



Technical Specifications - VSP SN 408 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 2"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

7,2 - 12,0 m³/h

Delivery head

171 - 45 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

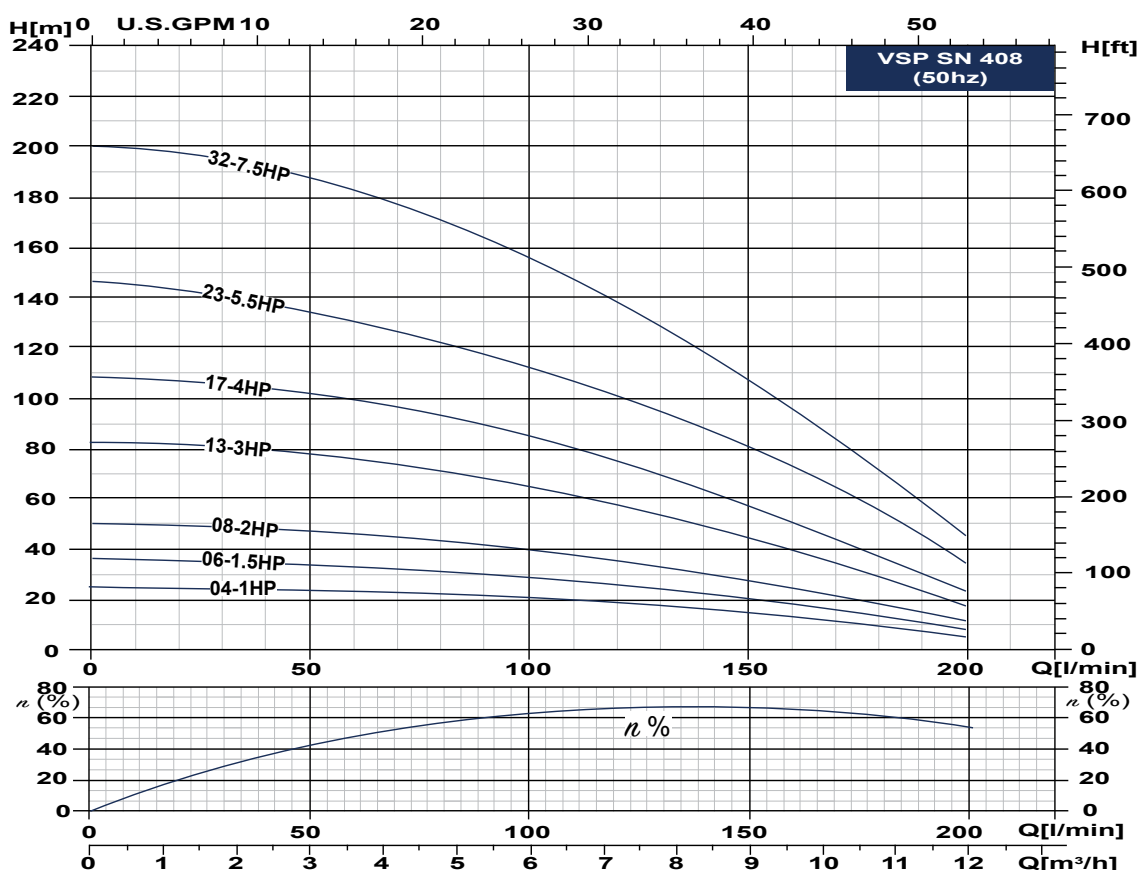
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

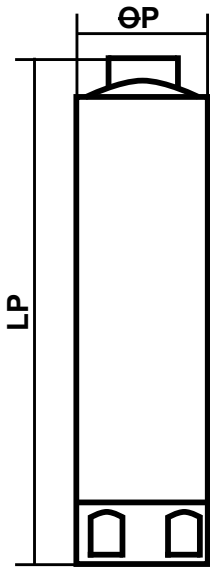
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	4.8	6	8.4	9.6	10.8	12.0
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 408 / 06	6	4"	1.10	1.50	356	2"	3.4	0	0	80	100	140	160	180	200
VSP SN 408 / 08	8	4"	1.50	2.00	418	2"	4.0	37	33	31	25	20	15	9	
VSP SN 408 / 13	13	4"	2.20	3.00	573	2"	5.5	50	44	41	34	27	20	12	
VSP SN 408 / 17	17	4"	3.00	4.00	697	2"	6.6	82	71	67	54	43	32	19	
VSP SN 408 / 23	23	4"	4.00	5.50	921	2"	8.4	107	92	88	71	57	42	25	
VSP SN 408 / 32	32	4"	5.50	7.50	1.238	2"	11.0	144	124	120	96	77	58	35	
								200	171	162	132	106	79	45	



Technical Specifications - VSP SN 412 (50HZ)



No. of vanes

6

Outlet connection diameter

(inside threaded) 2"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

9,6 - 15,6 m³/h

Delivery head

136 - 35 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

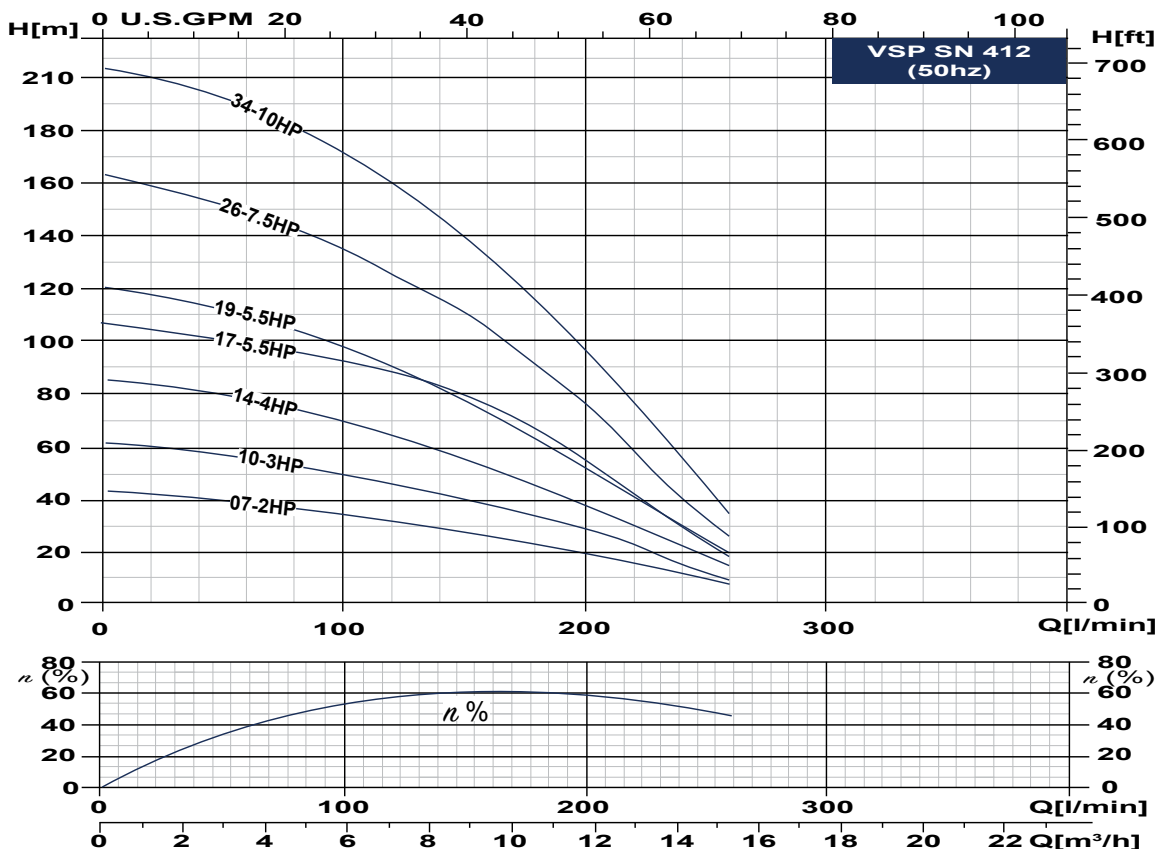
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

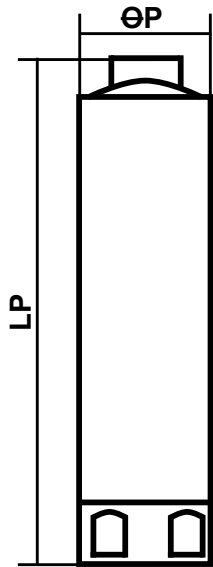
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	9.6	10.8	12	13.2	14.4	15.6
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 412 / 07	7	4"	1.50	2.00	534	2"	5.3	43	27	24	20	15	11	7	
VSP SN 412 / 10	10	4"	2.20	3.00	690	2"	6.7	63	40	35	30	22	17	10	
VSP SN 412 / 14	14	4"	3.00	4.00	989	2"	8.6	87	56	48	41	32	24	15	
VSP SN 412 / 17	17	4"	4.00	5.50	1.092	2"	10.1	108	68	59	51	41	29	18	
VSP SN 412 / 19	19	4"	4.00	5.50	1.195	2"	11.0	120	76	66	56	45	33	20	
VSP SN 412 / 26	26	4"	5.50	7.50	1.559	2"	14.3	163	104	90	77	62	45	27	
VSP SN 412 / 34	34	4"	7.50	10.00	2.049	2"	20.9	213	136	117	100	81	59	35	



Technical Specifications - VSP SN 412 (50HZ)



No. of vanes

7

Outlet connection diameter

(inside threaded) 2"

Pump outside diameter

95mm

Diffuser :Noryl

Impeller :Noryl

Coupling :Stainless steel (AISI 304)

Strainer :Stainless steel (AISI 304)

Valve cap :Stainless steel (AISI 304)

Wear box :Stainless steel (AISI 304)

Capacity

15,6 - 24,0 m³/h

Delivery head

95 - 36 mt

Shaft diameter

(hexagonal) 11mm

Top Diffuser :Noryl

Pump shaft :Stainless steel (AISI 304)

Suction case :Stainless steel (AISI 304)

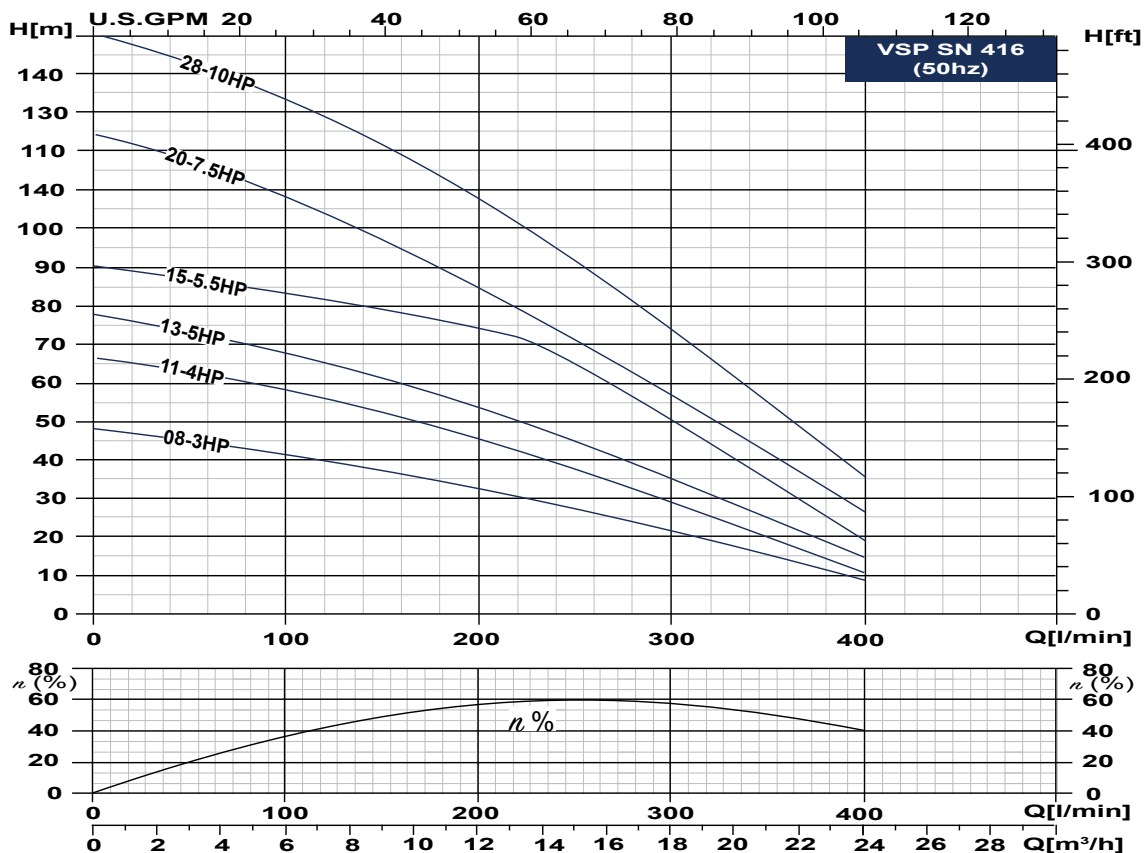
Top bracket :Stainless steel (AISI 304)

Rotation :CCW

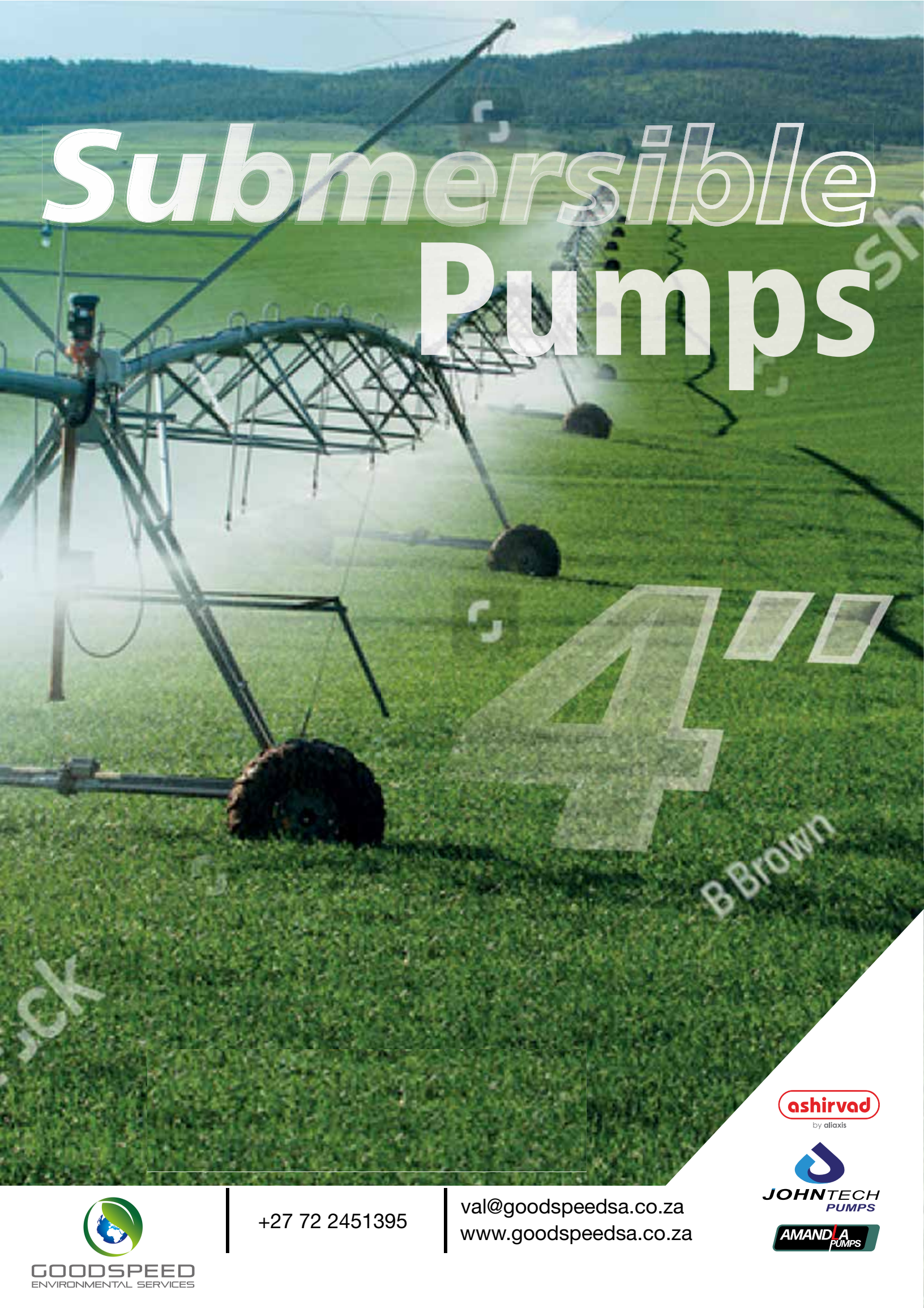
Revolution :2.900 rpm

Dimension and Performance Table

Type	Stages	Motor			Pump			m ³ /h	0	14.4	15.6	18	19.2	21.6	24
		Type	kW	HP	L(m)	DN (RPT/NPT)	Kg								
VSP SN 416 / 08	8	4"	2.20	3.00	676	2"	6.3	48	27	26	21	19	14	9	
VSP SN 416 / 11	11	4"	3.00	4.00	880	2"	8.1	66	37	35	29	27	20	13	
VSP SN 416 / 13	13	4"	4.00	5.50	1.013	2"	9.3	78	43	41	34	31	23	15	
VSP SN 416 / 15	15	4"	4.00	5.50	1.149	2"	10.5	90	51	48	40	37	29	19	
VSP SN 416 / 20	20	4"	5.50	7.50	1.489	2"	13.5	118	68	64	53	49	39	26	
VSP SN 416 / 28	28	4"	7.5	10.00	2.096	2"	21.2	165	95	89	74	68	54	36	



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