



SP 4",6",8",10" series

Stainless Steel Submersible Pumps

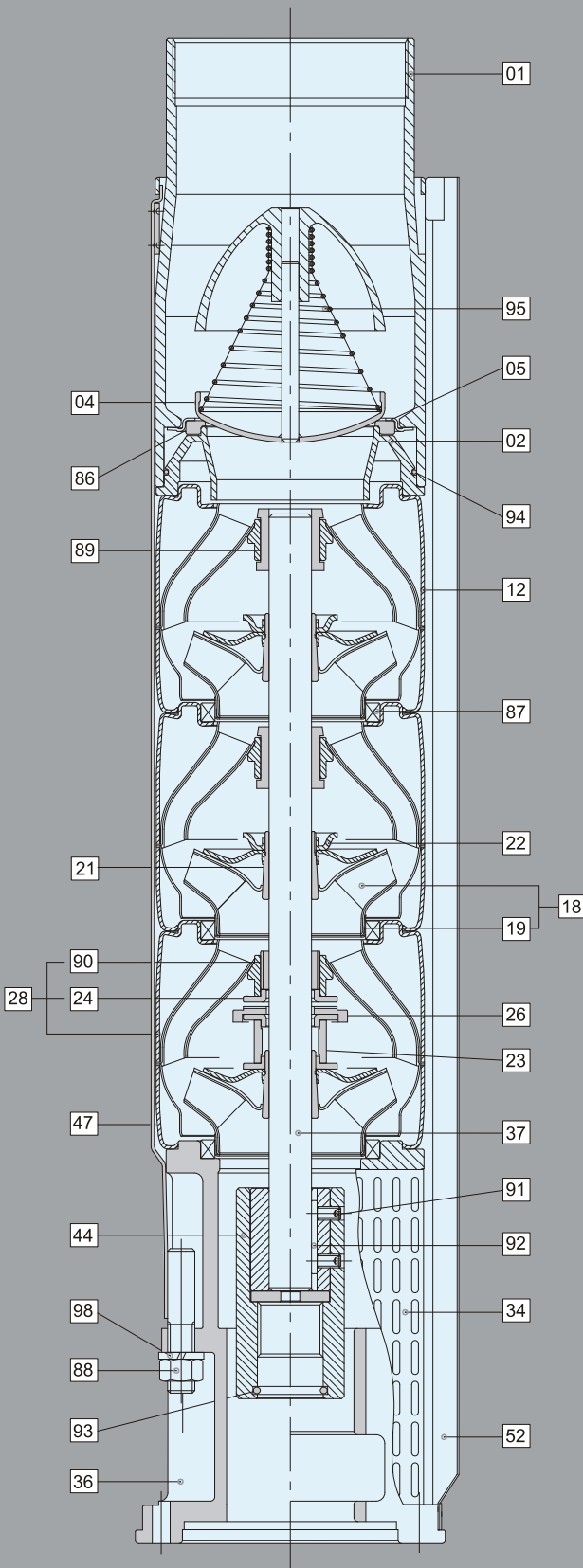
50Hz



STAIRS INDUSTRIAL CO., LTD.

General Data

Example: SP500



Material Specification-8" Pumps

Pos.	Components	Standard
01	Discharge	SUS304 / SUS316
02	Lower Valve Seat Retainer	SUS304 / SUS316
04	Valve Cup	SUS304 / SUS316
05	Upper Valve Seat Retainer	SUS304 / SUS316
12	Diffuser	SUS304 / SUS316
18	Impeller	SUS304 / SUS316
19	Ring Of Impeller	SUS304 / SUS316
21	Split Cone	SUS304 / SUS316
22	Split Cone Nut	SUS304 / SUS316
23	Nut For Stop Ring	SUS304 / SUS316
24	Stop Ring	SUS304 / SUS316
26	Spacing Washer For Stop Ring	Carbon+Graphite+PTFE
28	Bottom Diffuser	SUS304 / SUS316
34	Strainer	SUS304 / SUS316
36	Suction Interconnector	SUS304 / SUS316
37	Pump Shaft	SUS431 / SUS316
44	Coupling	SUS304 / SUS316
47	Strap	SUS304 / SUS316
52	Cable Guard	SUS304 / SUS316
86	Valve Seat	NBR
87	Neck Ring	SUS304+NBR / SUS316+NBR
88	Nut	SUS304 / SUS316
89	Bearing	NBR
90	Bearing	US304+NBR / SUS316+NBR
91	Screw	SUS304 / SUS316
92	Key	SUS304 / SUS316
93	O-ring	NBR
94	O-ring	NBR
95	Spring	SUS304 / SUS316
98	Spring Washer	SUS304 / SUS316

*AISI 316 stainless steel pumps are available on request.

General Data

8" Stainless Steel Submersible Pumps

Stairs' SP 8" range of submersible pumps are made of corrosion and abrasion resistant stainless steel and have been developed in accordance with state of the art technology, which is also for heavy duty and high volume pumping application. The SP 8" pumps are manufactured to the highest standards of highly efficient hydraulic impeller and diffuser design to reach high energy efficiency, dependable performance, rugged construction and long service life, even in difficult environments.

Applications

- ◆ Potable water supply
- ◆ Agricultural irrigation and livestock watering
- ◆ Municipal and industrial water supply
- ◆ Pressure boosting
- ◆ Mining applications
- ◆ Groundwater lowering
- ◆ Fountain

Pumped Liquids

- ◆ Clean, thin, non-aggressive and non-corrosive liquids without solid particles or fibers.

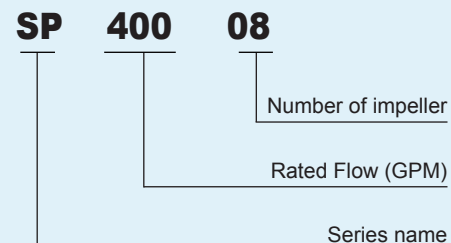
Operating Conditions

- ◆ Capacity (m³/h) min 12 max 120
- ◆ Total Head: Max. 441 m
- ◆ Max. ambient temperature (Liquid): 40°C
- ◆ Sand content: Max. 50 g/m³

Screen size of each hole: 20 x 4 mm



Model code



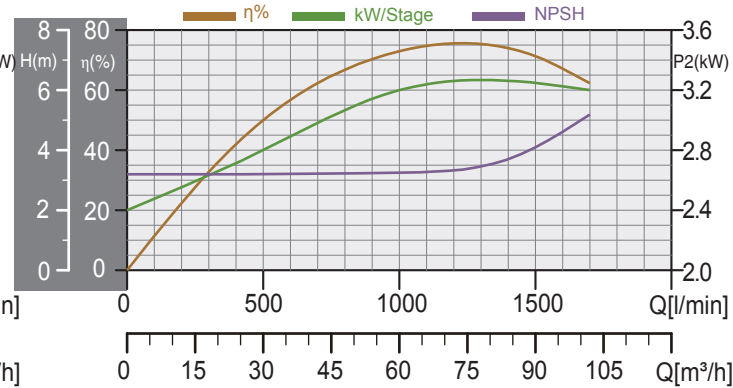
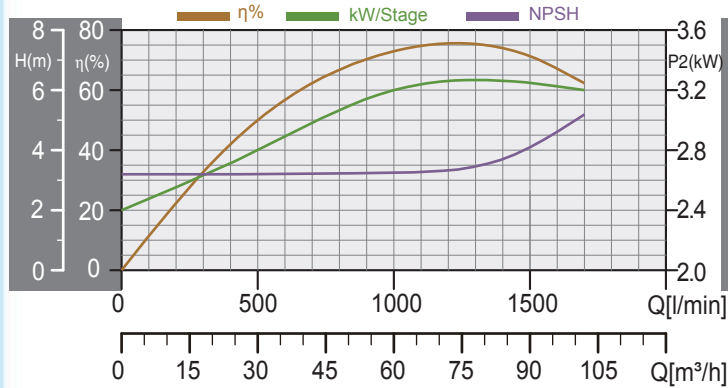
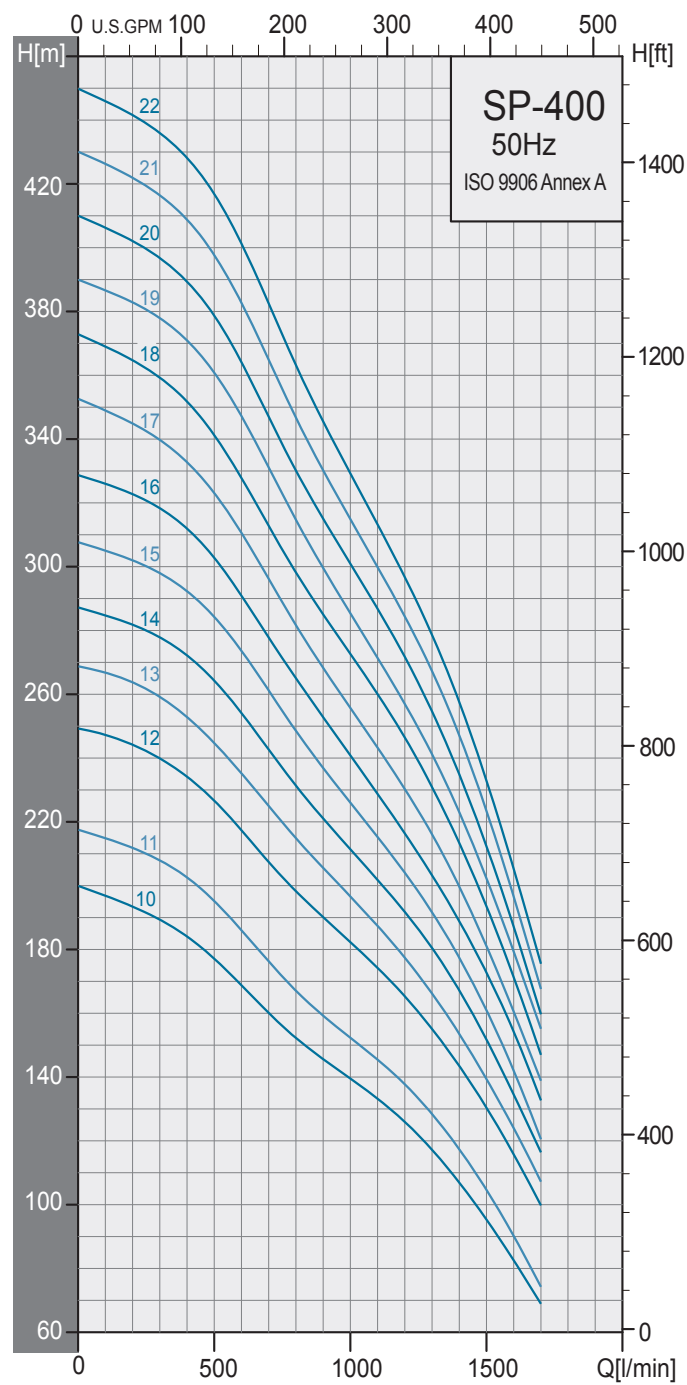
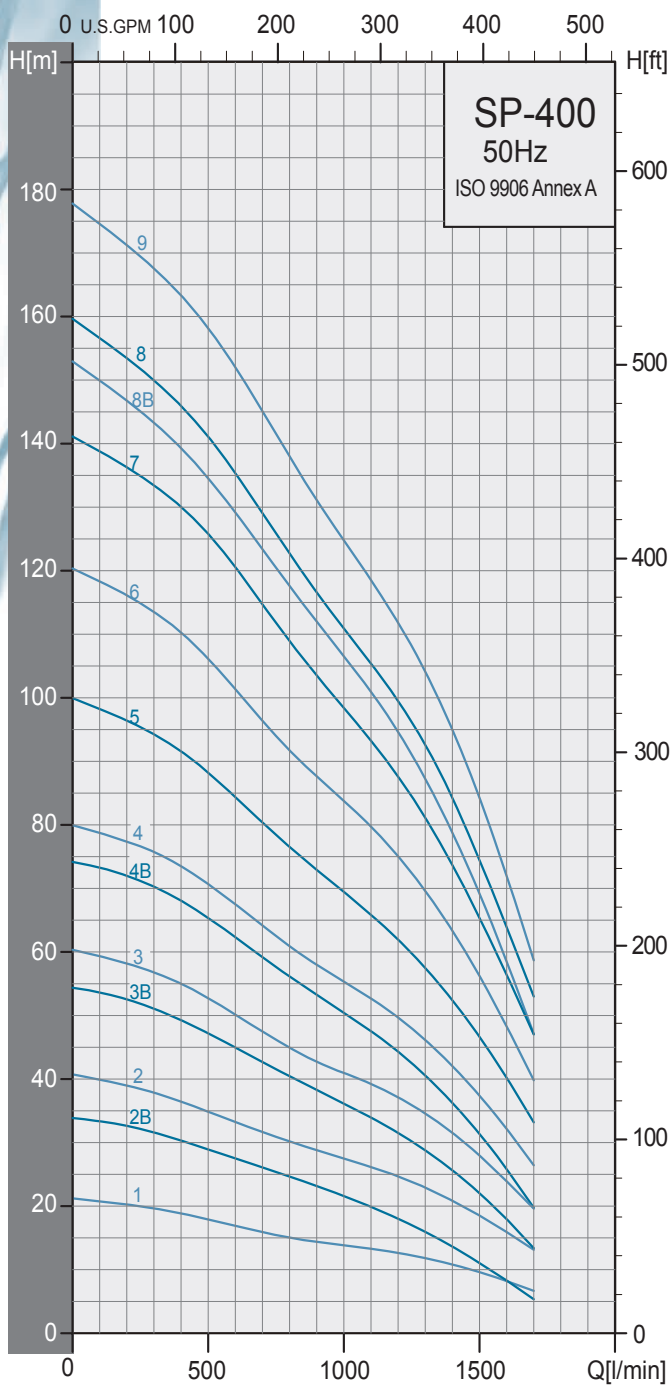
Features

- ◆ Stainless steel construction designed and built for years of trouble free operation
- ◆ Designed and built to operate in difficult conditions.
- ◆ All metal parts are made of 304 or 316 stainless steel, except for the shafts, which are made of 431 or 316 stainless steel.
- ◆ Heavy duty stainless steel discharge head with built-in check valve for preventing back flow in connection with pump stoppage and the risk of destructive water hammer is reduced to a minimum.
- ◆ NEMA standard of bracket mounting.
- ◆ High quality shaft bearings provide low friction and high wear resistance.
- ◆ The stop ring prevents damage to the pump during transport and in case of up-thrust in connection with start-up. The stop ring, which is designed as a thrust bearing, limits axial movements of the pump shaft.
- ◆ Stainless steel strainer to restrict the entry of sand and other extraneous material.

Stairs SP Series

SP 8"

SP400 Performance Curves



Selection Chart

50Hz

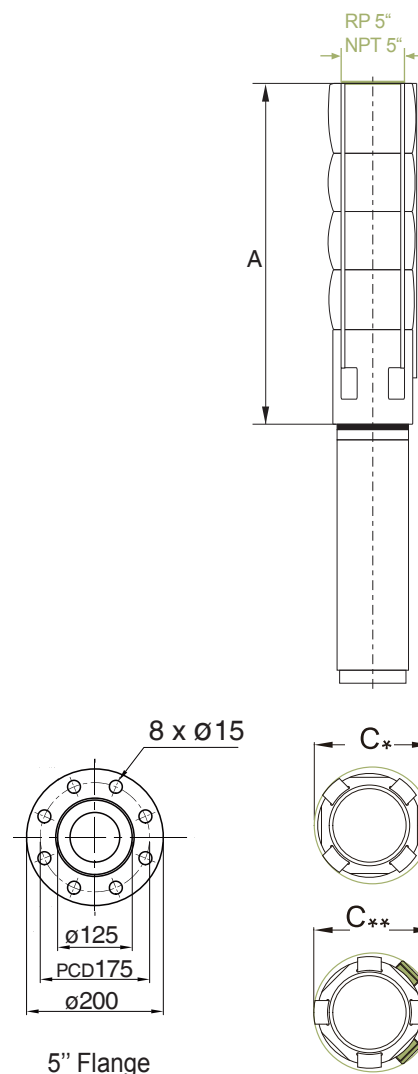
Pump Type	Motor		m³/h l/min	Q capacity 2850 rpm											
	P2			12	18	24	30	36	42	48	54	66	78	90	102
	KW	HP		200	300	400	500	600	700	800	900	1100	1300	1500	1700
SP 400-1	5.5	7.5	HEAD IN METERS	20	20	19	18	17	16	15	14	13	12	9	7
SP 400-2B	5.5	7.5		33	32	30	28	27	26	25	23	20	16	11	6
SP 400-2	7.5	10		38	37	36	35	33	32	30	28	26	23	18	13
SP 400-3B	9.3	12.5		53	51	49	47	45	43	40	38	34	28	22	13
SP 400-3	11	15		58	57	55	53	50	47	45	43	39	35	28	20
SP 400-4B	13	17.5		72	70	68	65	62	59	56	53	47	40	31	20
SP 400-4	15	20		77	76	74	71	67	64	61	58	53	46	37	27
SP 400-5	18.5	25		96	94	92	88	84	80	76	73	66	57	46	33
SP 400-6	22	30		116	113	110	106	101	96	92	88	80	70	56	40
SP 400-7	26	35		136	133	130	126	120	115	109	104	93	81	65	47
SP 400-8B	26	35		147	143	139	134	129	123	117	112	101	87	69	47
SP 400-8	30	40		153	150	146	141	135	129	123	117	105	93	75	53
SP 400-9	30	40		171	167	163	158	152	145	138	131	118	104	84	58
SP 400-10	37	50		193	188	183	177	168	160	152	145	132	117	94	68
SP 400-11	37	50		211	207	202	195	186	176	167	159	145	128	104	74
SP 400-12	45	60		244	240	234	227	217	207	198	190	173	154	130	99
SP 400-13	55	75		263	259	252	244	235	224	214	205	187	166	139	107
SP 400-14	55	75		282	278	272	264	254	242	231	221	201	180	151	116
SP 400-15	55	75		302	298	292	284	273	260	248	237	215	191	160	120
SP 400-16	63	85		322	318	312	302	290	278	265	252	228	202	172	132
SP 400-17	63	85		345	340	333	323	310	296	281	268	243	216	181	138
SP 400-18	63	85		365	359	352	341	328	312	298	285	260	230	193	147
SP 400-19	75	100	383	378	371	361	347	331	314	299	271	241	202	155	
SP 400-20	75	100	402	397	389	379	364	347	330	315	287	254	212	159	
SP 400-21	75	100	422	416	409	398	383	365	347	330	300	267	223	167	
SP 400-22	93	125	442	436	428	417	401	382	363	345	313	278	233	175	

*Higher pressure , longer stages pumps up to 22 stages are available on request.

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)						Net Weight
		5"Connection(RP,NPT)			5"Flange			(Kg)
		A	C*	C**	A	C*	C**	Pump
SP 400-1	6"	618	178	186	618	200	200	25.1
SP 400-2B	6"	746	178	186	746	200	200	28.7
SP 400-2	6"	746	178	186	746	200	200	28.7
SP 400-3B	6"	874	178	186	874	200	200	32.3
SP 400-3	6"	874	178	186	874	200	200	32.3
SP 400-4B	6"	1003	178	186	1003	200	200	35.9
SP 400-4	6"	1003	178	186	1003	200	200	35.9
SP 400-5	6"	1131	178	186	1131	200	200	39.5
SP 400-6	6"	1259	178	186	1259	200	200	43
SP 400-7	6"	1387	178	186	1387	200	200	46.6
SP 400-8B	6"	1515	178	186	1515	200	200	50.2
SP 400-8	6"	1515	178	186	1515	200	200	50.2
SP 400-9	6"	1644	178	186	1644	200	200	53.8
SP 400-10	6"	1772	178	186	1772	200	200	57.4
SP 400-11	6"	1900	178	186	1900	200	200	61
SP 400-12	8"	2039	200	204	2039	209	209	67
SP 400-13	8"	2168	200	204	2168	209	209	70.6
SP 400-14	8"	2296	200	204	2296	209	209	74.2
SP 400-15	8"	2424	200	204				77.8
SP 400-16	8"	2552	200	204				81.4
SP 400-17	8"	2680	200	204				85.2
SP 400-18	8"	2809	200	204				88.6
SP 400-19	8"	2937	200	204				92.2
SP 400-20	8"	3065	200	204				95.8
SP 400-21	8"	3193	200	204				99.4
SP 400-22	8"	3321	200	204				103

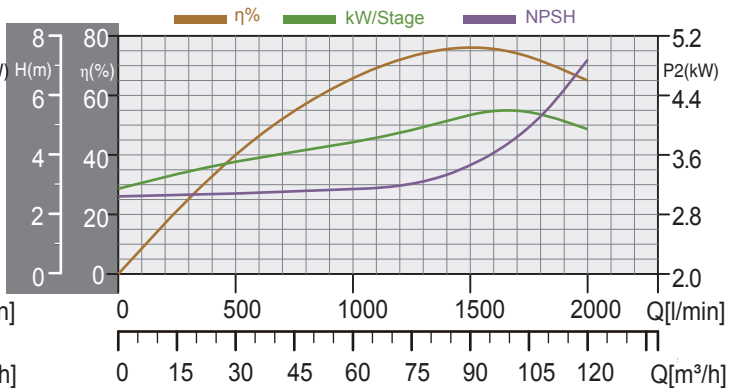
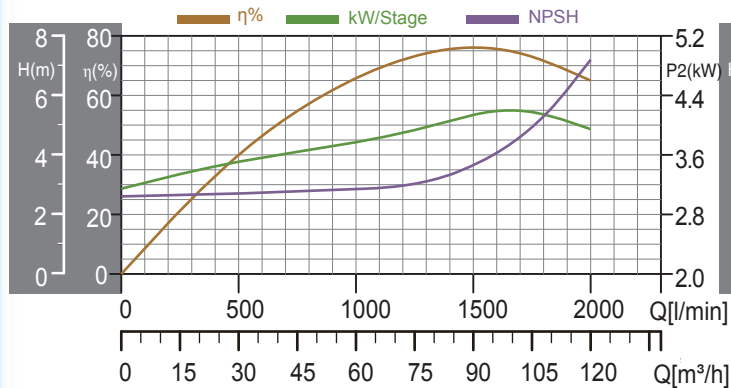
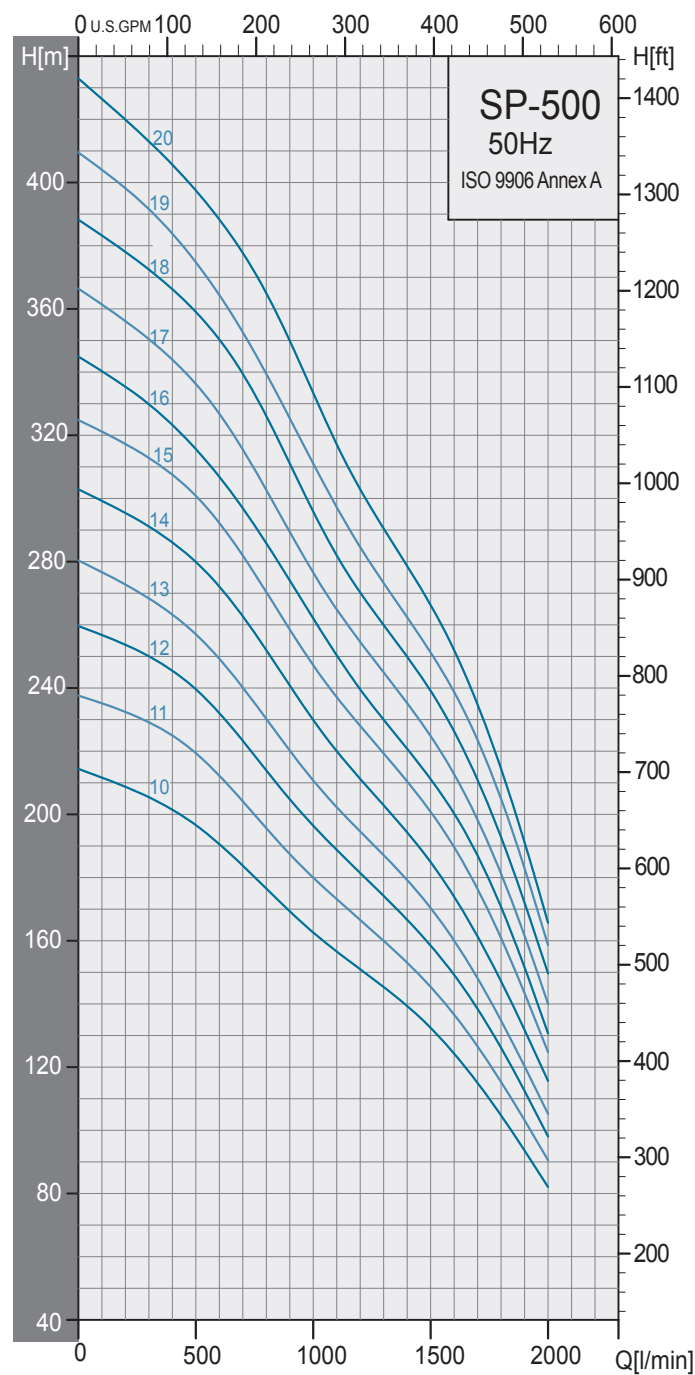
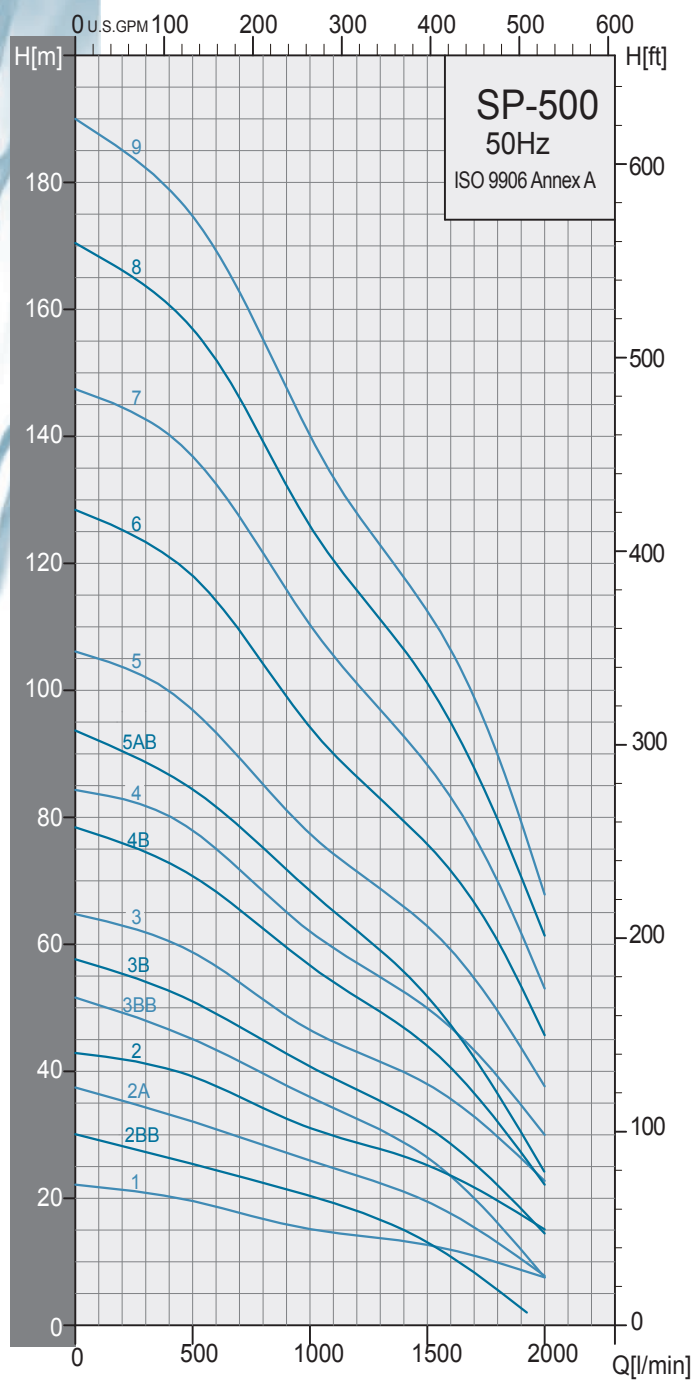
C*: Maximum diameter of pump with one motor cable
C**: Maximum diameter of pump with two motor cable



Stairs SP Series

SP 8"

SP500 Performance Curves



Selection Chart

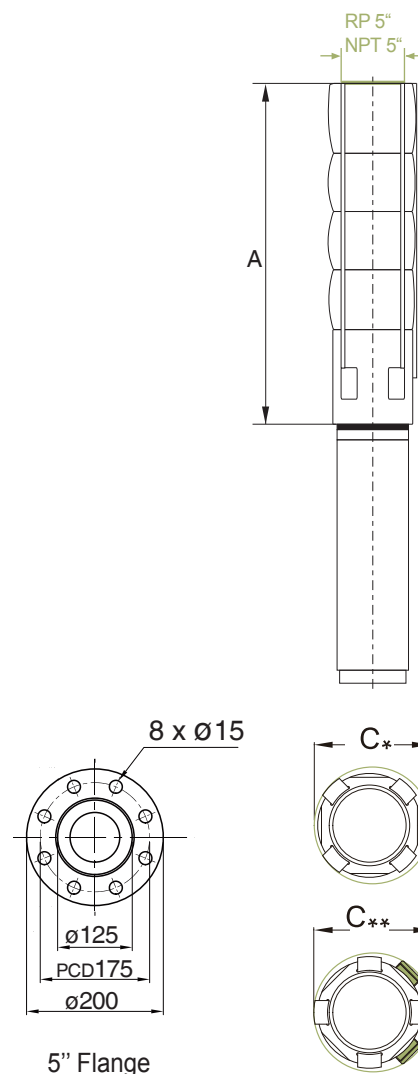
50Hz

Pump Type	Motor		Q capacity 2850 rpm												
	P2		m³/h l/min	18	24	30	36	42	48	60	72	84	96	108	120
	KW	HP		300	400	500	600	700	800	1000	1200	1400	1600	1800	2000
SP 500-1	5.5	7.5	HEAD IN METERS	21	20	19	18	18	17	15	14	13	12	10	8
SP 500-2BB	5.5	7.5		27	26	25	24	23	22	20	18	15	11	5	-
SP 500-2A	7.5	10		34	33	32	31	30	28	26	24	21	17	13	8
SP 500-2	9.3	12.5		41	40	39	37	36	34	31	29	26	23	20	15
SP 500-3BB	9.3	12.5		48	46	45	43	41	40	36	33	28	23	16	8
SP 500-3B	11	15		54	53	51	49	47	45	41	37	33	28	22	15
SP 500-3	13	17.5		62	60	59	57	54	51	47	43	40	35	30	23
SP 500-4B	15	20		74	73	71	68	65	62	56	52	47	40	32	22
SP 500-4	18.5	25		82	80	78	75	72	68	62	57	53	47	39	30
SP 500-5AB	18.5	25		89	87	84	82	78	75	68	62	55	47	36	25
SP 500-5	22	30		102	100	97	94	90	85	77	72	66	59	50	38
SP 500-6	26	35		123	121	118	114	110	104	94	86	79	72	60	46
SP 500-7	30	40		143	140	137	132	127	121	110	101	93	83	70	53
SP 500-8	37	50		164	160	157	152	146	139	126	116	106	95	80	62
SP 500-9	37	50		182	179	175	169	163	155	140	128	118	106	90	68
SP 500-10	45	60		206	201	197	190	183	177	162	150	140	124	105	82
SP 500-11	55	75		230	225	220	212	204	196	180	167	152	137	116	90
SP 500-12	55	75		250	245	240	231	222	214	197	181	167	150	126	99
SP 500-13	55	75		268	263	258	250	240	230	210	195	180	160	135	106
SP 500-14	63	85		291	286	280	271	261	251	230	210	194	174	147	116
SP 500-15	75	100	312	308	300	292	281	270	248	228	210	190	160	126	
SP 500-16	75	100	330	323	316	307	297	286	262	240	221	200	171	131	
SP 500-17	75	100	350	344	336	327	316	302	277	255	235	212	180	140	
SP 500-18	93	125	372	366	360	350	340	326	296	270	250	227	192	150	
SP 500-19	93	125	392	384	375	364	353	339	311	285	262	239	205	159	
SP 500-20	93	125	412	406	397	388	378	365	333	302	279	251	214	166	

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)						Net Weight (Kg)
		5"Connection(RP,NPT)			5"Flange			Pump
		A	C*	C**	A	C*	C**	
SP 500-1	6"	618	178	186	618	200	200	25.1
SP 500-2BB	6"	746	178	186	746	200	200	28.7
SP 500-2A	6"	746	178	186	746	200	200	28.7
SP 500-2	6"	746	178	186	746	200	200	28.7
SP 500-3BB	6"	874	178	186	874	200	200	32.3
SP 500-3B	6"	874	178	186	874	200	200	32.3
SP 500-3	6"	874	178	186	874	200	200	32.3
SP 500-4B	6"	1003	178	186	1003	200	200	35.9
SP 500-4	6"	1003	178	186	1003	200	200	35.9
SP 500-5AB	6"	1131	178	186	1131	200	200	39.5
SP 500-5	6"	1131	178	186	1131	200	200	39.5
SP 500-6	6"	1259	178	186	1259	200	200	43
SP 500-7	6"	1387	178	186	1387	200	200	46.6
SP 500-8	6"	1515	178	186	1515	200	200	50.2
SP 500-9	6"	1644	178	186	1644	200	200	53.8
SP 500-10	8"	1783	196	204	1783	205	205	60.1
SP 500-11	8"	1911	196	204	1911	205	205	63.7
SP 500-12	8"	2039	196	204	2039	205	205	67.3
SP 500-13	8"	2168	196	204	2168	205	205	71
SP 500-14	8"	2296	196	204	2296	205	205	74.6
SP 500-15	8"	2424	196	204				78.2
SP 500-16	8"	2552	196	204				81.8
SP 500-17	8"	2680	196	204				85.4
SP 500-18	8"	2809	196	204				89
SP 500-19	8"	2937	196	204				92.6
SP 500-20	8"	3065	196	204				96.2

C*: Maximum diameter of pump with one motor cable
C**: Maximum diameter of pump with two motor cable





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