STAGE

VERTICAL MULTISTAGE CENTRIFUGAL PUMP

ISO 9001 2015 CERTIFIED

CE

VERTICAL MULTISTAGE PUMPS TYPE 50Hz

Model	Stages	Motor			Q Capacity 2850 RPM																			Pump	
		P2		l/min	0	10	20	30	40	50	60	70	80	100	120	140	160	180	200	250	300	350	400	Net Weight	Outlet
		kW	HP	m3/h	0	0.6	1.2	1.8	2.4	3	3.6	4.2	4.8	6	7.2	8.4	9.6	10.8	12	15	18	21	24	kg.	mm.
VST 2-9	9	1.1	1.5		87	85	77	68	60	48															1-1/4"
VST 2-11	11	1.1	1.5		104	102	93	83	70	56															1-1/4"
VST 2-15	15	1.5	2		144	138	130	118	102	80															1-1/4"
VST 2-22	22	2.2	3		212	200	189	168	145	118															1-1/4"
VST 2-26	26	3	4		252	242	226	206	180	147															1-1/4"
VST 3-9	9	0.75	1		58		54	51	47	41	34	28												28.3	1-1/4"
VST 3-10	10	0.75	1		63		60	56	52	45	37	30												28.7	1-1/4"
VST 3-13	13	1.1	1.5		83		79	73	67	59	49	40												36.5	1-1/4"
VST 3-15	15	1.1	1.5		97		90	84	77	67	55	45												37.2	1-1/4"
VST 3-19	19	1.5	2		122		118	110	101	90	73	62												42.8	1-1/4"
VST 3-21	21	2.2	3		138		131	124	113	100	85	71												45.3	1-1/4"
VST 3-23	23	2.2	3		150		144	135	124	110	91	76												46.1	1-1/4"
VST 3-25	25	2.2	3		163		155	148	135	120	100	83												46.8	1-1/4"
VST 3-27	27	2.2	3		177		168	159	146	129	105	89												47.6	1-1/4"
VST 3-29	29	2.2	3		190		180	170	156	138	114	95												48.3	1-1/4"
VST 3-31	31	3	4		204		195	185	170	150	125	105												58	1-1/4"
VST 3-33	33	3	4		218		207	196	181	160	135	113												58.8	1-1/4"
VST 3-36	36	3	4		237		225	214	197	174	145	120												59.9	1-1/4"
VST 4-4	4	0.75	1		39				35	33	31	29	27	24	17										1-1/4"
VST 4-5	5	1.1	1.5		50				45	42	40	38	35	30	22										1-1/4"
VST 4-6	6	1.1	1.5		59				53	50	48	46	43	35	26										1-1/4"
VST 4-8	8	1.5	2		80				72	67	65	62	58	48	36										1-1/4"
VST 4-10	10	2.2	3		111				91	86	83	79	74	62	48										1-1/4"
VST 4-12	12	2.2	3		121				107	103	98	95	88	74	56										1-1/4"
VST 4-16	16	3	4		162				145	142	136	128	119	100	77										1-1/4"
VST 4-19	19	4	5.5		194				174	167	161	154	143	123	93										1-1/4"
VST 4-22	22	4	5.5		223				200	193	186	173	164	140	105										1-1/4"
VST 5-5	5	0.75	1		31				29	29	26	25	24	20	14									23.1	1-1/4"
VST 5-7	7	1.1	1.5		46				42	42	39	36	35	30	24									35.2	1-1/4"
VST 5-8	8	1.1	1.5		52				47	47	45	43	39	33	28									35.7	1-1/4"
VST 5-9	9	1.5	2		59				55	55	52	49	47	40	33									40.3	1-1/4"
VST 5-10	10	1.5	2		65				62	62	57	55	52	47	39									40.9	1-1/4"
VST 5-12	12	2.2	3		80				76	76	71	67	65	57	46									43.7	1-1/4"
VST 5-13	13	2.2	3		85				81	81	76	74	70	61	50									44.2	1-1/4"
VST 5-14	14	2.2	3		93				87	87	83	80	75	66	55									44.8	1-1/4"
VST 5-15	15	2.2	3		100				95	95	89	85	80	71	59									45.2	1-1/4"
VST5-20	20	3	4		136				117	117	121	116	111	97	82									56.9	1-1/4"
VST5-29	29	4	5.5		196				188	188	180	172	165	148	123									66.6	1-1/4"
VST5-32	32	4	5.5		217				208	208	200	191	182	161	135									89.4	1-1/4"
VST5-36	36	5.5	7.5		246				233	233	220	214	202	182	153									91.9	1-1/4"
VST10-2	2	0.75	1		18								18	17	16	16	14	12	10					38.2	1-1/2"
VST10-3	3	1.1	1.5		28								28	27	26	25	22	19	16					45.9	1-1/2"
VST10-4	4	1.5	2		39								38	37	36	34	31	29	24					51.1	1-1/2"
VST10-6	6	2.2	3		59								59	58	55	52	48	42	37					55	1-1/2"
VST10-7	7	3	4		70								69	68	65	61	58	51	45					65.2	1-1/2"
VST10-9	9	3	4		90								88	87	83	79	72	64	57					67.3	1-1/2"
VST10-12	12	4	5.5		121								120	118	112	106	99	88	77					74.4	1-1/2"
VST10-16	16	5.5	7.5		161								160	156	150	141	131	120	93					105.5	1-1/2"
VST10-20	20	7.5	10		202								202	199	191	181	168	151	132					115.6	1-1/2"
VST10-22	22	7.5	10		223								223	218	209	193	182	162	145					117.7	1-1/2"
VST15-1	1	1.1	1.5		11											10	10	10	10	9	8	7		49.4	2"
VST15-2	2	2.2	3		27											25	24	24	23	21	19	15		55.7	2"
VST15-3	3	3	4		42											38	37	36	35	32	29	25		66.3	2"
VST15-4	4	4	5.5		54											51	50	50	49	45	40	35		71.7	2"
VST15-5	5	4	5.5		69											65	64	63	61	57	51	43		73.2	2"
VST15-6	6	5.5	7.5		82											79	78	77	75	70	62	53		101.6	2"
VST15-7	7	5.5	7.5		97											92	91	89	87	80	72	63		103.1	2"
VST15-8	8	7.5	10		110											106	105	102	100	94	84	72		110.7	2"
VST15-9	9	7.5	10		124											119	118	116	114	105	95	80		112.2	2"
VST15-10	10	11	15		139											134	132	130	127	119	107	92		145.5	2"
VST15-14	14	11	15		193											187	184	181	178	165	150	128		151.8	2"
VST15-17	17	15	20		237											229	225	222	218	202	181	156		167.5	2"
VST20-1	1	0.75	1		12													10	10	10	9	9	7	49.5	2"
VST20-2	2	2.2	3		28													26	25	24	22	20	17	55.7	2"
VST20-3	3	4	5.5		41													40	39	38	35	32	27	70.3	2"
VST20-4	4	5.5	7.5		57													55	54	51	48	44	39	98.7	2"
VST20-5	5	5.5	7.5		71													69	68	65	61	57	50	100.1	2"
VST20-6	6	7.5	10		87													82	81	78	74	67	60	107.5	2"
VST20-7	7	7.5	10		101													97	95	91	82	79	69	109	2"
VST20-10	10	11	15		145													140	139	133	125	115	103	145.5	2"
VST20-12	12	15	20		175													169	167	161	153	140	125	159.1	2"
VST20-14	14	15	20		203													196	195	188	177	163	145	162	2"
VST20-17	17	18.5	25		250													241	239	230	218	200	180	199.4	2"

Head in Meters

VERTICAL MULTISTAGE PUMPS TYPE 50Hz

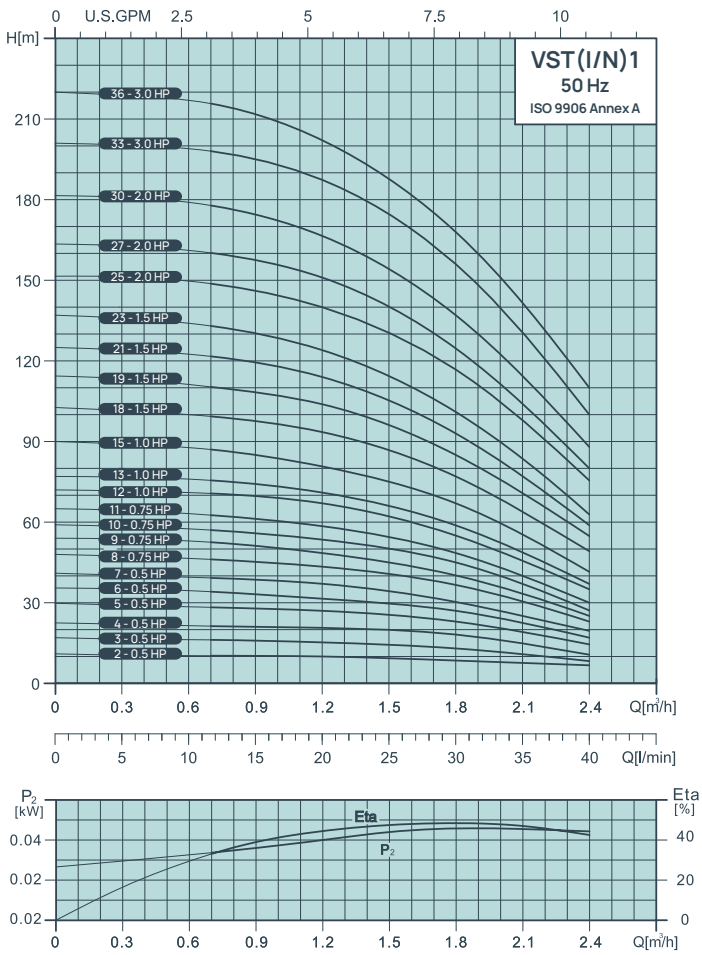
Model	Stages	Motor		Q Capacity 2850 RPM																		Pump	
		P2		l/min	0	100	200	300	400	500	600	800	1000	1200	1400	1600	1800	2000	2200	2400	2600	Net Weight	Outlet
		kW	HP	m3/h	0	6	12	18	24	30	36	48	60	72	84	96	108	120	132	144	156	kg.	mm.
VST32-2	2	4	5.5		39		38	35	32	29	23											89.6	2-1/2"
VST32-3-2	3	4	5.5		50		50	48	43	38	29											109.5	2-1/2"
VST32-3	3	5.5	7.5		58		57	53	49	43	35											109.5	2-1/2"
VST32-4	4	7.5	10		77		76	71	66	58	47											118.4	2-1/2"
VST32-6-2	6	11	15		109		109	104	95	84	67											161.8	2-1/2"
VST32-6	6	11	15		118		115	109	100	90	74											161.8	2-1/2"
VST32-8-2	8	15	20		147		147	140	130	114	92											178.6	2-1/2"
VST32-8	8	15	20		155		154	146	135	121	100											178.6	2-1/2"
VST32-10-2	10	18.5	25		187		187	178	165	145	119											217.7	2-1/2"
VST32-10	10	18.5	25		193		192	183	170	152	125											217.7	2-1/2"
VST32-12-2	12	22	30		226		226	215	200	176	145											234.8	2-1/2"
VST32-12	12	22	30		232		232	221	205	185	152											234.8	2-1/2"
VST32-14	14	30	40		273		273	262	243	218	180											344.3	2-1/2"
VST45-1-1	1	3	4		19			20	20	18	16	14										93.1	3"
VST45-2-2	2	5.5	7.5		40			42	40	38	35	26										117.6	3"
VST45-2	2	7.5	10		50			50	48	46	44	35										123.5	3"
VST45-3-2	3	11	15		66			66	65	62	59	46										164.5	3"
VST45-3	3	11	15		76			75	74	70	66	55										164.5	3"
VST45-4	4	15	20		102			100	98	95	90	75										178.9	3"
VST45-5	5	18.5	25		128			126	124	120	114	95										215.6	3"
VST45-6	6	22	30		152			152	150	144	135	115										231.1	3"
VST45-8	8	30	40		204			204	200	195	184	155										343.2	3"
VST45-10	10	37	50		254			256	250	242	230	195										368.7	3"
VST45-12	12	45	60		305			314	308	296	280	236										452.5	3"
VST64-2-2	2	7.5	10		40					39	38	35	30	24								117.6	4"
VST64-2-1	2	11	15		50					47	45	42	38	32								154.8	4"
VST64-2	2	11	15		60					54	52	49	45	40								154.8	4"
VST64-3-2	3	15	20		69					67	65	61	55	46								170	4"
VST64-3-1	3	15	20		79					75	73	68	61	53								170	4"
VST64-3	3	18.5	25		89					83	80	76	70	62								202.9	4"
VST64-4-2	4	18.5	25		98					95	93	87	78	67								206.9	4"
VST64-4-1	4	22	30		108					104	101	95	86	75								219.7	4"
VST64-4	4	22	30		118					111	108	102	94	83								219.7	4"
VST64-5	5	30	40		148					140	137	130	119	105								327.3	4"
VST64-6-2	6	30	40		157					153	150	141	129	112								331.2	4"
VST64-6	6	37	50		177					168	165	156	144	127								349.2	4"
VST64-7-1	7	37	50		196					189	185	175	160	140								353.3	4"
VST64-7	7	45	60		205					201	197	187	170	150								429.4	4"
VST64-8-2	8	45	60		213					213	209	198	180	157								433.5	4"
VST64-8-1	8	45	60		223					221	217	205	188	165								433.5	4"
VST90-1-1	1	5.5	7.5		25						21	20	19	17	15	11	6					115	4"
VST90-1	1	7.5	10		35						28	25	24	22	20	18	14					120.9	4"
VST90-2-2	2	11	15		48						45	43	40	36	32	26	17					163.5	4"
VST90-2	2	15	20		68						59	55	52	48	45	39	32					174.1	4"
VST90-3-2	3	18.5	25		80						75	71	66	62	55	47	36					212.2	4"
VST90-3	3	22	30		101						90	85	80	75	67	60	51					225	4"
VST90-4-2	4	30	40		115						107	102	96	90	80	70	56					333.9	4"
VST90-4	4	30	40		136						121	115	108	100	92	83	70					333.9	4"
VST90-5	5	37	50		169						152	145	135	126	115	105	89					356.6	4"
VST90-6-2	6	45	60		184						169	161	154	143	130	114	95					437.9	4"
VST90-6	6	45	60		205						185	175	165	155	141	127	110					437.9	4"
VST120-1	1	11	15		39								26	25	22	20	19	16	14			195.6	5"
VST120-2-1	2	18.5	25		49								45	43	39	36	33	29	24			249.1	5"
VST120-2	2	22	30		58								54	51	47	44	41	36	32			265.8	5"
VST120-3	3	30	40		86								81	78	72	67	63	56	50			375.5	5"
VST120-4-1	4	37	50		105								101	97	89	85	77	70	60			403.5	5"
VST120-5-1	5	45	60		135								129	124	114	108	100	90	70			489.6	5"
VST120-6-1	6	55	75		164								157	151	140	132	123	111	97			619.8	5"
VST120-7	7	75	100		201								194	186	171	163	152	140	124			746.4	5"
VST150-1-1	1	11	15		22										18	17	16	15	14	12	10	195.5	5"
VST150-1	1	15	20		31										25	23	21	20	19	18	17	206.1	5"
VST150-2-1	2	22	30		53										35	42	40	37	35	33	30	261.8	5"
VST150-3-2	3	30	40		76										64	60	57	55	51	48	45	375.3	5"
VST150-3	3	37	50		95										79	75	71	68	65	62	59	393.4	5"
VST150-4-1	4	45	60		118										99	95	90	85	81	77	72	479.4	5"
VST150-5-2	5	55	75		140										118	113	108	103	98	93	85	609.7	5"
VST150-6	6	75	100		191										162	155	147	141	135	129	120	736	5"

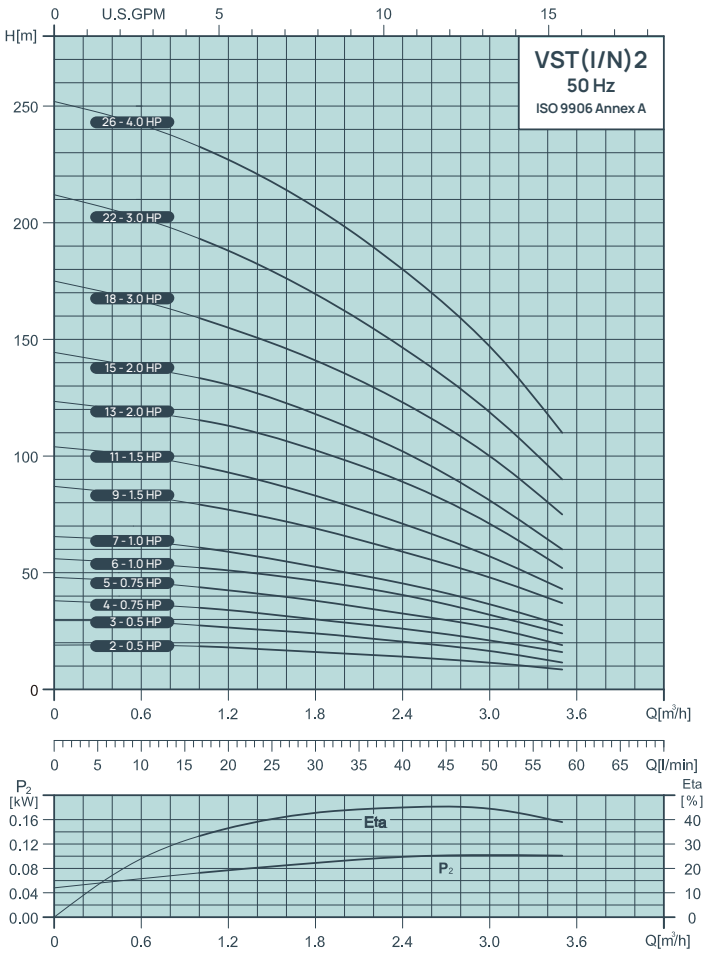
Head in Meters

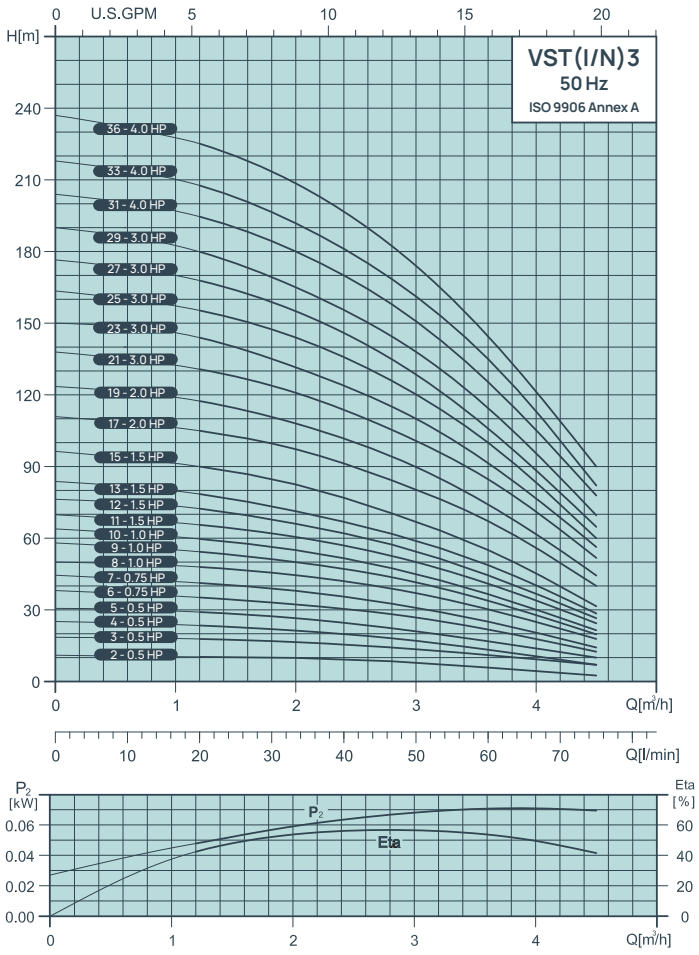
Performance Curves

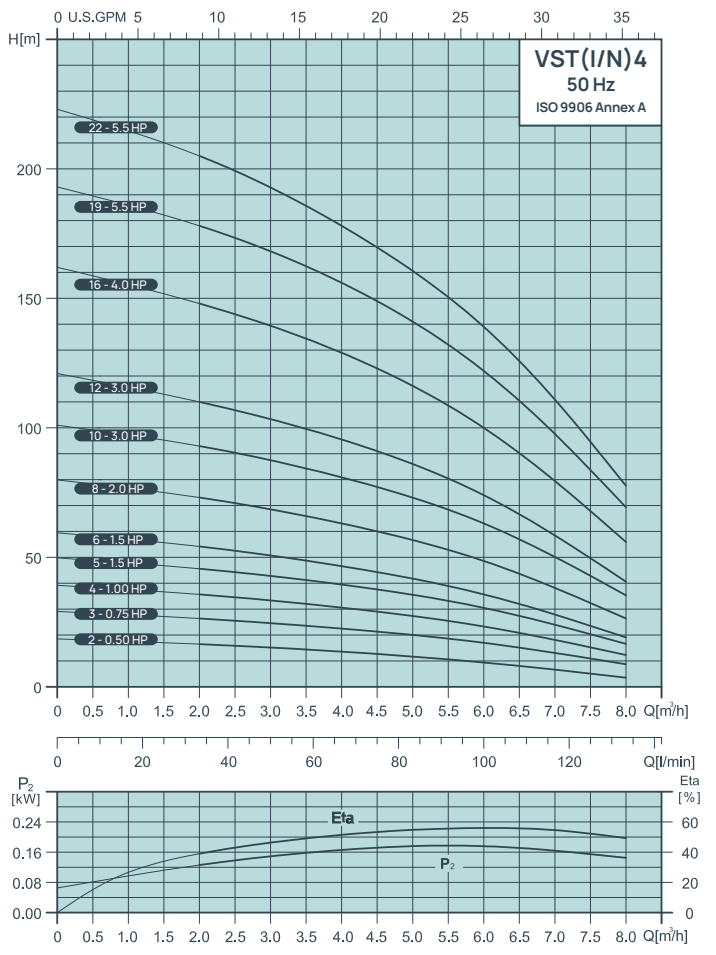
Vertical Multistage Centrifugal In-Line Pumps

STAGE





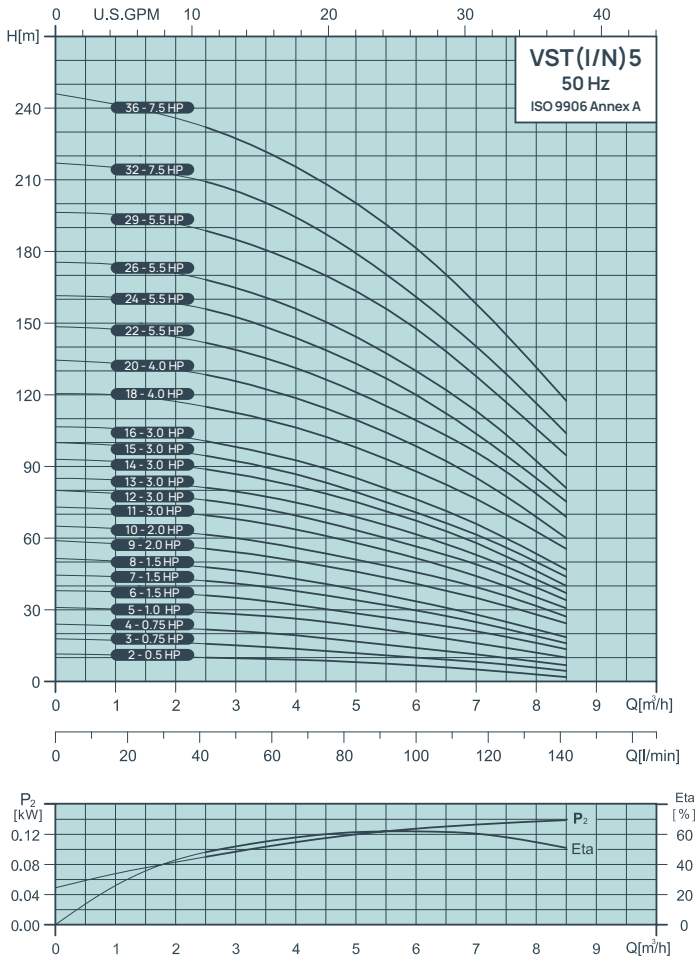


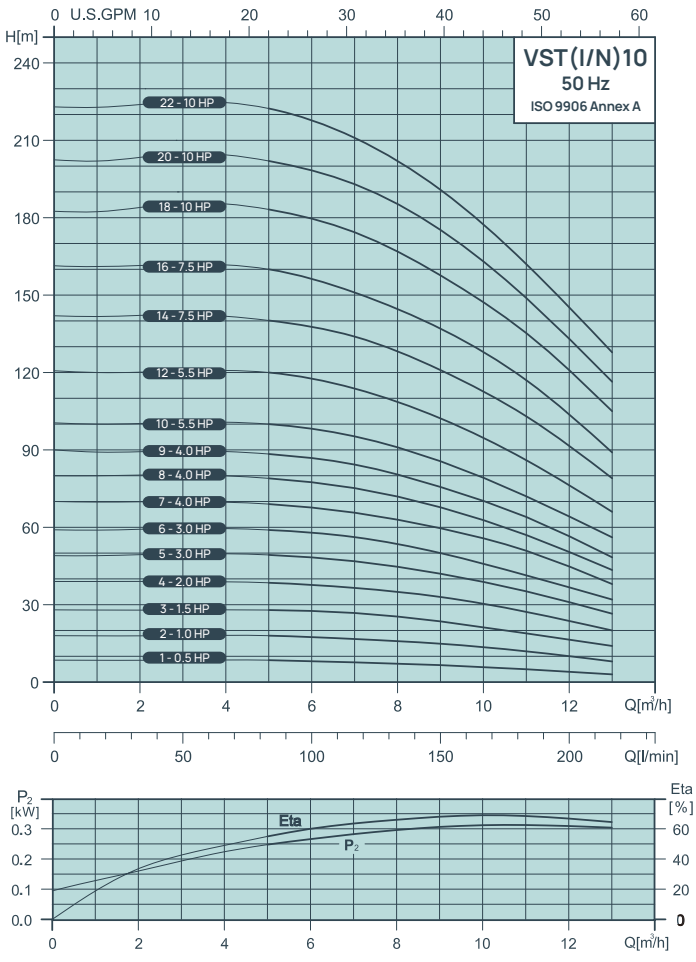


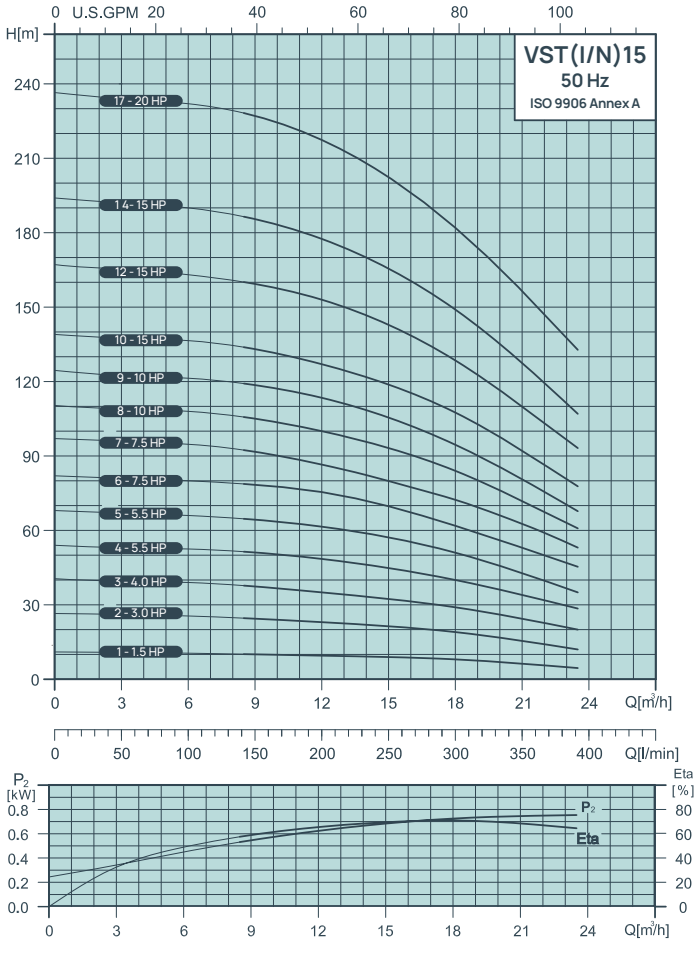
Performance Curves

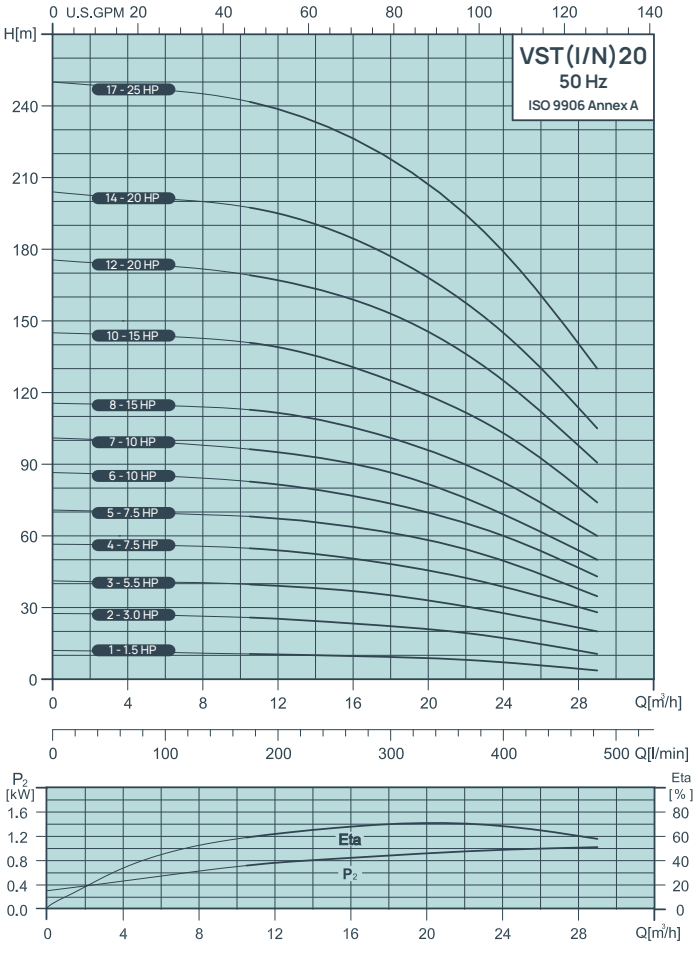
Vertical Multistage Centrifugal In-Line Pumps

STAGE





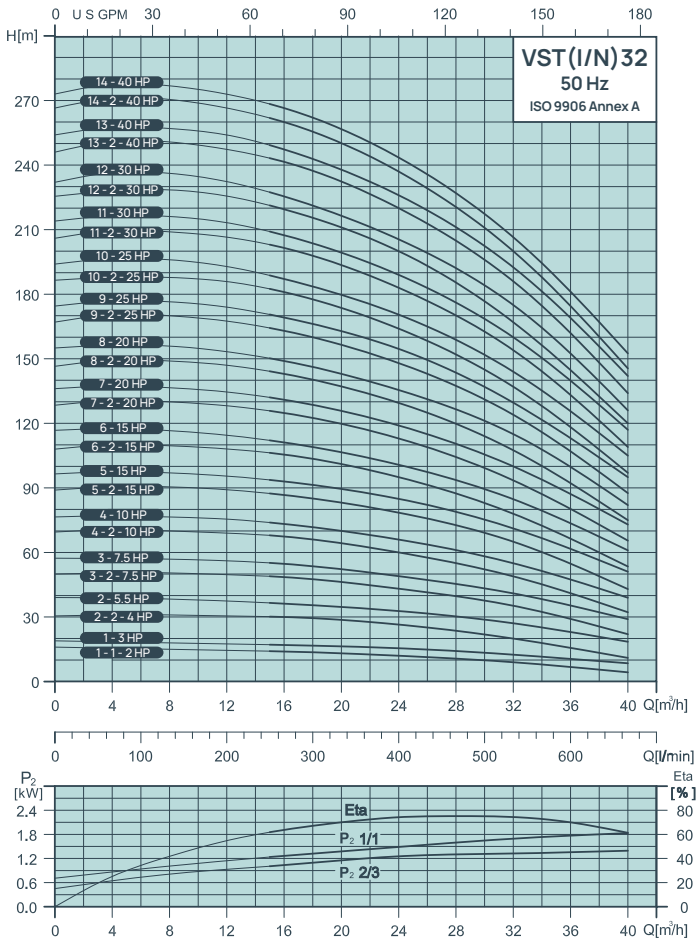


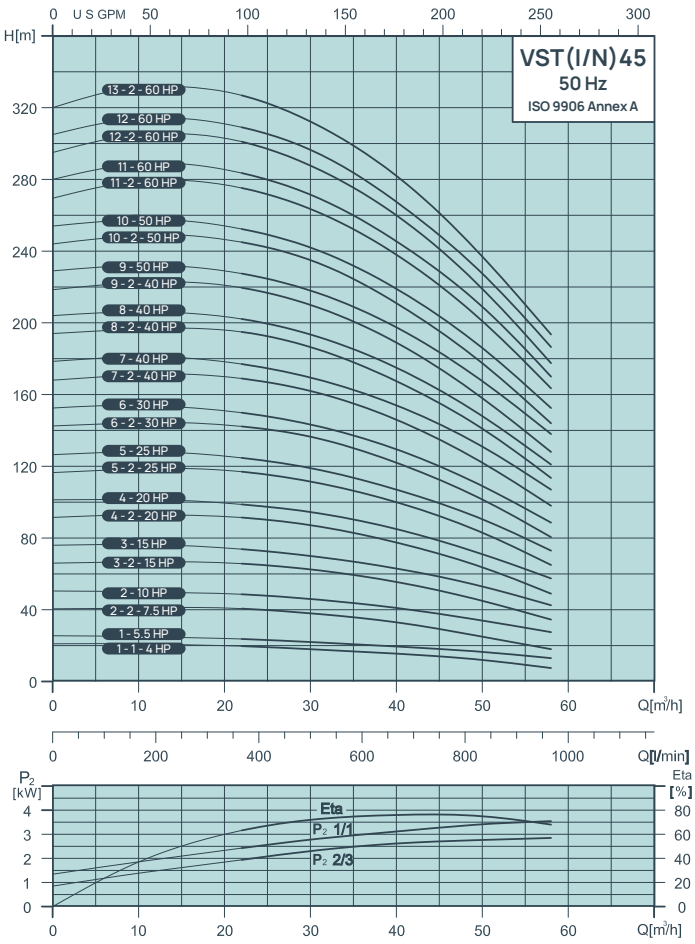


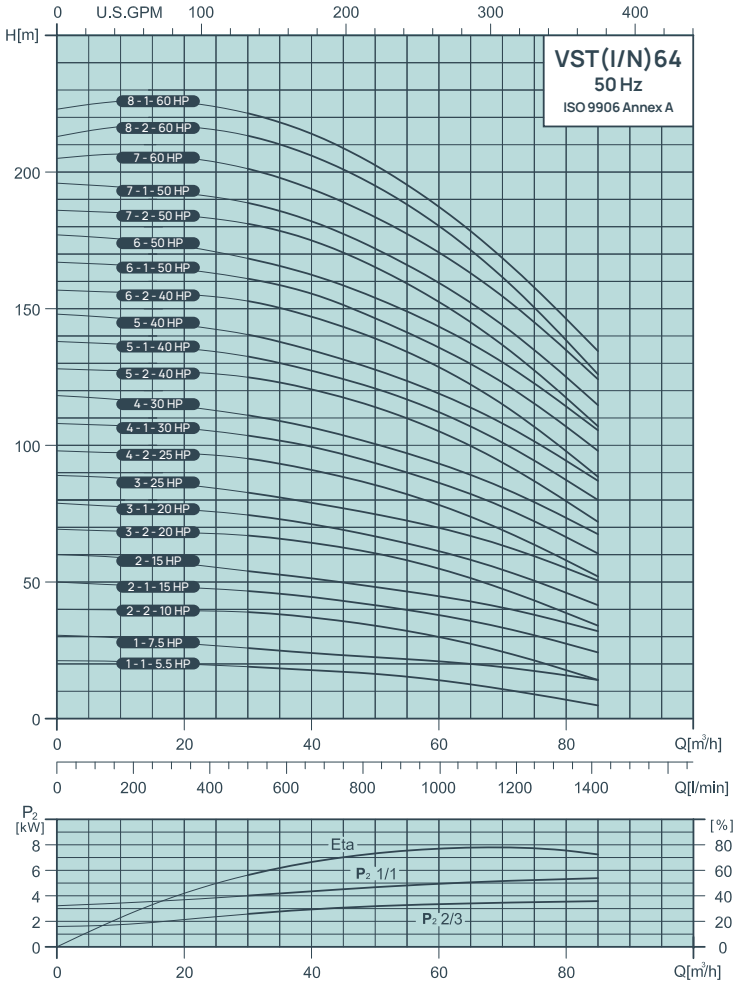
Performance Curves

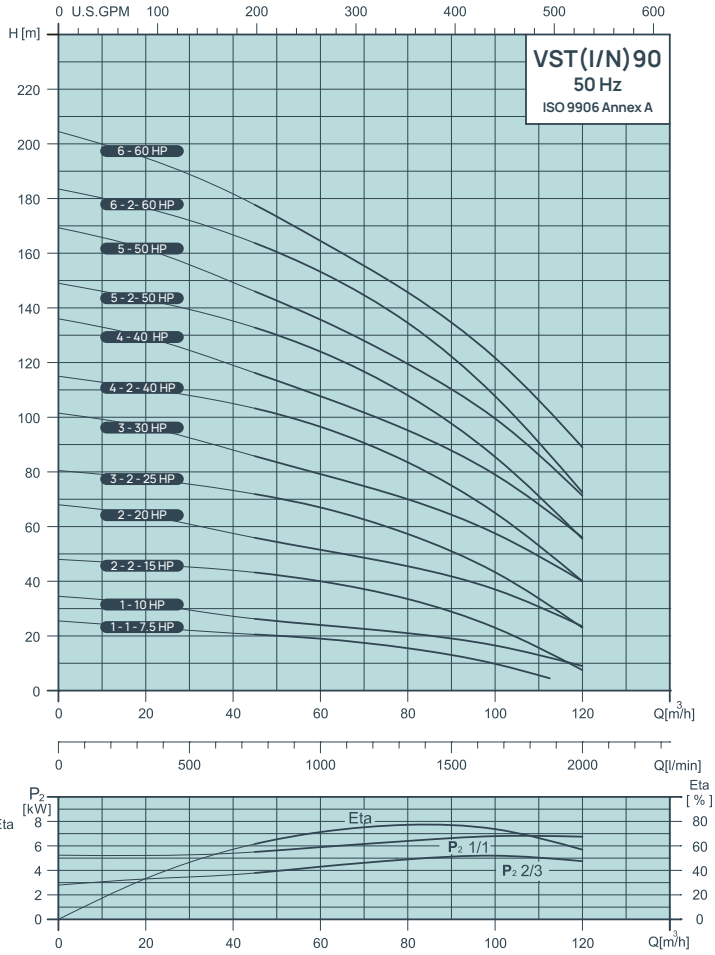
Vertical Multistage Centrifugal In-Line Pumps

STAGE





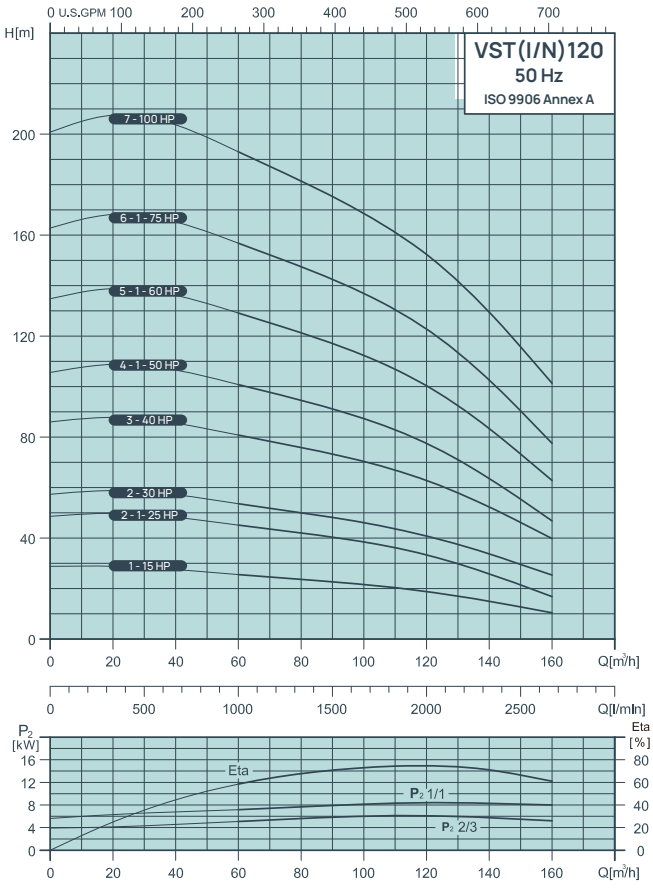


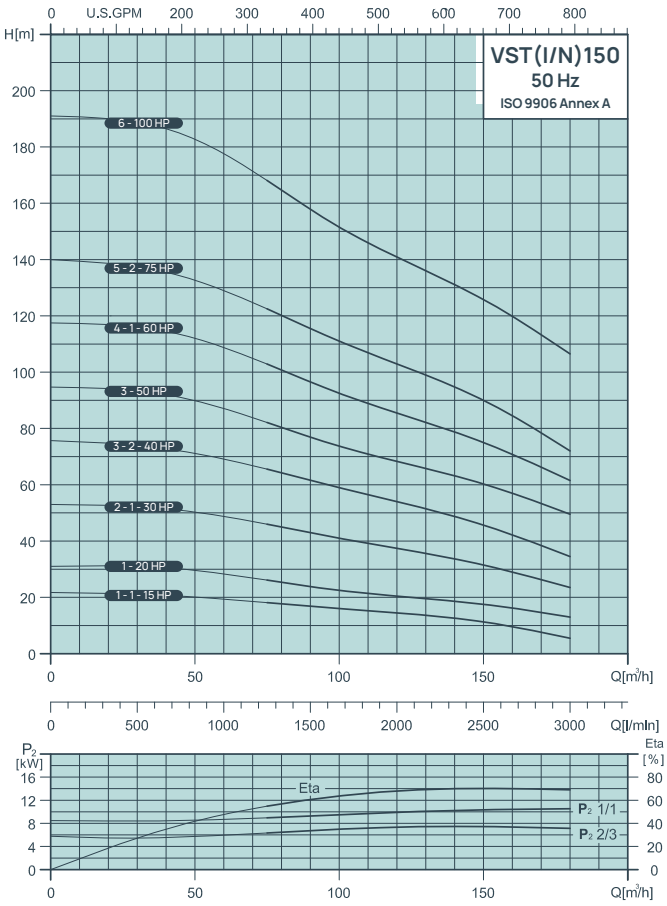


Performance Curves

Vertical Multistage Centrifugal In-Line Pumps

STAGE





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 mehanical seal can be replaced in minutes without special tools and without dismantling the pump.

IDENTIFICATION CODE

VST -10 -5 -1 -SQQV

- -SQQV — Shaftseal
  - S=Cartridge Type
  - Q= Silicon carbide
  - U = Tungsten carbide
  - B= Carbon
  - E = EPDM
  - V = Viton
- -1 — Number of small impeller
- -5 — Number of stages
- -10 — Flow rate in m³/h
- VST — Type range (VST / VSTI / VSTN)

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	2.5-2.5	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

- Ambient temperature: Max. +50°C
- Electrical data: Enclosure class: IP55 | Insulation class: F | Motor: IE3

PUMP

DURABLE & HEAVY-DUTY

STAGE VST, VSTI, and VSTN Series Pumps are high-performance vertical multistage pumps built for heavy-duty applications. With a durable, in-line design and flange or Victaulic coupling, they ensure smooth flow with equally sized suction and discharge ports. Made from stainless steel for strength and longevity, they feature a close-coupled IEC-standard motor shaft and a cartridge-type mechanical seal for easy maintenance. Available in multiple sizes and stages, they deliver the right flow and pressure for your needs.

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

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

Heating, Ventilation And Air-conditioning
- Boilers
- Induction heating
- Heat exchangers
- Refrigerators
- Cooling towers and systems
- Temperature control systems

Irrigation And Agriculture
- Greenhouses
- Sprinkler irrigation
- Field irrigation (flooding)

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

Pump type	Flange & Pje			
	Stages	Max. Operating Pressure	Stages	Max. Inlet Pressures
VST(I/N) 1	2 - 36	25 bar	2 - 36	10 bar
VST (I/N) 3	2 - 36	25 bar	2 - 29	10 bar
			31 - 36	15 bar
VST(I/N) 5	2 - 36	25 bar	2 - 16	10 bar
			18 - 36	15 bar
VST(I/N) 10	1 - 16	16 bar	1 - 6	8 bar
	17 - 22	25 bar	7 - 22	10 bar
VST(I/N) 15	1 - 10	16 bar	1 - 3	8 bar
	12 - 17	25 bar	4 - 17	10 bar
VST(I/N) 20	1 - 10	16 bar	1 - 3	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

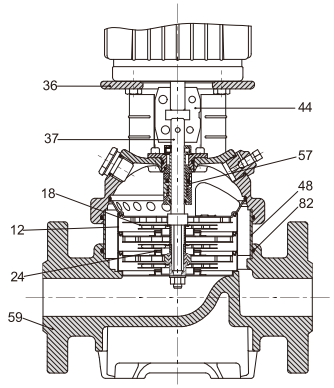
*Rule to follow : The inlet pressure+ the pressure against a closed valve ‹ Max. Operating pressure.

Max. Operating Pressure and Inlet Pressures

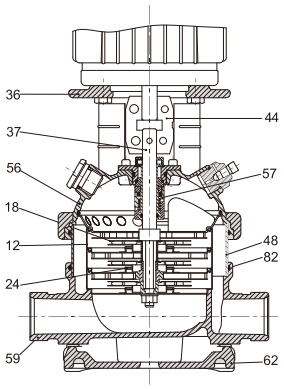
Vertical Multistage Centrifugal In-Line Pumps

STAGE

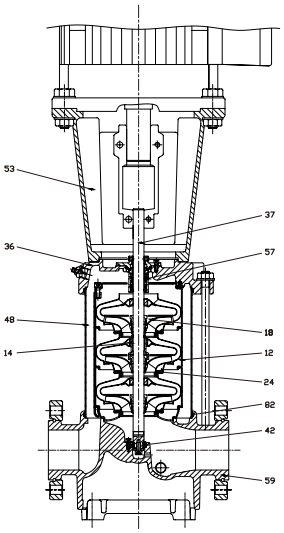
VST 1, 2, 3, 4, 5, 10, 15, 20



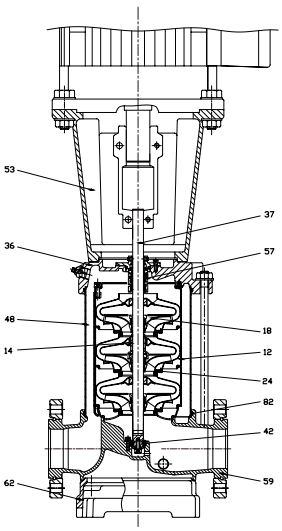
VST(I/N) 1, 2, 3, 4, 5, 10, 15, 20



VST 32, 45, 64, 90



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



CONSTRUCTION

Pos.	Name	Material	VST 1,2,3,4,5,10,15,20 Standard		VST 1,2,3,4,5,10,15,20 Standard		VST 1,2,3,4,5,10,15,20 Standard	
			Europe	USA	Europe	USA	Europe	USA
36	Pump Head	Cast Iron	EN-GJL-200	ASTM 25B	EN-GJL-450-10	ASTM 65-45-12	EN-GJL-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

Pos.	Name	Material	VST 32, 45, 64, 90 Standard		VST 32, 45, 64, 90 Standard		VST 32, 45, 64, 90 Standard	
			Europe	USA	Europe	USA	Europe	USA
36	Pump Head	Cast Iron	EN-GJL-250	ASTM 25B				
		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						

STAGE

ISO 9001 2015 CERTIFIED

CE