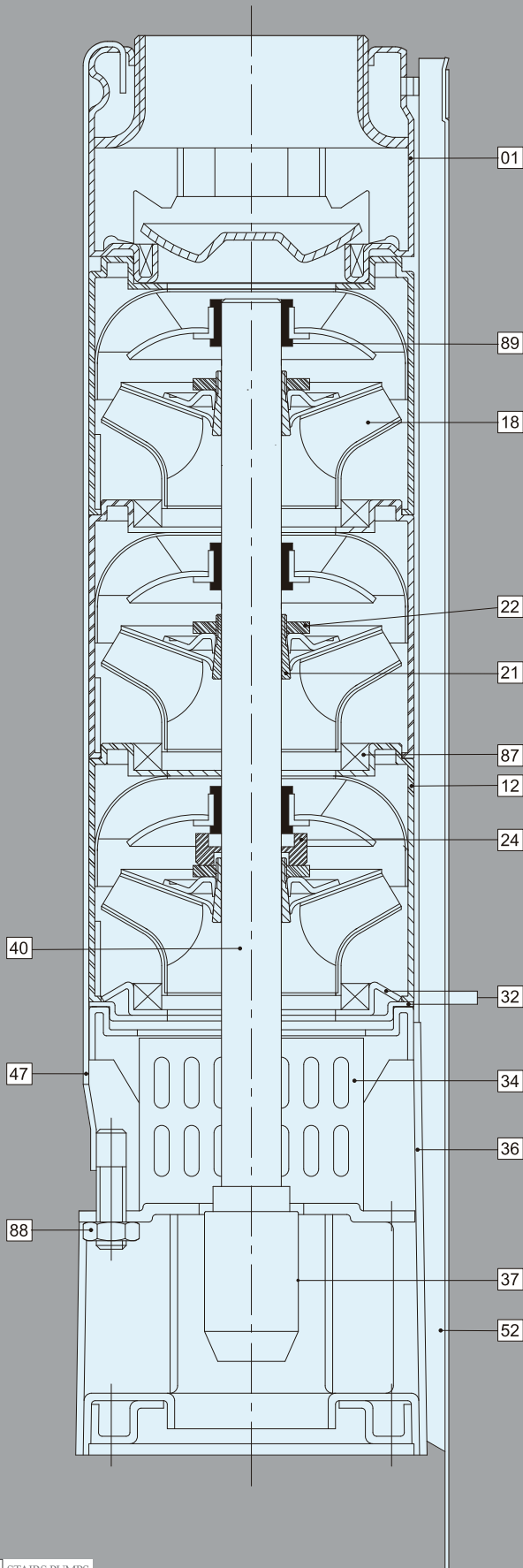


General Data

Example: SP-70



Material Specification-4" Pumps

Pos.	Components	Standard
01	Discharge	SUS304 / SUS316
12	Diffuser	SUS304 / SUS316
18	Impeller	SUS304 / SUS316
21	Split Cone	SUS304 / SUS316
22	Split Cone Nut	SUS304 / SUS316
24	Stop Ring	Carbon+Graphite+PTFE
32	Neck Ring Retainer	SUS304 / SUS316
34	Strainer	SUS304 / SUS316
36	Suction Interconnector	SUS304 / SUS316
37	Coupling	SUS304 / SUS316
40	Pump Shaft	SUS304 / SUS431 / SUS316
47	Strap	SUS304 / SUS316
52	Cable Guard	SUS304 / SUS316
87	Neck Ring	SUS304+NBR / SUS316+NBR
88	Nut	SUS304 / SUS316
89	Bearing	NBR

*AISI 316 stainless steel pumps are available on request.

General Data

4" Stainless Steel Submersible Pumps

Stairs' SP 4" 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. The SP 4" 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 0.3 max 21
- ◆ Total Head: Max. 675 m
- ◆ Max. ambient temperature (Liquid): 30°C
- ◆ Sand content: Max. 50 g/m³
- ◆ Screen size of each hole:

5 x 1 mm (SP-05~10)



Ø2.5 mm (SP-18~25)

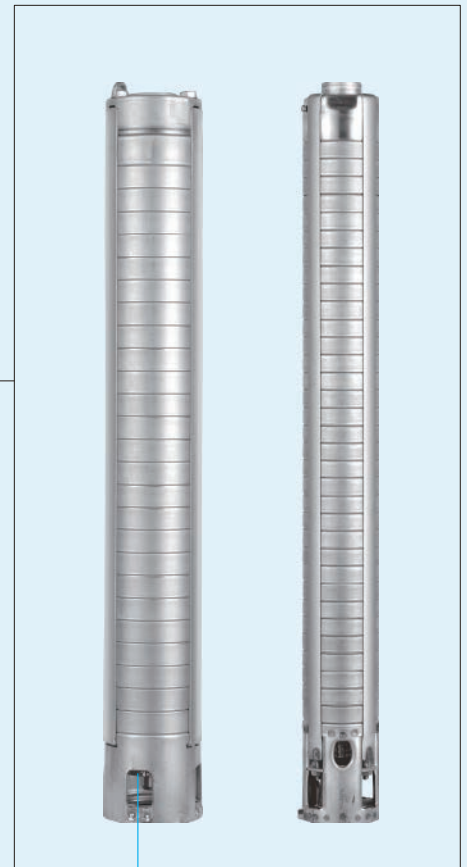


20 x 4 mm (SP-40~70)



Features

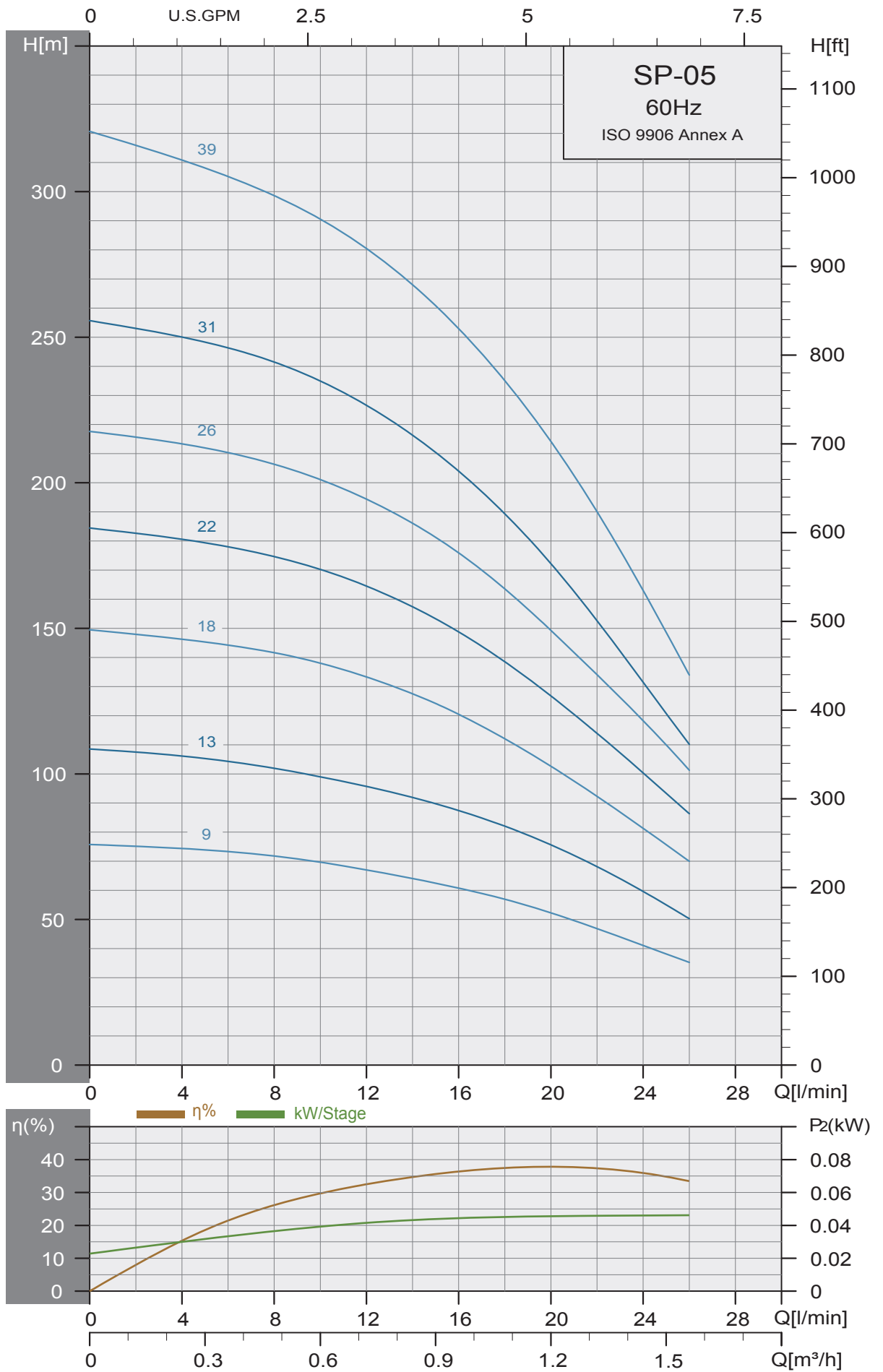
- ◆ Stainless steel construction designed and built for years of trouble free operation
- ◆ Designed and built to operate in difficult conditions.
- ◆ All metal parts are made of 304 or 316 stainless steel, except for the shafts, which are made of 431, 304 or 316 stainless steel.
- ◆ Heavy duty stainless 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.
- ◆ Smooth safety hook.
- ◆ 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 4"

SP05 Performance Curves



Selection Chart

60Hz

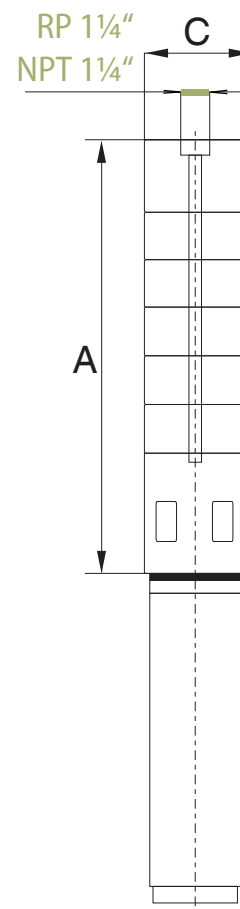
Pump Type	Motor		Q capacity 3450 rpm						
	P2		l/min m³/h	0	5	10	15	20	25
	KW	HP		0	0.3	0.6	0.9	1.2	1.5
SP-0509	0.25	0.33	HEAD IN METERS	76	74	70	62	52	38
SP-0513	0.37	0.5		108	105	99	90	76	55
SP-0518	0.55	0.75		150	145	138	124	102	75
SP-0522	0.75	1		183	179	170	153	127	93
SP-0526	1.1	1.5		218	212	201	181	149	110
SP-0531	1.1	1.5		256	248	235	210	172	121
SP-0539	1.5	2		320	308	291	261	214	148

*Higher pressure , longer stages pumps up to 39 stages are available on request.

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)		Net Weight (Kg) Pump
		A	C	
SP-0509	4"	356	98	2.9
SP-0513	4"	440	98	3.6
SP-0518	4"	545	98	4.4
SP-0522	4"	629	98	5.1
SP-0526	4"	713	98	5.8
SP-0531	4"	841	98	8.8
SP-0539	4"	1009	98	10.7

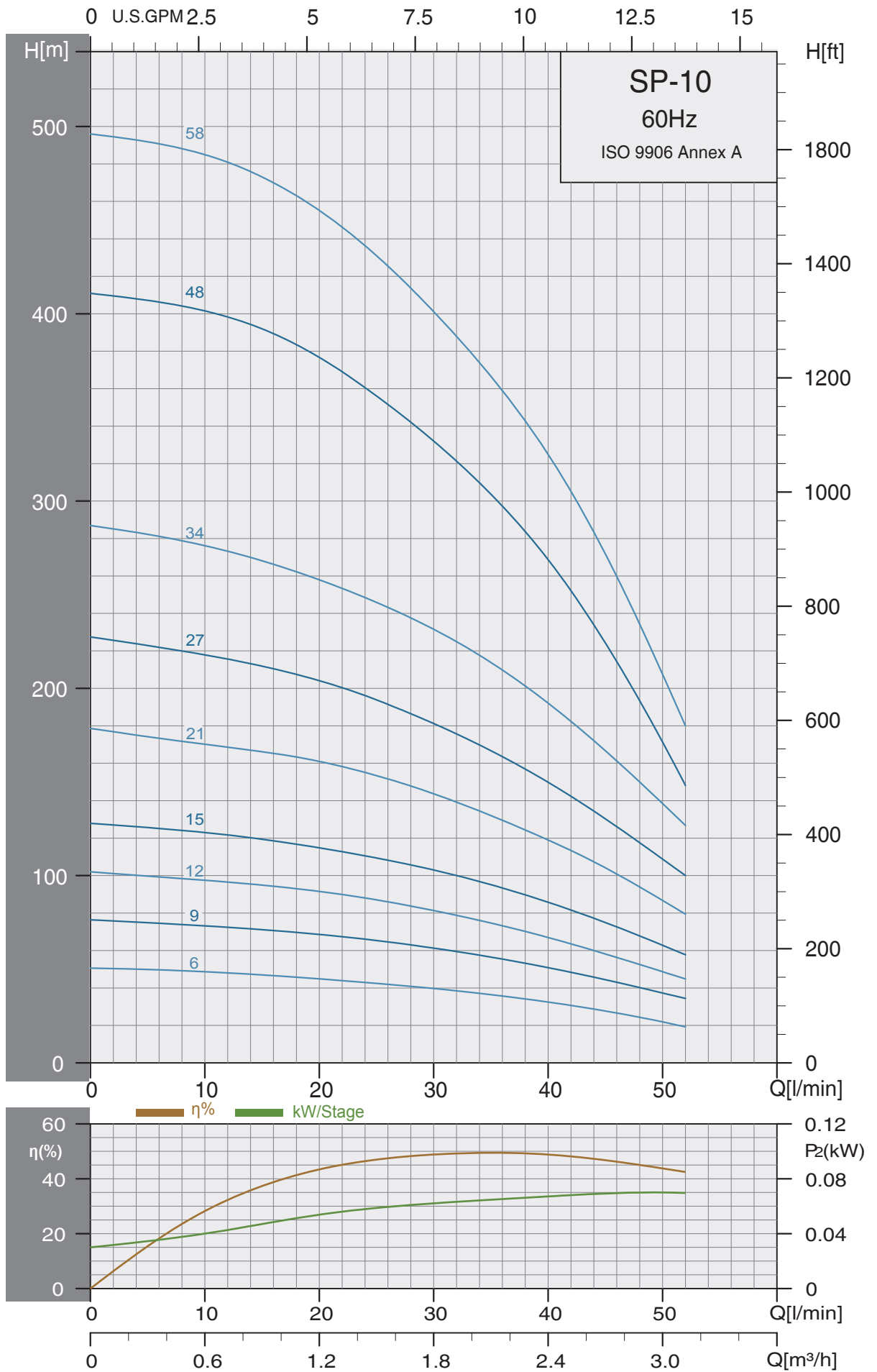
C= Maximum diameter of pump inclusive of cable guard and motor.



Stairs SP Series

SP 4"

SP10 Performance Curves



Selection Chart

60Hz

Pump Type	Motor		Q capacity 3450 rpm							
	P2		l/min	0	20	25	30	35	40	50
	KW	HP	m³/h	0	1.2	1.5	1.8	2.1	2.4	3.0
SP-1006	0.25	0.33	HEAD IN METERS	51	45	42	40	36	32	21
SP-1009	0.37	0.5		77	69	65	61	56	51	37
SP-1012	0.55	0.75		102	92	87	81	75	67	49
SP-1015	0.75	1		128	115	109	103	95	86	63
SP-1021	1.1	1.5		179	160	153	144	132	119	87
SP-1027	1.5	2		227	204	194	181	167	150	109
SP-1034	2.2	3		287	258	246	231	214	192	138
SP-1048	4	5.5		411	376	356	331	303	268	171
▶ SP-1058	4	5.5		496	455	431	401	367	325	207

*Higher pressure , longer stages pumps up to 58 stages are available on request.

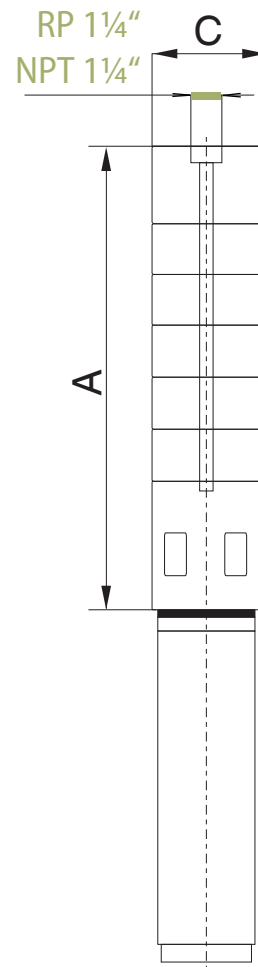
▶ With Sleeve .

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)		Net Weight (Kg)
		A	C	Pump
SP-1006	4"	293	98	2.4
SP-1009	4"	356	98	3
SP-1012	4"	419	98	3.6
SP-1015	4"	482	98	4.2
SP-1021	4"	608	98	5.3
SP-1027	4"	734	98	6.4
SP-1034	4"	904	98	10
SP-1048	4"	1198	98	11.5
▶ SP-1058	4"	1766	133	33.9

C = Maximum diameter of pump inclusive of cable guard and motor.
 SP-1058 are mounted in sleeve for R 1 1/4 connection.

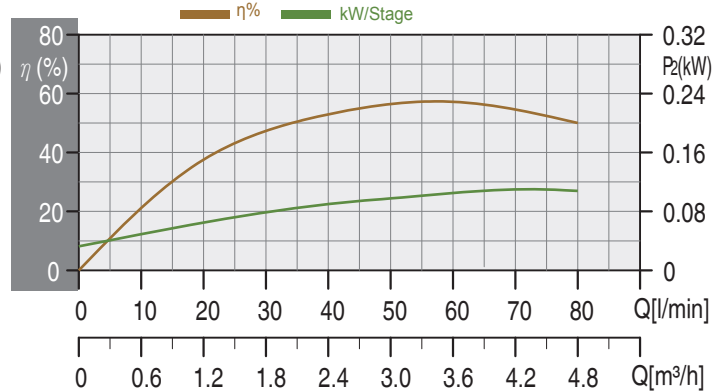
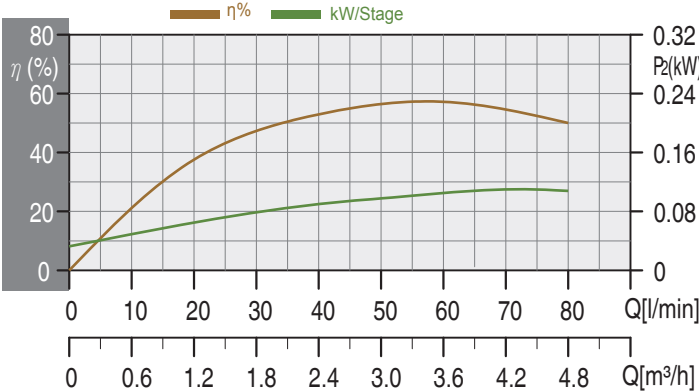
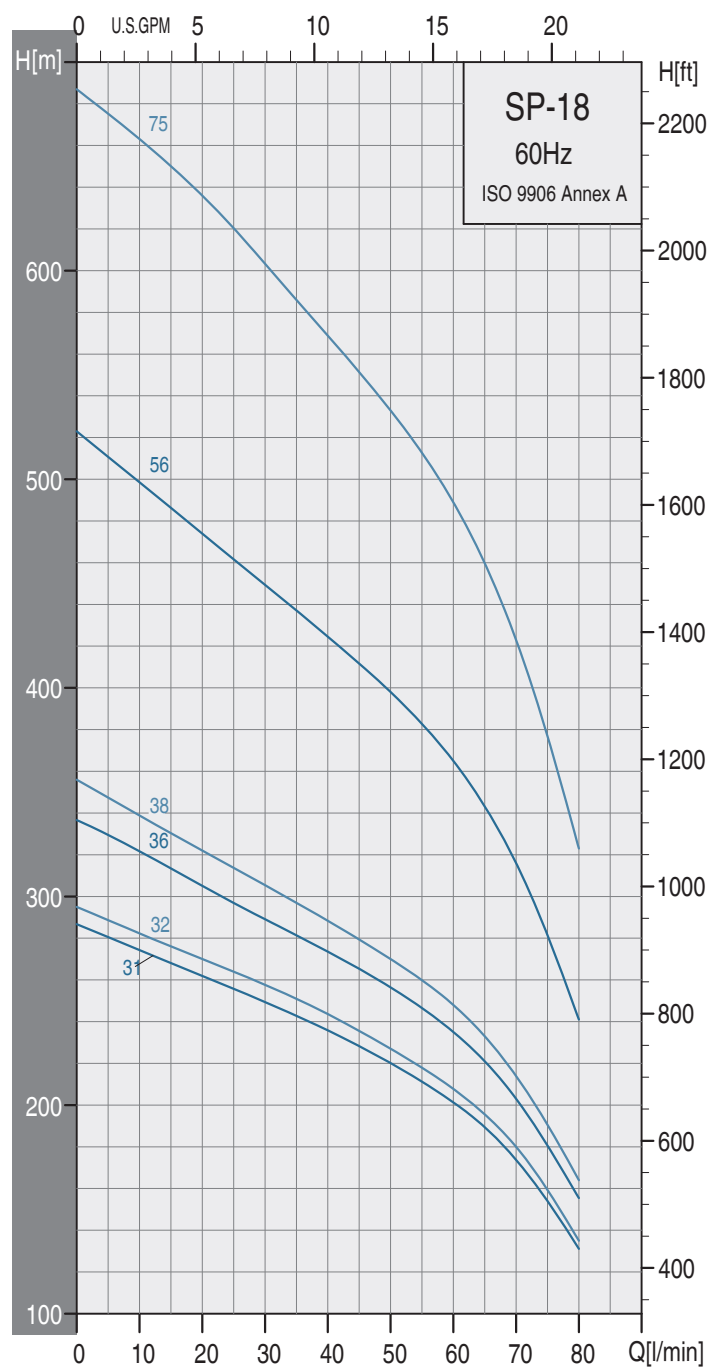
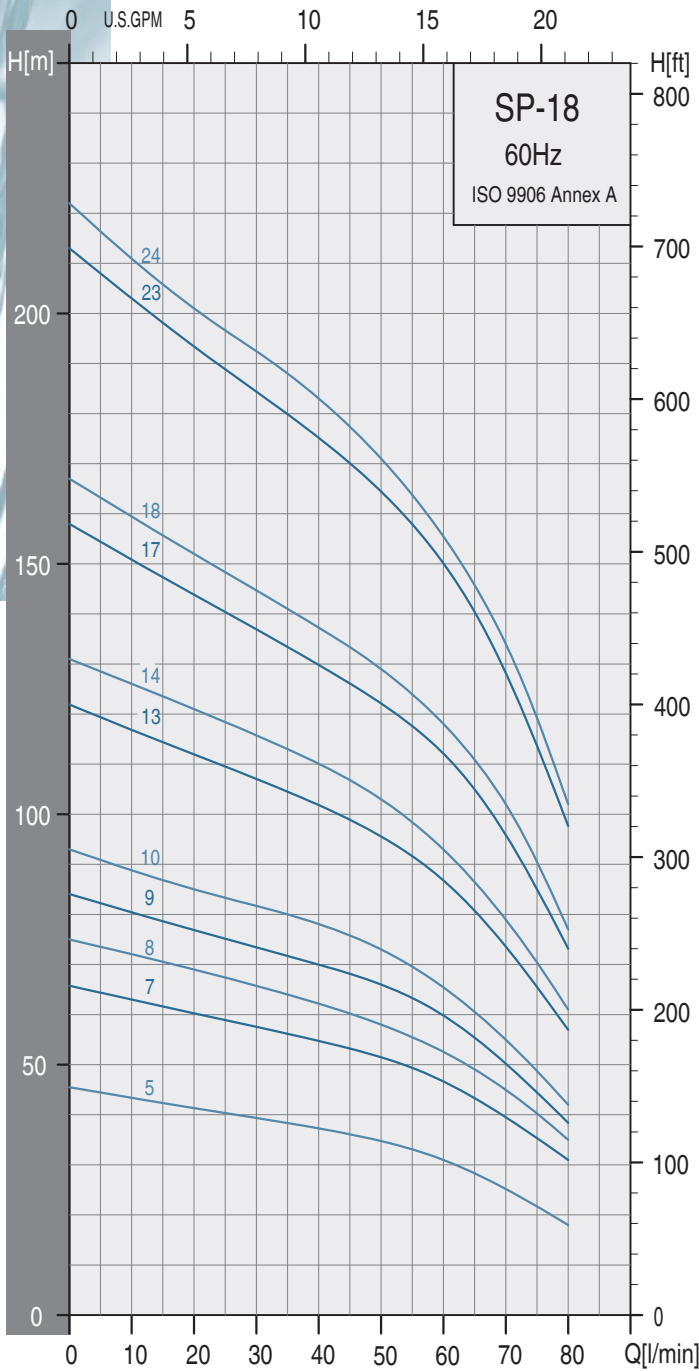
▶ With Sleeve .



Stairs SP Series

SP 4"

SP18 Performance Curves



Selection Chart

60Hz

Pump Type	Motor		l/min m³/h	Q capacity 3450 rpm						
	P2			0	35	40	50	60	70	80
	KW	HP		0	2.1	2.4	3.0	3.6	4.2	4.8
SP-1805	0.37	0.5	HEAD IN METERS	46	38	37	35	31	25	18
SP-1807	0.55	0.75		66	56	55	51	47	39	31
SP-1808	0.75	1		75	64	63	58	54	45	35
SP-1809	0.75	1		84	72	70	66	60	50	38
SP-1810	0.75	1		93	80	77	73	66	55	42
SP-1813	1.1	1.5		122	105	102	96	87	73	57
SP-1814	1.1	1.5		131	113	110	103	94	79	61
SP-1817	1.5	2		158	133	130	122	112	96	73
SP-1818	1.5	2		167	141	138	129	119	102	77
SP-1823	2.2	3		213	180	175	164	150	128	98
SP-1824	2.2	3		222	188	183	171	157	134	102
SP-1831	3	4		286	243	236	220	201	174	131
SP-1832	3	4		295	251	244	227	207	180	135
SP-1836	3.7	5		337	281	274	256	235	203	155
SP-1838	3.7	5		356	297	287	270	248	214	164
▶ SP-1856	5.5	7.5		522	437	425	398	365	316	241
▶ SP-1875	7.5	10		687	586	569	533	489	423	323

*Higher pressure , longer stages pumps up to 75 stages are available on request.

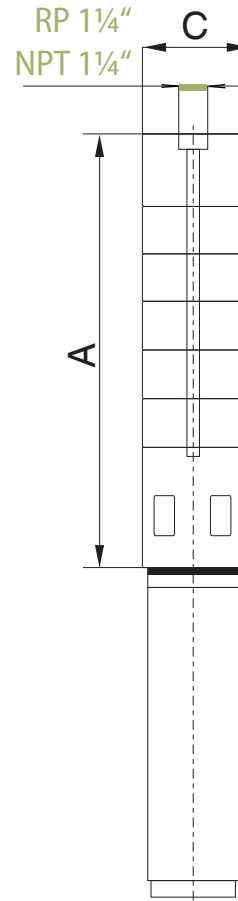
▶ With Sleeve .

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)		Net Weight (Kg) Pump
		A	C	
SP-1805	4"	272	98	2.3
SP-1807	4"	314	98	2.6
SP-1808	4"	335	98	2.8
SP-1809	4"	356	98	3.0
SP-1810	4"	377	98	3.2
SP-1813	4"	440	98	3.8
SP-1814	4"	461	98	4.0
SP-1817	4"	524	98	4.5
SP-1818	4"	545	98	4.7
SP-1823	4"	650	98	5.7
SP-1824	4"	671	98	5.9
SP-1831	4"	841	98	9.2
SP-1832	4"	862	98	9.5
SP-1836	4"	946	98	10.5
SP-1838	4"	988	98	11
▶ SP-1856	6"	1741	140	34
▶ SP-1875	6"	1951	140	41.8

C = Maximum diameter of pump inclusive of cable guard and moter.
 SP-1856 to SP-1875 are mounted in sleeve for R 1/4 connection.

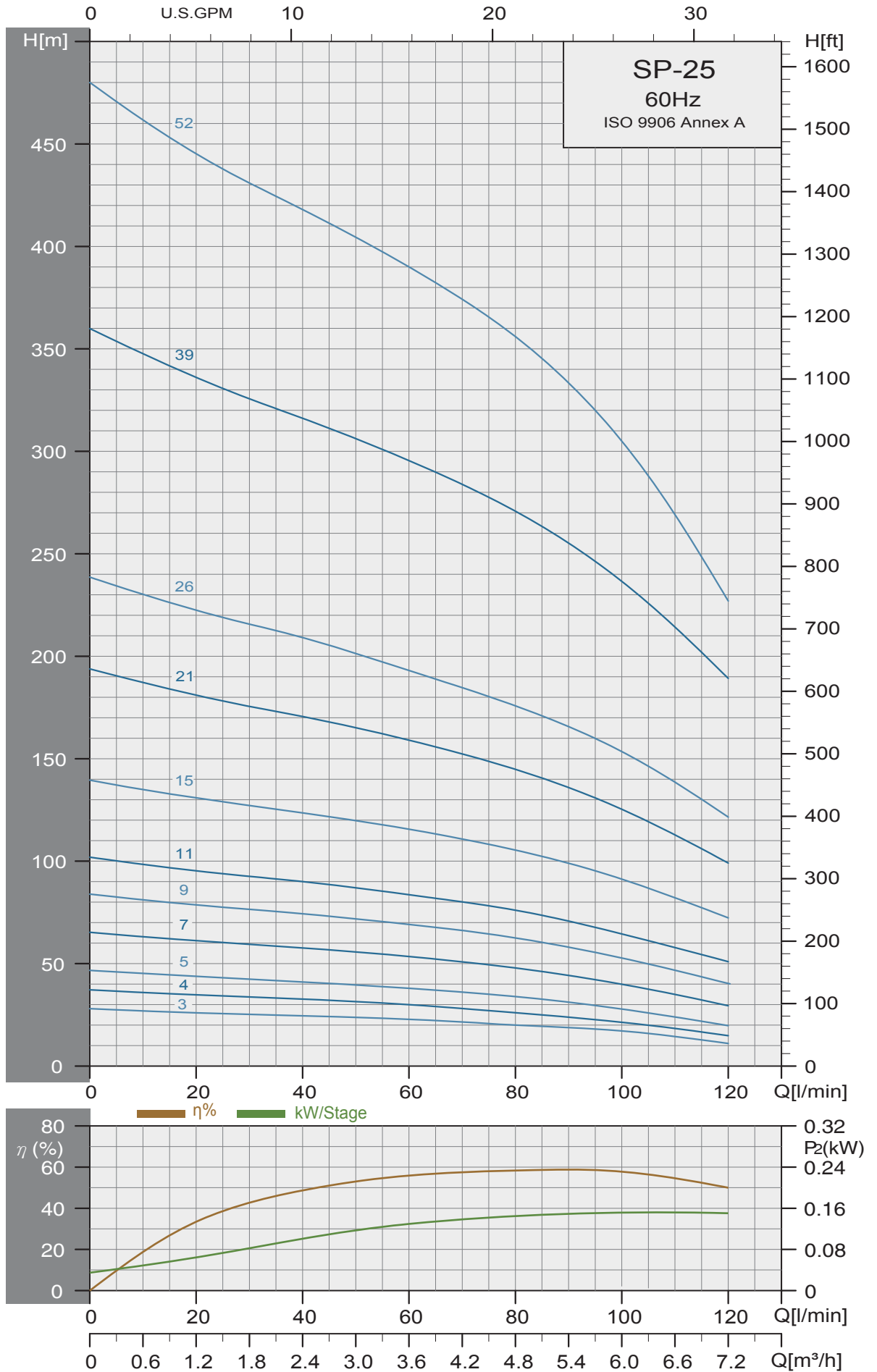
▶ With Sleeve .



Stairs SP Series

SP 4"

SP25 Performance Curves



Selection Chart

60Hz

Pump Type	Motor		Q capacity 3450 rpm							
	P2		l/min m³/h	0	60	70	80	90	100	120
	KW	HP		0	3.6	4.2	4.8	5.4	6.0	7.2
SP-2503	0.37	0.5	HEAD IN METERS	28	23	21	20	18	17	11
SP-2504	0.37	0.5		37	30	28	26	24	23	15
SP-2505	0.55	0.75		47	38	36	34	31	28	20
SP-2507	0.75	1		65	53	51	48	44	40	29
SP-2509	1.1	1.5		84	69	66	63	58	53	40
SP-2511	1.5	2		102	84	80	76	71	65	51
SP-2515	2.2	3		140	116	111	105	99	91	72
SP-2521	3	4		194	259	152	145	136	125	99
SP-2526	3.7	5		237	193	185	176	166	153	122
SP-2539	5.5	7.5		360	295	284	271	255	237	189
▶ SP-2552	7.5	10		480	390	374	356	333	305	227

*Higher pressure , longer stages pumps up to 52 stages are available on request.

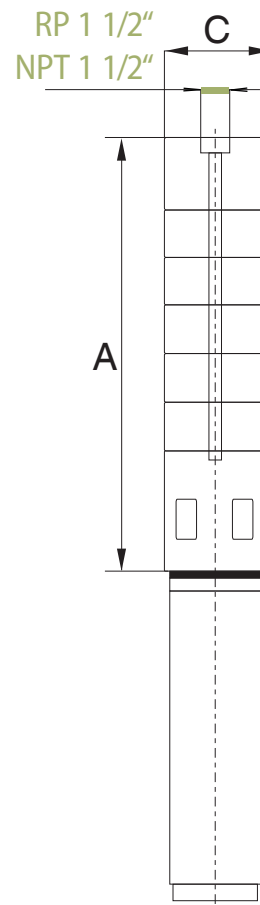
▶ With Sleeve .

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)		Net Weight (Kg) Pump
		A	C	
SP-2503	4"	230	98	1.8
SP-2504	4"	251	98	2.0
SP-2505	4"	272	98	2.2
SP-2507	4"	314	98	2.6
SP-2509	4"	356	98	3.0
SP-2511	4"	398	98	3.4
SP-2515	4"	482	98	4.1
SP-2521	4"	608	98	5.3
SP-2526	4"	713	98	6.2
SP-2539	4"	994	98	11.1
	6"	1068	138	13.5
▶ SP-2552	6"	1852	140	32.5

C = Maximum diameter of pump inclusive of cable guard and motor.
SP-2552 are mounted in sleeve for R 1 1/2 connection.

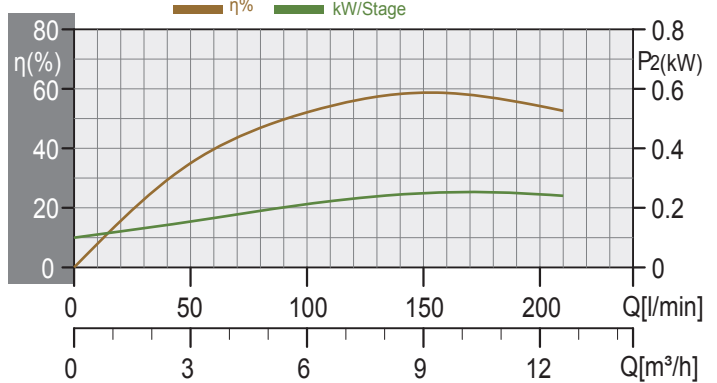
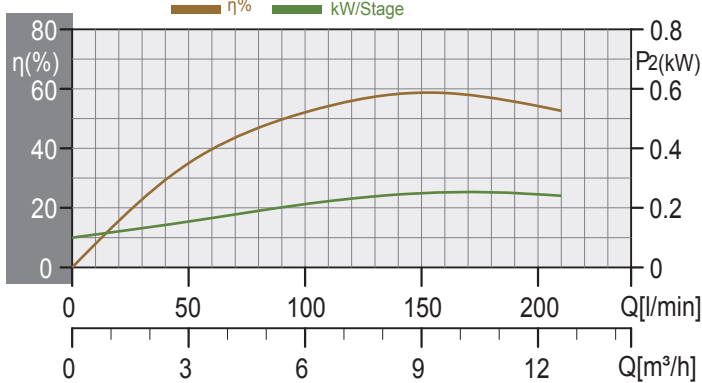
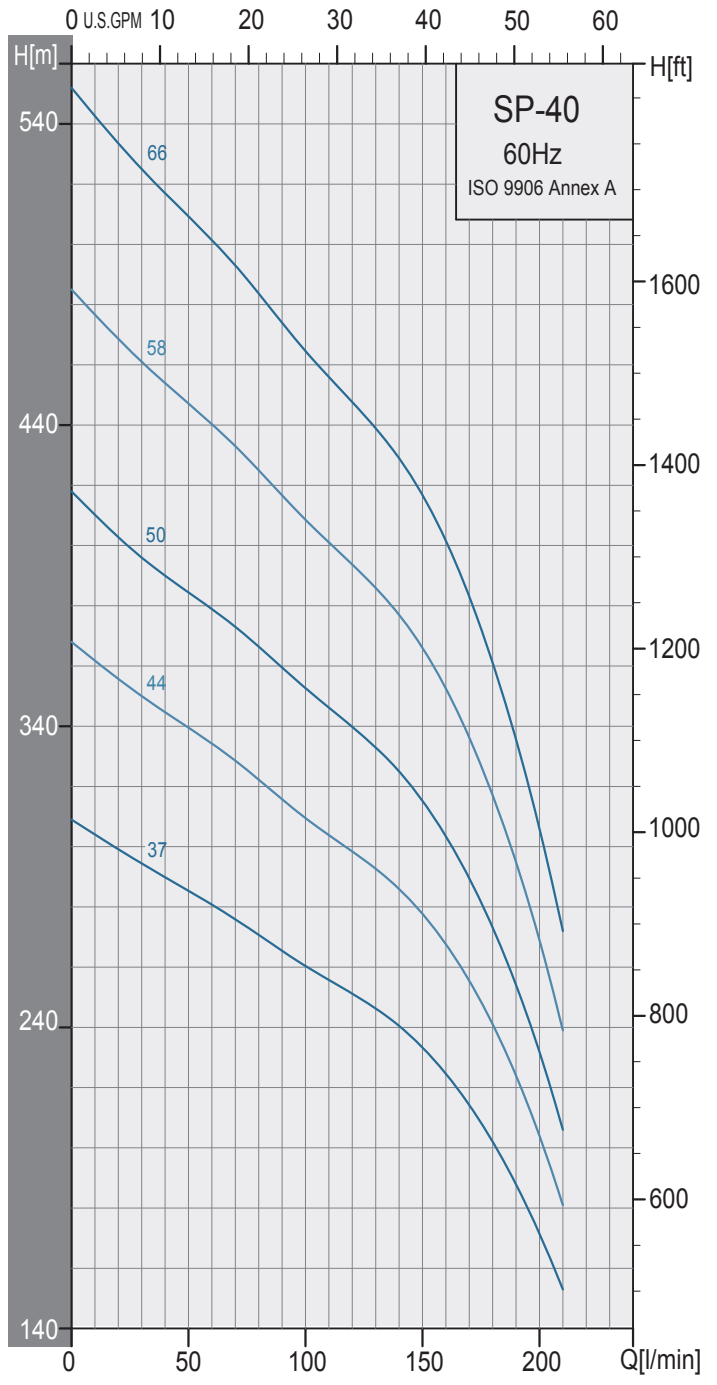
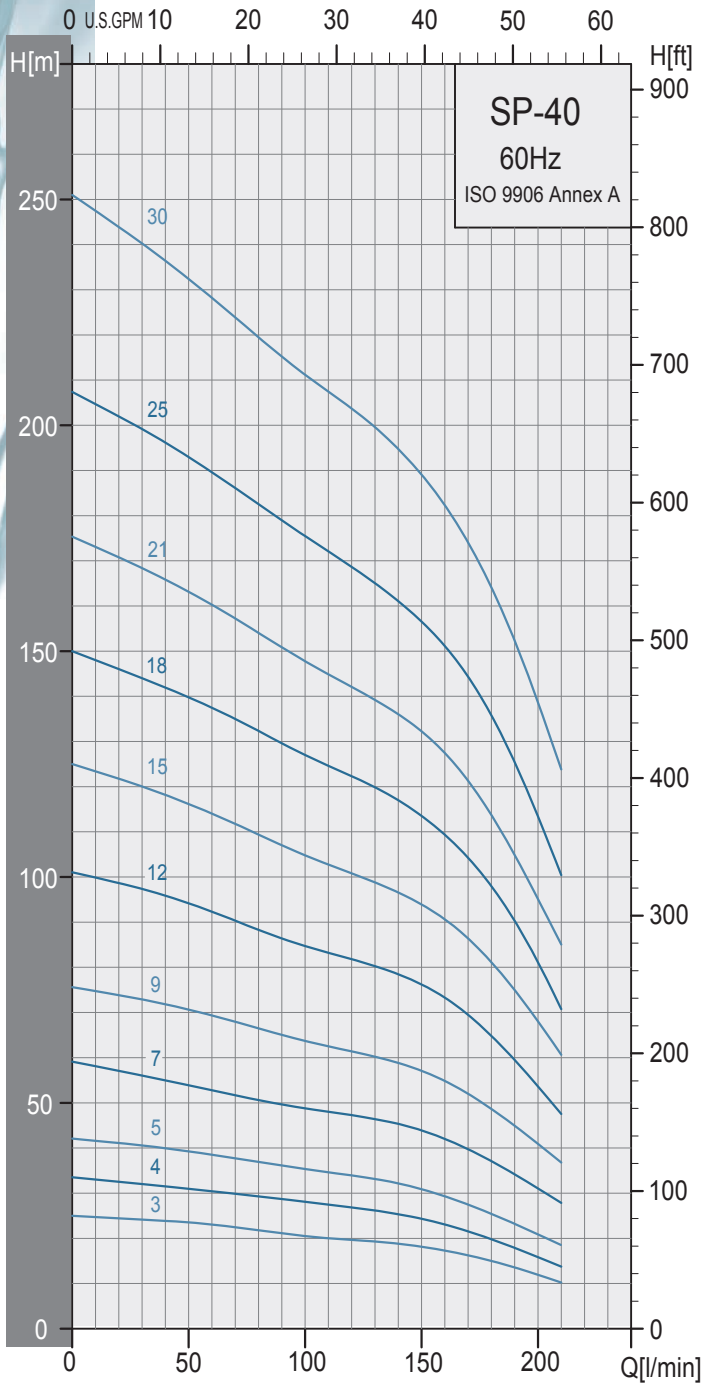
▶ With Sleeve .



Stairs SP Series

SP 4"

SP40 Performance Curves



Selection Chart

60Hz

Pump Type	Motor		Q capacity 3450 rpm									
	P2		l/min m³/h	0	80	90	100	120	140	160	180	200
	KW	HP		0	4.8	5.4	6.0	7.2	8.4	9.6	10.8	12
SP-4003	0.55	0.75	HEAD IN METERS	25	22	21	20	19.5	19	17	15	12
SP-4004	0.75	1		33	29	28	27	26	25	23	20	16
SP-4005	1.1	1.5		42	37	36	35	34	32	29	25	21
SP-4007	1.5	2		59	51	50	49	47	45	42	37	31
SP-4009	2.2	3		76	66	65	64	61	59	55	49	41
SP-4012	3	4		101	88	86	85	82	78	73	65	54
SP-4015	3.7	5		125	109	107	105	101	97	91	81	68
SP-4018	5.5	7.5		150	132	129	127	122	117	109	98	81
SP-4021	5.5	7.5		175	154	151	148	142	136	127	114	95
SP-4025	5.5	7.5		207	183	179	175	169	161	151	136	113
SP-4030	7.5	10		251	220	215	211	204	195	182	164	139
SP-4037	11	15		309	270	265	260	251	241	224	202	172
SP-4044	11	15		368	322	315	309	298	286	268	241	204
▶ SP-4050	13	17.5		418	366	359	352	339	325	304	273	232
▶ SP-4058	15	20		485	425	416	408	393	377	353	317	269
▶ SP-4066	15	20		552	484	474	465	448	429	402	361	306

*Higher pressure , longer stages pumps up to 66 stages are available on request.

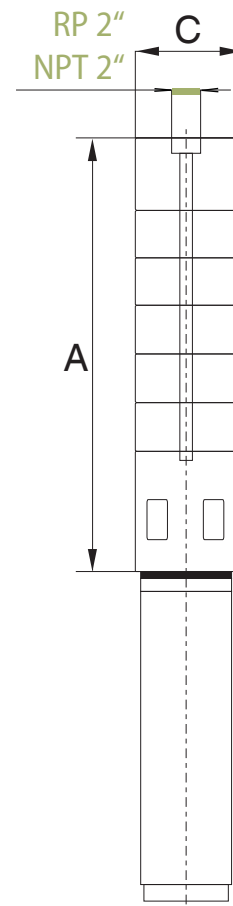
▶ With Sleeve .

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)		Net Weight (Kg) Pump
		A	C	
SP-4003	4"	328	98	3.3
SP-4004	4"	370	98	3.8
SP-4005	4"	412	98	4.3
SP-4007	4"	496	98	5.3
SP-4009	4"	580	98	6.3
SP-4012	4"	706	98	7.3
SP-4015	4"	832	98	9.3
SP-4018	4"	958	98	10.8
	6"	1024		12.6
SP-4021	4"	1084	98	12.3
	6"	1150		14.1
SP-4025	4"	1252	98	14.3
	6"	1318		16.1
SP-4030	4"	1459	98	16.8
	6"	1525	138	18.7
SP-4037	6"	1819	138	22.0
SP-4044	6"	2116	138	25.6
▶ SP-4050	6"	2669	140	51.6
▶ SP-4058	6"	3005	140	58.0
▶ SP-4066	6"	3341	140	64.6

C = Maximum diameter of pump inclusive of cable guard and motor.
 SP-4050 to SP-4066 are mounted in sleeve for R 2 connection.

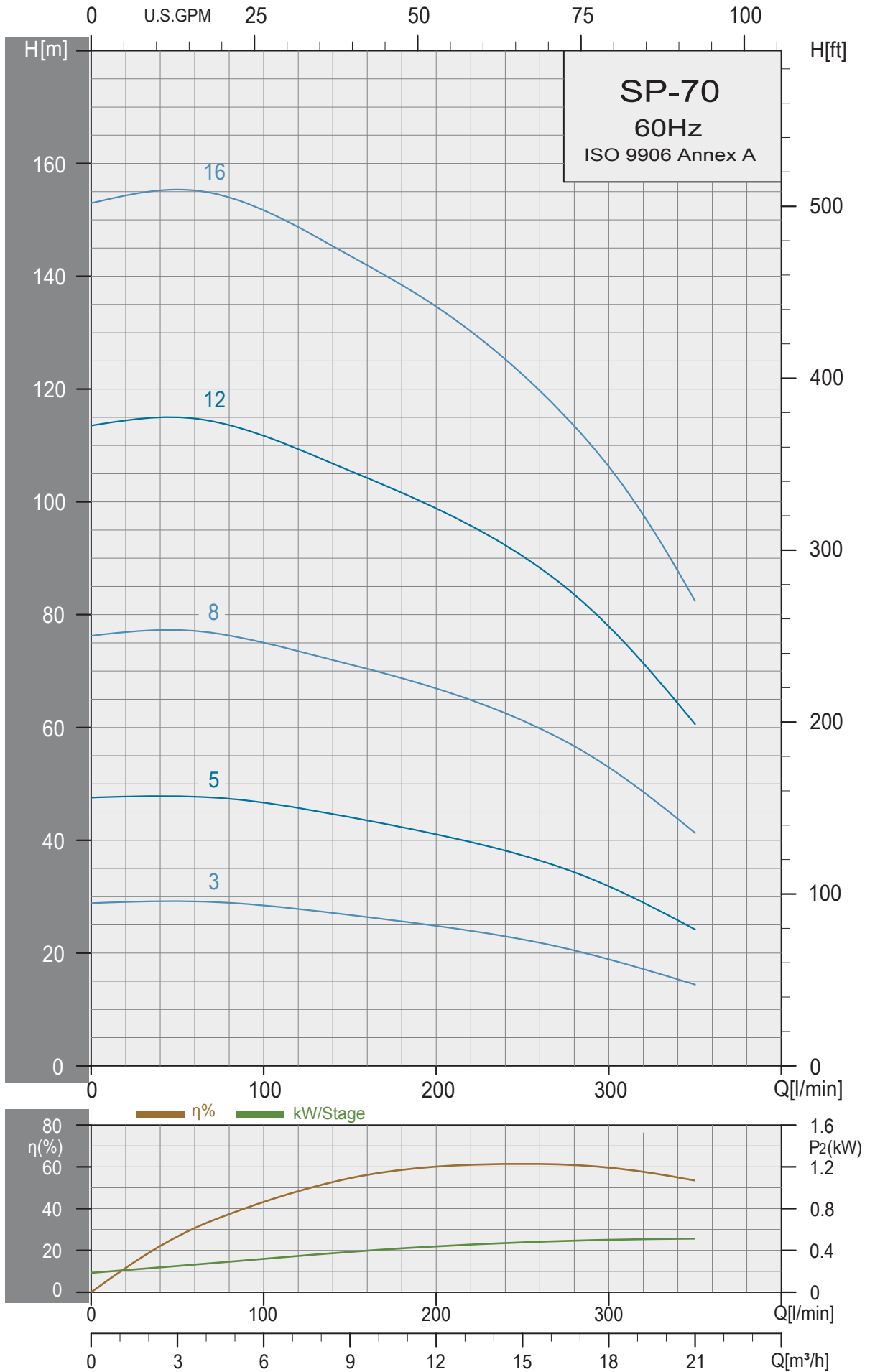
▶ With Sleeve .



Stairs SP Series

SP 4"

SP70 Performance Curves



Selection Chart

60Hz

Pump Type	Motor		Q capacity 3450 rpm								
	P2		l/min m³/h	0	140	160	180	200	250	300	350
	KW	HP		0	8.4	9.6	10.8	12	15	18	21
SP-7003	1.5	2	HEAD IN METERS	29	28	27	26	25	22	19	14
SP-7005	2.2	3		48	45	44	42	41	37	32	24
SP-7008	3.7	5		76	72	70	69	67	61	53	41
SP-7012	5.5	7.5		114	107	104	102	99	90	78	61
SP-7016	7.5	10		153	145	142	138	135	123	106	82

Dimensions and weights

Pump Type	Motor Dia.	Dimensions (mm)		Net Weight (Kg) Pump
		A	C	
SP-7003	4"	375	98	3.7
SP-7005	4"	505	98	5.0
SP-7008	4"	700	98	7.0
SP-7012	4"	960	98	9.5
	6"	1025	136	11.8
SP-7016	4"	1220	98	12.1
	6"	1285	136	14.5

C=Maximum diameter of pump inclusive of cable guard and motor.

