

# S3P S3.5P S4P

**50Hz**

**Deep-Well  
Submersible  
Pump 3"-3.5"-4"**

**hydroo®**



# PRODUCTS

<b>Presentation</b>	<b>03</b>
<b>Technical Data</b>	
3" S3P	04
3.5" S3.5P	07
4" S4P	10
<b>Installation dimensions</b>	
3" S3P	18
3" S3.5P	19
4" S4P	20
4" HYA4	23
4" HY04	25

# PRESENTATION

Hydroo Pump Industries SL is an enterprise specialised in the research, development and large-scale production of Stainless Steel centrifugal pumps. We have a vertical integration of the production processes, standing out stamping, welding and motor wiring in 6 value centers and production units. All of them with a high performance management on pump engineering and production quality.

HYDROO has set up a wide range of pumping solutions for many applications as building services, industry, irrigation and industrial process. Customers enjoy of the highest performance in booster sets and pressurization, fire-fighting sets, pumping of underground water, HVAC and drainage and sewage, utilities, desalination and OEM integrations. Versions in 50 Hz and 60 Hz are available, as well as any modification on materials, on request.

Global water challenges require excellence in pumping technologies and close cooperation between pump designers, manufacturers and pump engineers. In order to better meet the customers' needs and requirements our company is facing an expansion of its operations worldwide, providing timely and effective services in more than 70 countries. With tight relationships in many regions, we're proud to introduce a new regional value center for Europe. We are based near Barcelona at the Girona industrial area. Hydroo is a trademark to forge excellent and successful business relationships with European customers by means of an operative assembling unit and an application engineering unit. HYDROO trademark wants to symbolize the firm commitment for a high level service to European customers.

**At Hydroo we bet on a high level service to European pump partners.**

# S3P 50Hz 3" Submersible Multistage

## Technical Data

### Applications

For water supply from wells or reservoirs.  
For domestic use, for civil and industrial applications.  
For garden use and irrigation.

### Operating conditions

Maximum fluid temperature up to +35°C.  
Maximum sand content: 0.25%.  
Maximum immersion: 80m.  
Minimum well diameter: 3".

### Motor and pump

- Rewindable motor
- Three-phase: 350V-400V/50Hz
- Single-phase: 180V-230V/50Hz
- Equipped with start-up control box or digital auto-control box
- Pumps are designed by casing stressed
- NEMA dimension standards
- Performance curve tolerance according to ISO 99906 annex A

### Outlet diameter

1"

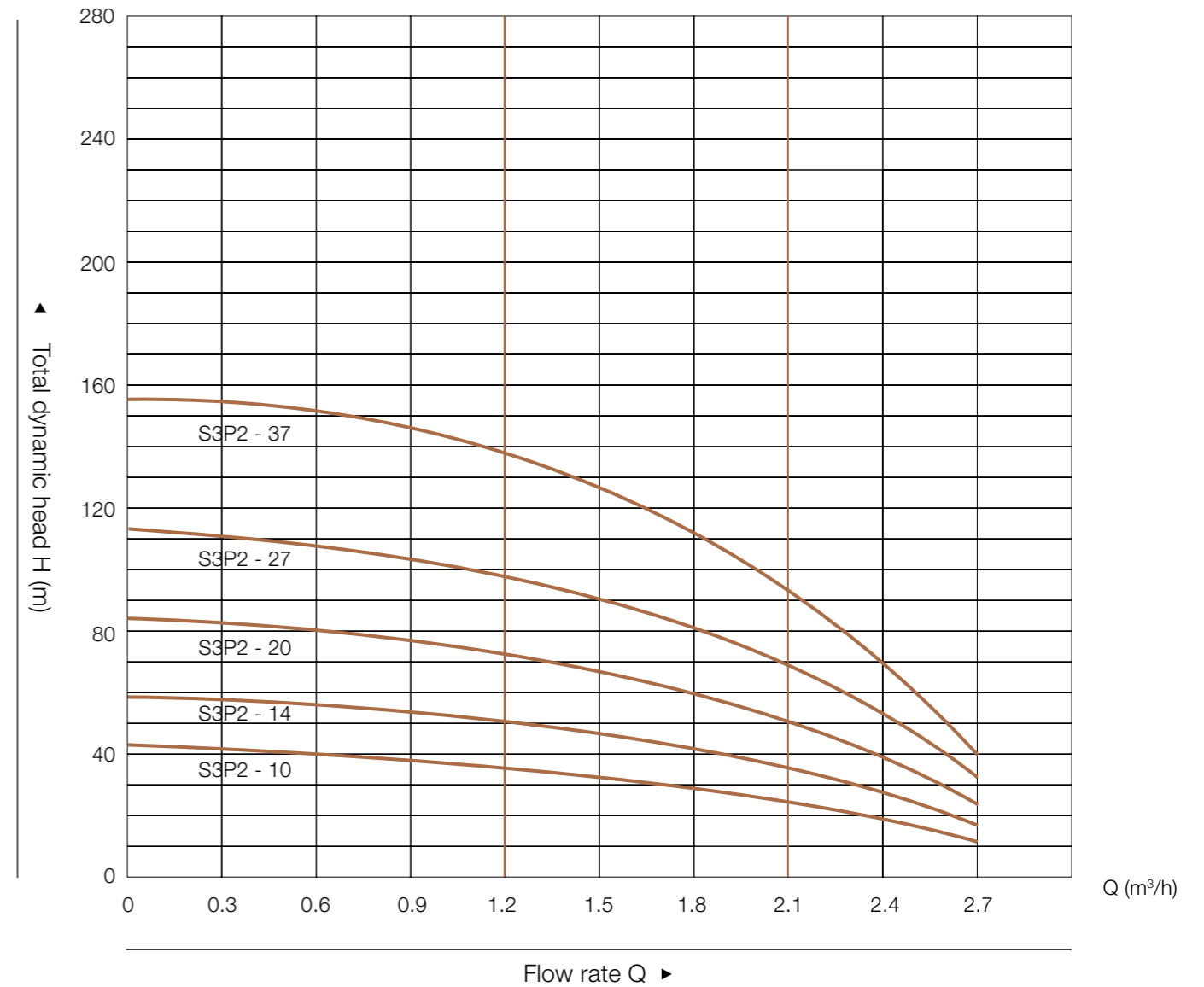
### S3P2 - 10

**S3P:** Stainless steel submersible 3" borehole pump, sand resistant type, POM impeller

**2:** Rated flow (m<sup>3</sup>/h)

**10:** Number of impellers

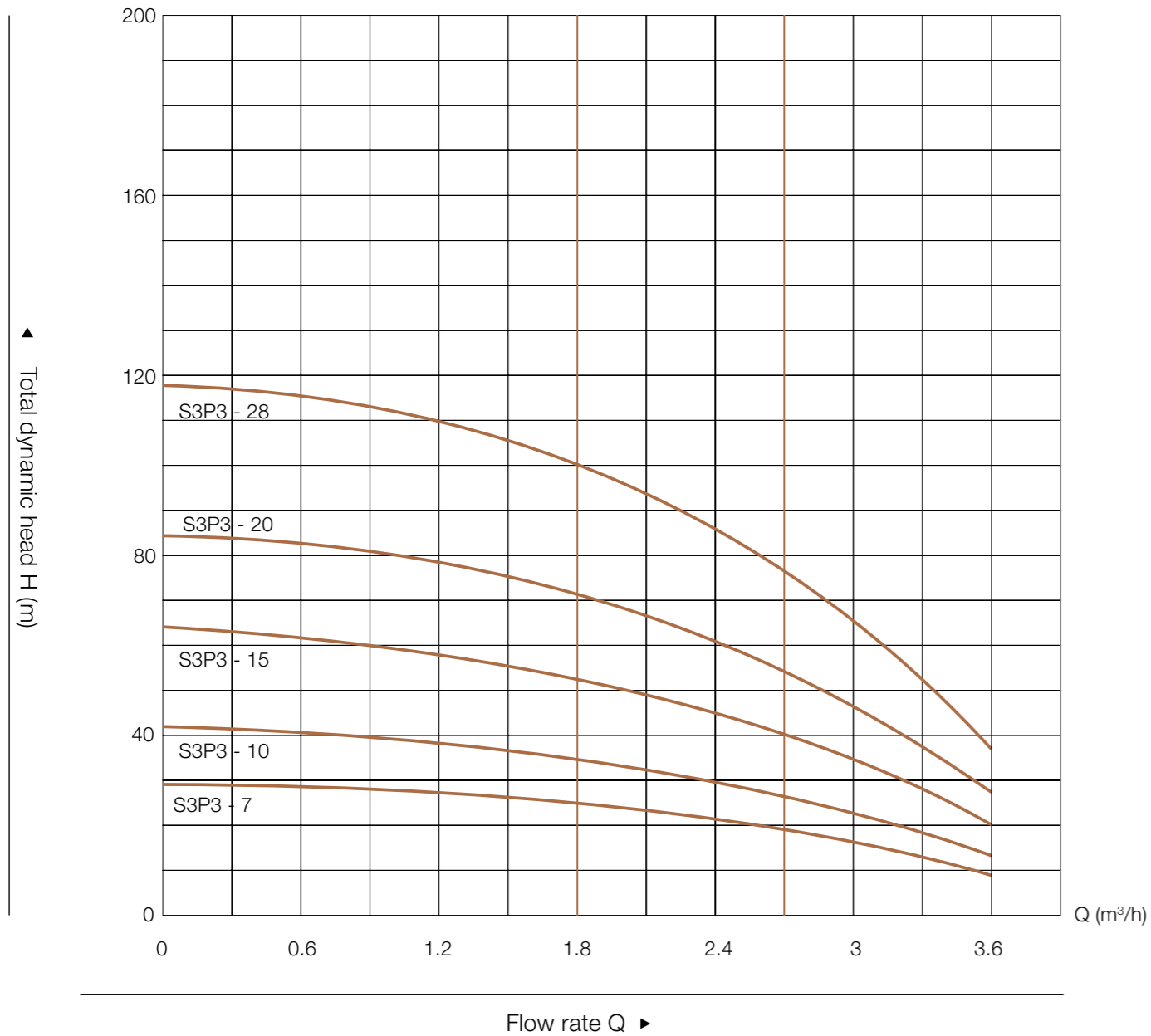
hydroo®



### Performance table

Type	Motor power		Delivery N~2850r/min										
	KW	H	Q(m <sup>3</sup> /h)	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7
S3P2-10	0.25	0.33	H(m)	42	41	39	38	36	33	29	24	18	10
S3P2-14	0.37	0.5		59	57	55	53	50	46	40	34	25	14
S3P2-20	0.55	0.75		84	82	78	76	72	66	58	48	36	20
S3P2-27	0.75	1		113	111	105	102	97	89	79	65	48	27
S3P2-37	1.1	1.5		155	152	144	140	133	122	107	89	66	37

Components	Material
Delivery casing	AISI 304 SS
Strainer	AISI 304 SS
Diffuser	Polycarbonate
Impeller	POM
Shaft	AISI 304 SS
Shaft coupling	AISI 304 SS
Wear ring	Rubber NBR
Motor external casing	AISI 304 SS
Mechanical seal	Special seal for deep well (carbor-sic/tc)
Shaft	AISI 304 SS
Bearing	NSK
Seal lubricant oil	Oil for food machinery and pharmaceutical use.



**Performance table**

Type	Motor power		Delivery N≈2850r/min													
	KW	H	Q(m³/h)	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3	3.3	3.6
S3P3-7	0.25	0.33	H(m)	29	29	29	28	27	26	25	23	21	19	16	13	9
S3P3-10	0.37	0.5		42	41	41	40	39	37	36	33	31	27	23	18	13
S3P3-15	0.55	0.75		63	62	61	60	58	56	53	50	46	41	35	27	20
S3P3-20	0.75	1		84	83	82	80	78	74	71	67	61	54	46	37	27
S3P3-28	1.1	1.5		117	116	114	112	109	104	100	93	86	76	65	51	37

# S3.5P 50Hz 3.5" Submersible Multistage

**Tecnical Data**

**Applications**

For water supply from wells or reservoirs.  
For domestic use, for civil and industrial applications.  
For garden use and irrigation.

**Operating conditions**

Maximum fluid temperature up to +35°C  
Maximum sand content: 3%  
Maximum immersion: 120m.  
Minimum well diameter: 3.5"

**Motor and pump**

- Rewindable motor
- Three-phase: 350V-415V/50Hz
- Single-phase: 150V-240V/50Hz
- Equipped with start-up control box

**Outlet diameter**

1 1/4"

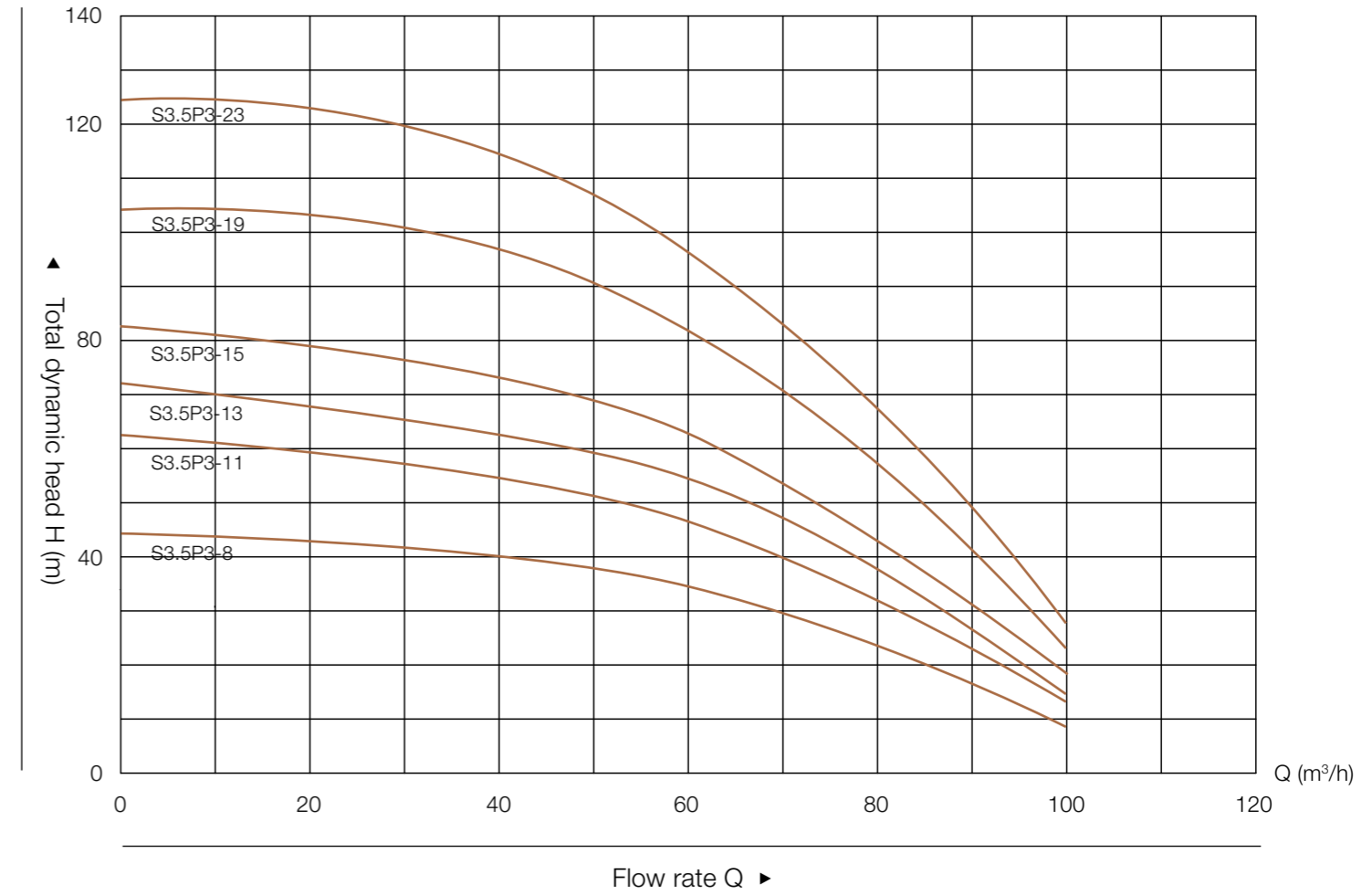
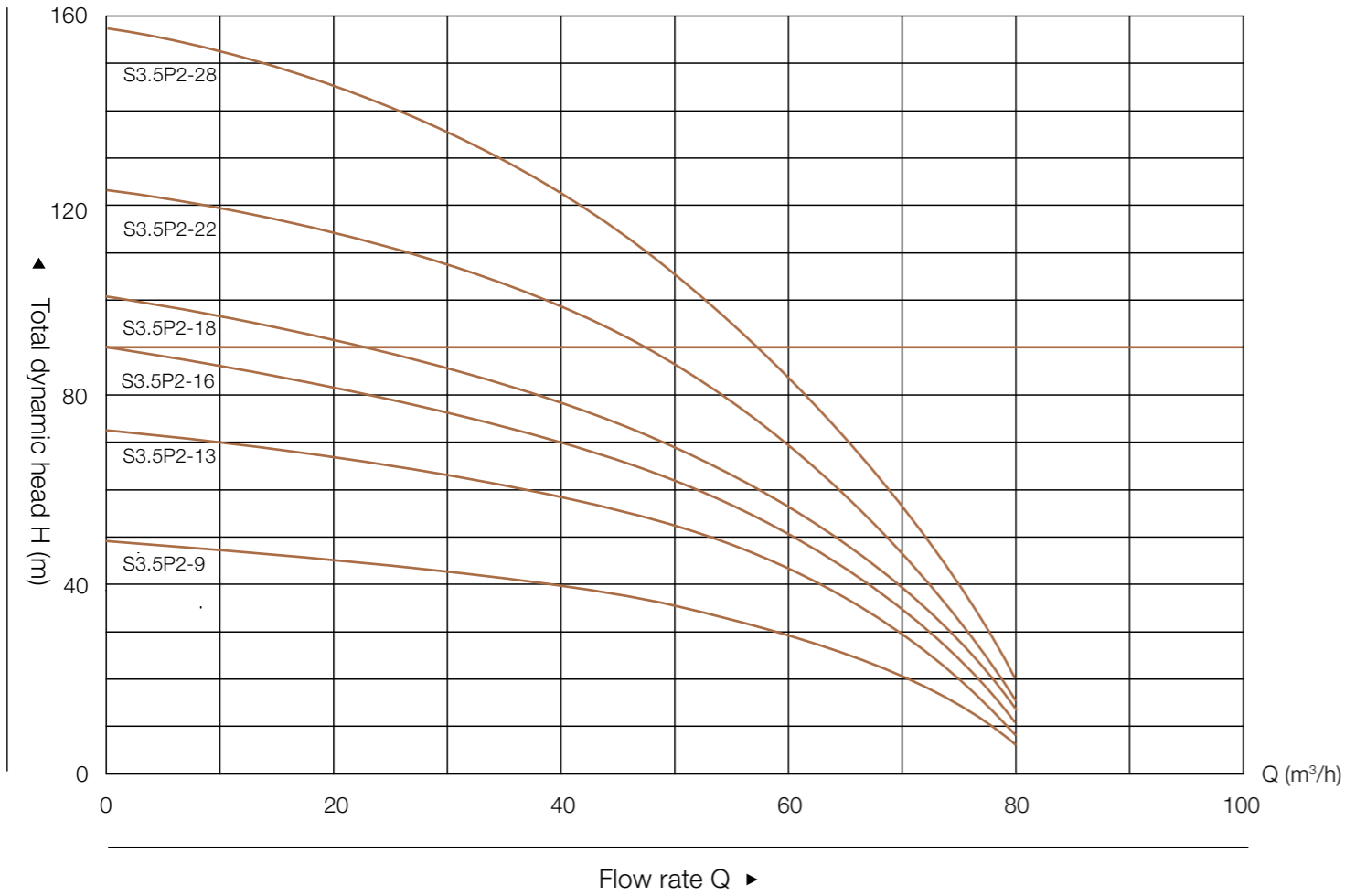
**S3.5P2 - 9**

**S3.5P:** Stainless Steel submersible 3,5" borehole pump, sand-resistant type, POM impeller  
**2:** Rated flow (m3/h)  
**9:** Number of impeller

hydroo®



Components	Material
Pump casing	AISI 304 SS / 201 SS
Outlets	Cast-Cu
Inlets	Cast-Cu
Strainer	AISI 304 SS
Diffuser	Polycarbonate
Impeller	POM
Pump shaft	AISI 304 SS / 201 SS
Shaft coupling	AISI 304 SS / 201 SS
Motor casing	AISI 304 SS / 201 SS
Top chock	Cast-Cu / Cast-Iron
Mechanical seal	Graphite-Ceramic / TC
Motor shaft	AISI 304 SS
Bearing	NSK / C&U
Seal lubricant oil	10# White oil



**Performance table**

Type	Motor power		Q(m³/h) l./min	Delivery N≈2850r/min									
	KW	HP		0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	
S3.5P2-9	0.37	0.55	H(m)	50	49	46	45	40	34	31	20	6	
S3.5P2-13	0.55	0.75		73	70	66	64	57	52	44	29	9	
S3.5P2-16	0.75	1.0		90	86	82	79	70	61	52	35	11	
S3.5P2-18	0.95	1.3		101	97	92	89	79	68	57	40	13	
S3.5P2-22	1.1	1.5		123	119	112	109	97	83	70	48	15	
S3.5P2-28	1.5	2.0		157	151	143	139	123	106	85	56	20	

**Performance table**

Type	Motor power		Q(m³/h) l./min	Delivery N≈2850r/min											
	KW	HP		0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	
S3.5P3-8	0.37	0.55	H(m)	44	43	43	42	39	37	33	30	24	16	9	
S3.5P3-11	0.55	0.75		62	61	59	58	54	50	45	40	33	22	13	
S3.5P3-13	0.75	1.0		72	71	69	68	64	59	53	47	39	26	15	
S3.5P3-15	0.95	1.3		82	81	79	78	74	68	62	55	45	30	18	
S3.5P3-16	1.1	1.5		91	89	87	85	78	73	65	59	39	20	6	
S3.5P3-18	1.5	2		109	106	103	100	94	87	80	71	46	30	10	
S3.5P3-19	1.1	1.5		103	102	100	100	93	87	78	70	57	38	23	
S3.5P3-23	1.5	2.0		124	123	121	120	113	105	95	84	69	46	27	

# S4P 50Hz 4" Submersible Multistage

## Tecnical Data

### Applications

For water supply from wells or reservoirs.  
For domestic use, for civil and industrial applications.  
For garden use and irrigation.

### Operating conditions

Maximum fluid temperature up to +35°C  
Maximum sand content: 1%  
Maximum immersion: 80m. (S4P16 up to 120m.)  
Minimum well diameter: 4"

### Motor and pump

- Rewindable motor
- Three-phase: 350V-400V/50Hz
- Single-phase: 180V-230V/50Hz
- Equipped with start-up control box

### Outlet diameter

S4P2, S4P3, S4P4: 1 1/4"  
S4P6, S4P8, S4P10, S4P16: 2"

### S4P2 - 7

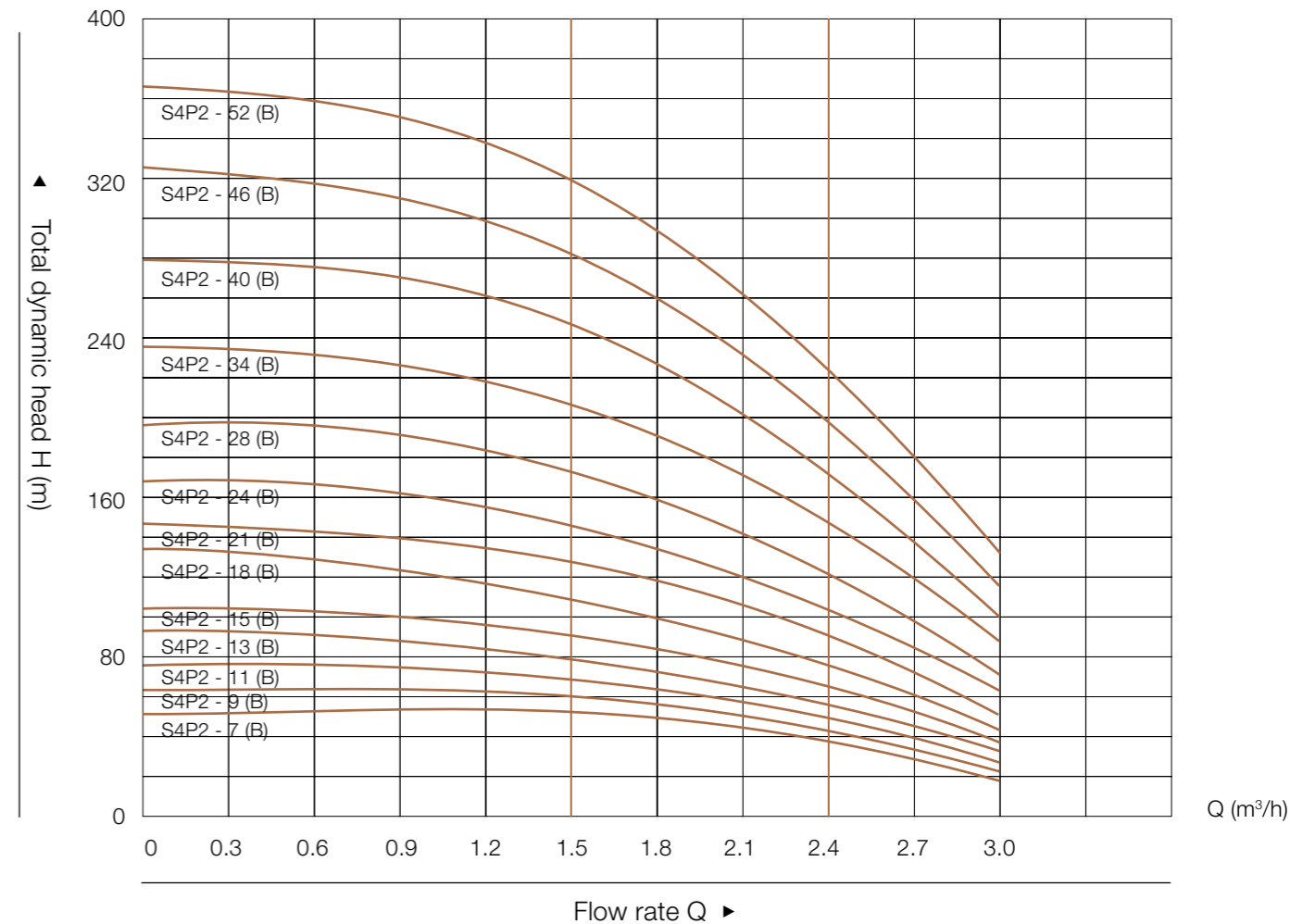
**S4P:** Stainless steel submersible 4" borehole pump, sand-resistant type, POM impeller

- 2:** Rated flow (m<sup>3</sup>/h)  
**7:** Number of impellers

hydroo®



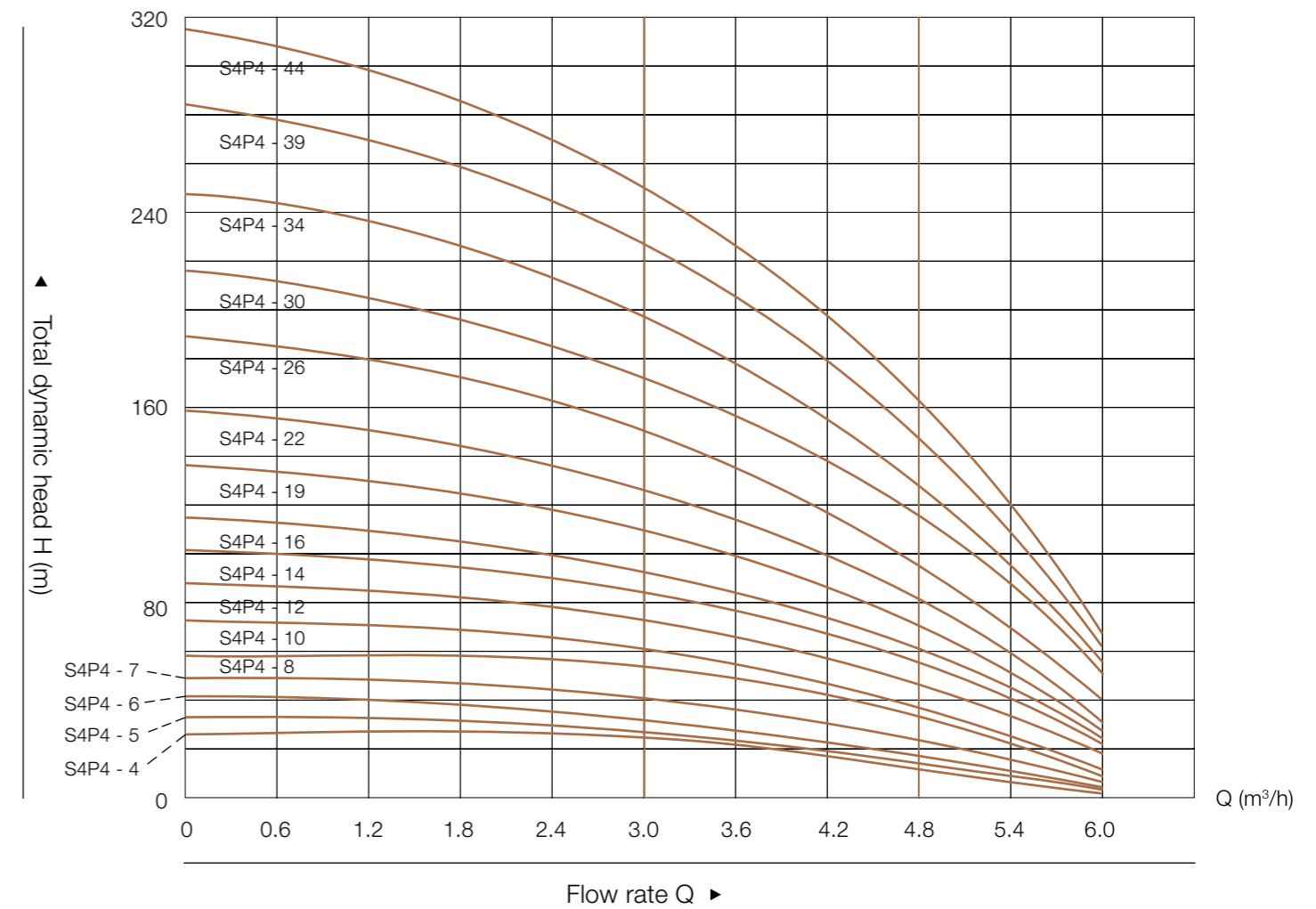
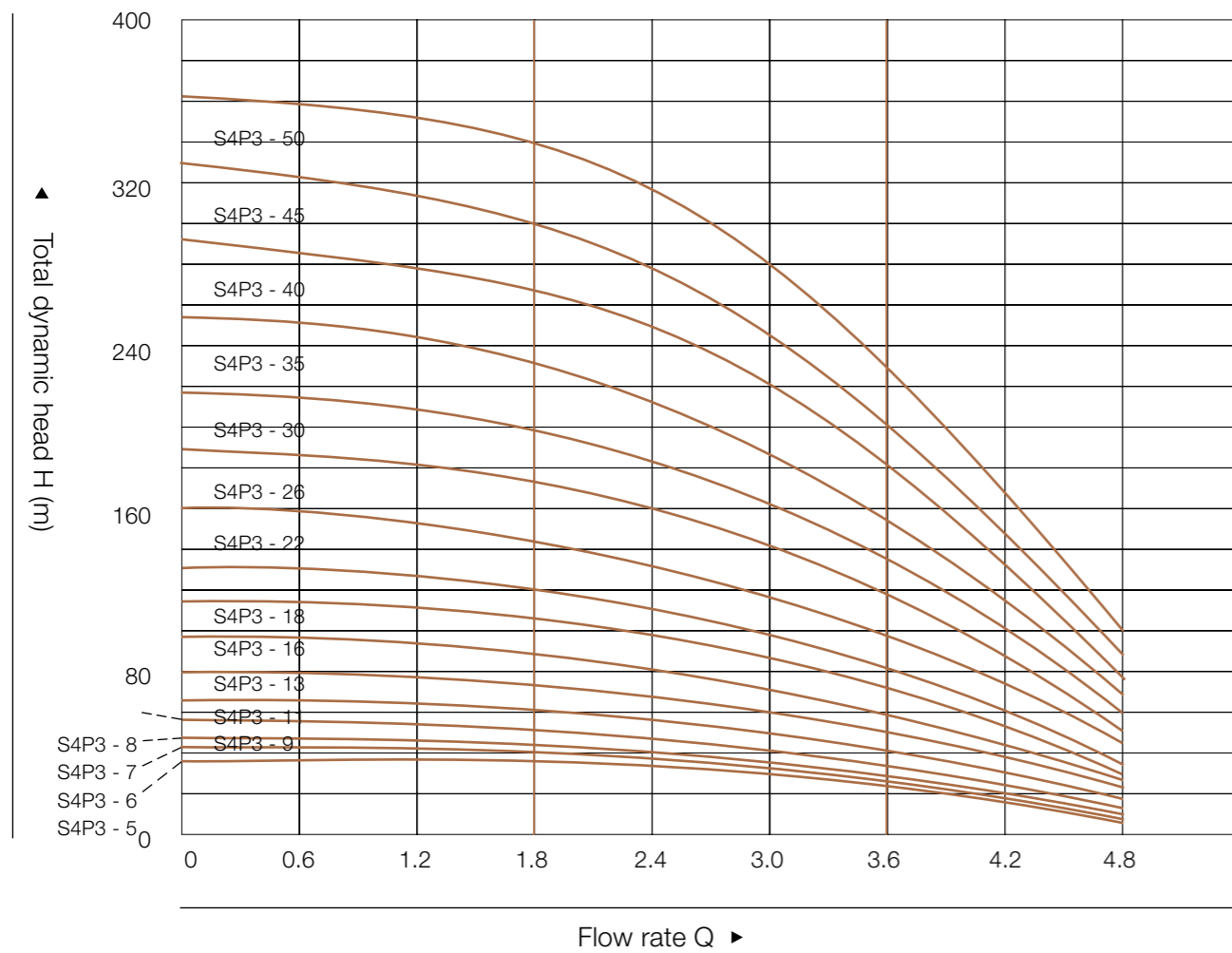
Components	Material
Delivery casing	AISI 304 SS
Strainer	AISI 304 SS
Diffuser	Polycarbonate
Impeller	POM
Shaft	AISI 304 SS
Shaft coupling	AISI 304 SS
Wear ring	Rubber
Motor extenal casing	AISI 304 SS
Mechanical seal	Special seal for deep well (carbor-sic/tc)
Shaft	AISI 304 SS
Bearing	NSK
Seal lubricant oil	Oil for food machinery and pharmaceuetic use.



### Performance table

Type	Motor power		Delivery N≈2850r/min												
	KW	H	Q(m <sup>3</sup> /h)	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	2.7	3.0	
S4P2-7	0.37	0.5	H(m)	49	49	48	48	46	44	42	39	34	29	24	
S4P2-8	0.37	0.5		56	56	55	54	53	51	48	44	39	33	27	
S4P2-9	0.55	0.75		63	63	62	61	59	57	54	50	44	37	30	
S4P2-11	0.55	0.75		77	76	76	75	73	70	66	61	54	46	37	
S4P2-13	0.75	1		91	90	90	88	86	82	78	72	64	54	44	
S4P2-15	0.75	1		105	104	103	102	99	95	90	83	73	62	50	
S4P2-18	1.1	1.5		126	125	124	122	119	114	108	99	88	75	60	
S4P2-21	1.1	1.5		147	146	145	143	138	133	126	116	103	87	71	
S4P2-24	1.5	2		168	167	165	163	158	152	144	132	117	100	81	
S4P2-28	1.5	2		196	195	193	190	185	177	168	154	137	116	94	
S4P2-34	2.2	3		238	236	234	231	224	215	203	188	166	141	114	
S4P2-40	2.2	3		280	278	276	272	264	253	239	221	196	166	134	
S4P2-46	3	4		322	320	317	313	303	291	275	254	225	191	155	
S4P2-52	3	4		364	362	358	353	343	329	311	287	254	216	175	



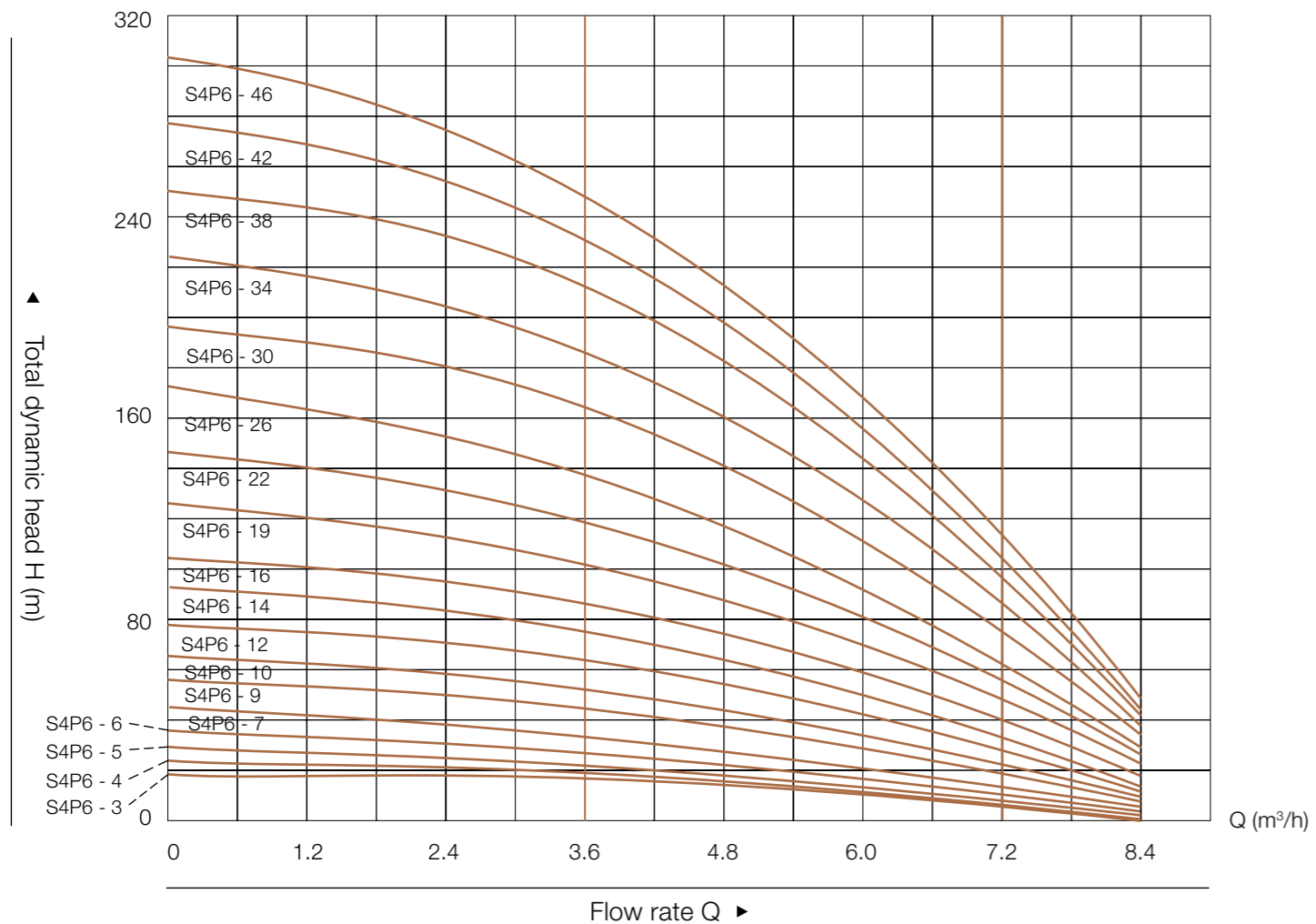


**Performance table**

Type	Motor power		Delivery N≈2850r/min									
	KW	H	Q(m³/h)	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8
S4P3-5	0.37	0.5	H(m)	36	36	35	33	31	27	22	17	10
S4P3-6	0.37	0.5		44	43	42	40	37	33	27	20	12
S4P3-7	0.55	0.75		51	50	49	47	43	38	31	23	14
S4P3-8	0.55	0.75		58	57	55	53	50	44	36	26	16
S4P3-9	0.75	1		65	64	62	60	56	49	40	30	18
S4P3-11	0.75	1		80	78	76	73	68	60	49	36	22
S4P3-13	1.1	1.5		95	93	90	87	81	71	58	43	26
S4P3-16	1.1	1.5		116	114	111	107	99	88	72	53	32
S4P3-18	1.5	2		131	128	125	120	112	99	81	60	36
S4P3-22	1.5	2		160	157	153	147	137	121	99	73	44
S4P3-26	2.2	3		189	185	180	173	161	143	117	86	52
S4P3-30	2.2	3		218	214	208	200	186	165	135	99	60
S4P3-35	3	4		255	250	243	233	217	192	157	116	70
S4P3-40	3	4		291	285	277	266	248	219	180	132	80
S4P3-45	4	5.5		327	321	312	300	279	247	202	149	90
S4P3-50	4	5.5		364	356	347	333	210	274	225	165	100

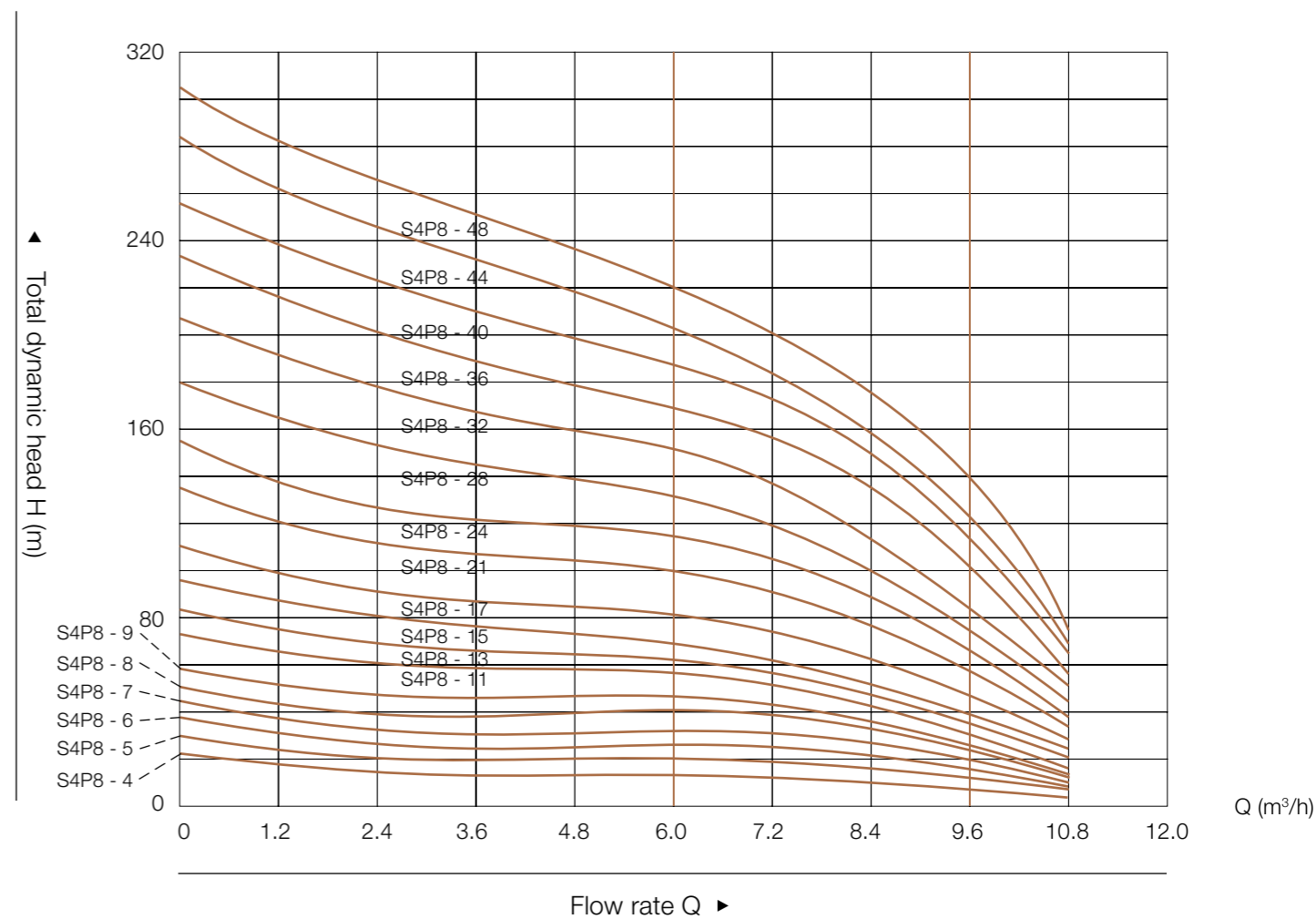
**Performance table**

Type	Motor power		Delivery N≈2850r/min												
	KW	H	Q(m³/h)	0	0.6	1.2	1.8	2.4	3.0	3.6	4.2	4.8	5.4	6.0	
S4P4-4	0.37	0.5	H(m)	29	28	27	26	25	23	21	18	15	11	6	
S4P4-5	0.37	0.5		36	35	34	32	31	29	26	23	18	13	8	
S4P4-6	0.55	0.75		43	42	40	39	37	35	32	27	22	16	9	
S4P4-7	0.55	0.75		51	49	47	45	44	41	37	32	26	19	11	
S4P4-8	0.75	1		58	56	54	52	50	47	42	36	29	21	12	
S4P4-10	0.75	1		72	69	67	65	62	58	53	46	37	27	16	
S4P4-12	1.1	1.5		87	83	80	78	75	70	63	55	44	32	19	
S4P4-14	1.1	1.5		101	97	94	91	87	82	74	64	51	37	22	
S4P4-16	1.5	2		116	111	107	104	100	93	84	73	59	43	25	
S4P4-19	1.5	2		137	132	127	124	118	111	100	87	70	51	30	
S4P4-22	2.2	3		159	153	147	143	137	128	116	100	81	59	34	
S4P4-26	2.2	3		188	181	174	169	162	152	137	118	95	69	40	
S4P4-30	3	4		217	208	201	195	187	175	158	137	110	80	47	
S4P4-34	3	4		246	236	228	221	212	198	179	155	125	91	53	
S4P4-39	4	5.5		282	271	261	254	243	228	206	178	143	104	61	
S4P4-44	4	5.5		318	306	295	286	274	257	232	200	161	117	68	



**Performance table**

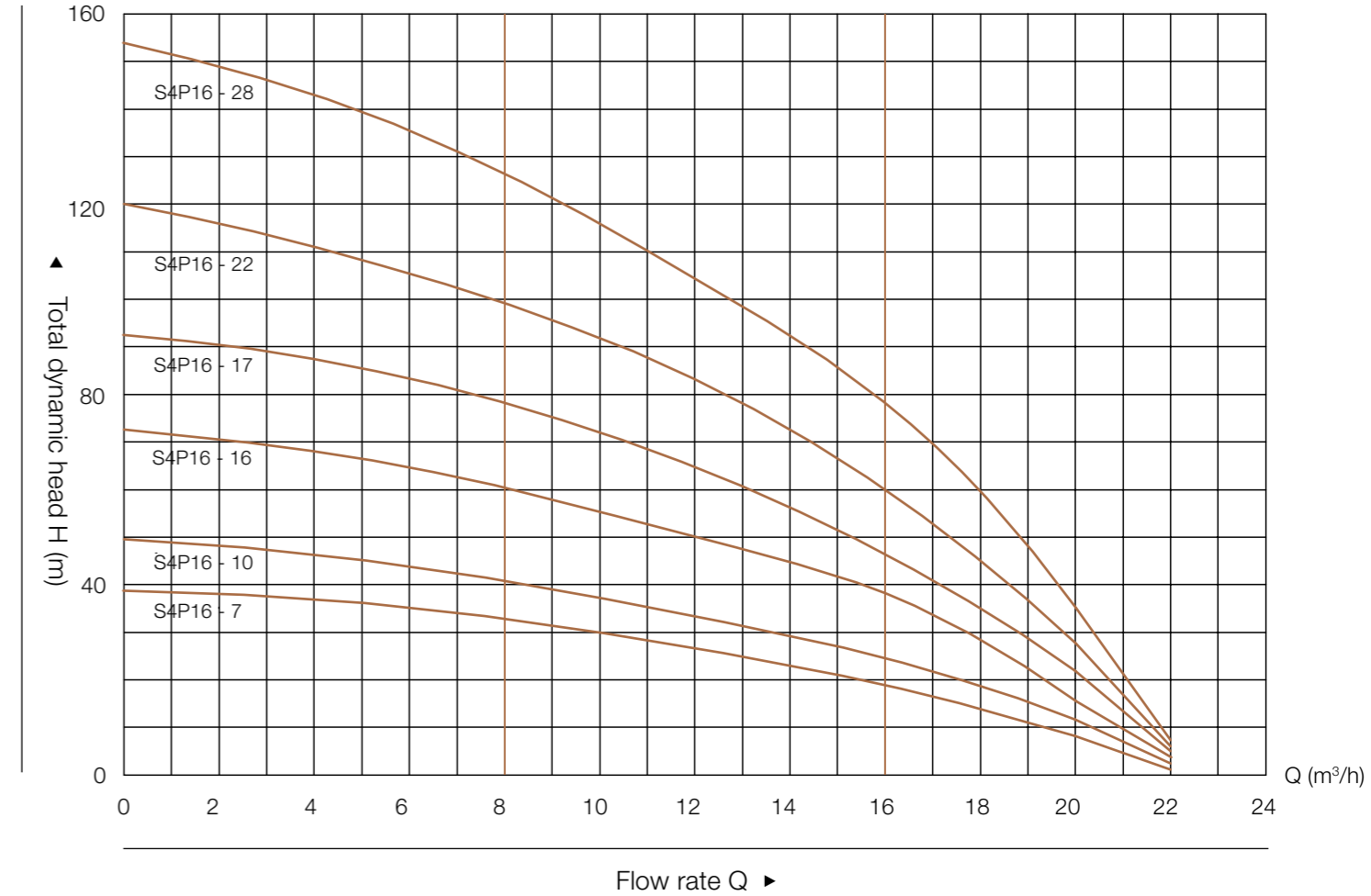
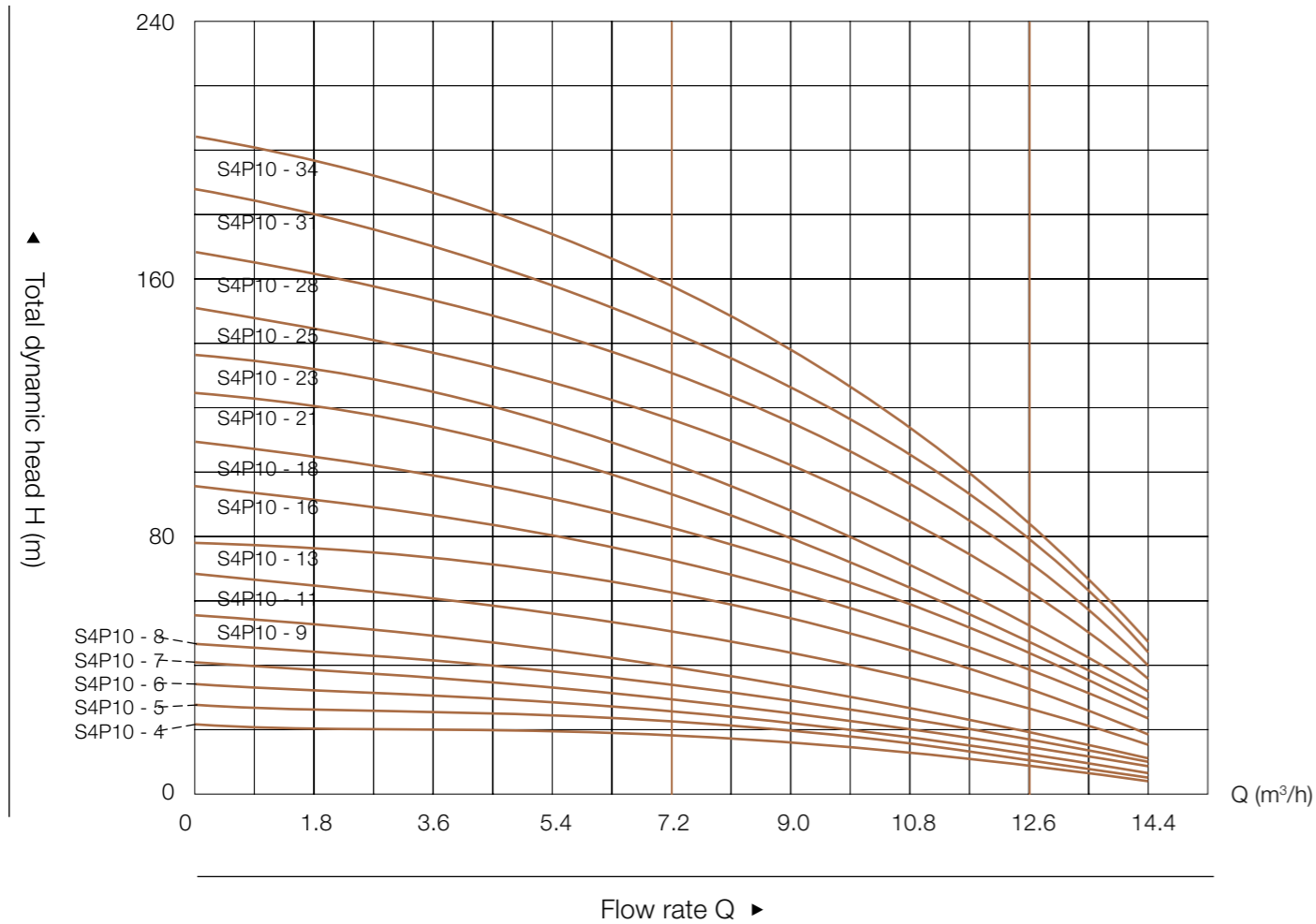
Type	Motor power		Q(m³/h)	Delivery N≈2850r/min							
	KW	H		0	1.2	2.4	3.6	4.8	6.0	7.2	8.4
S4P6-3	0.37	0.5	H(m)	20	19	17	16	14	11	8	3
S4P6-4	0.37	0.5		26	25	23	21	19	15	10	5
S4P6-5	0.55	0.75		33	31	29	26	24	19	13	6
S4P6-6	0.55	0.75		39	37	34	32	28	22	15	7
S4P6-7	0.75	1		46	43	40	37	33	26	18	8
S4P6-9	0.75	1		59	56	51	47	42	33	23	10
S4P6-10	1.1	1.5		66	62	57	53	47	37	25	11
S4P6-12	1.1	1.5		79	74	69	63	57	45	30	14
S4P6-14	1.5	2		92	87	80	74	66	52	35	16
S4P6-16	1.5	2		105	99	91	84	75	59	40	18
S4P6-19	2.2	3		125	118	108	100	89	70	48	21
S4P6-22	2.2	3		144	136	126	116	104	82	55	25
S4P6-26	3	4		171	161	148	137	122	96	65	29
S4P6-30	3	4		197	186	171	158	141	111	75	34
S4P6-34	4	5.5		223	211	194	179	160	126	85	38
S4P6-38	4	5.5		249	236	217	200	179	141	95	43
S4P6-42	5.5	7.5		276	260	240	221	198	156	105	47
S4P6-46	5.5	7.5		302	285	263	243	217	171	115	52



**Performance table**

Type	Motor power		Q(m³/h)	Delivery N≈2850r/min									
	KW	H		0	1.2	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8
S4P8-4	0.55	0.75	H(m)	26	24	22	21	20	19	17	14	10	6
S4P8-5	0.55	0.75		32	30	28	26	25	23	21	18	13	8
S4P8-6	0.75	1		39	36	34	32	30	28	25	21	16	10
S4P8-7	0.75	1		45	42	39	37	35	33	30	25	18	11
S4P8-8	1.1	1.5		52	48	45	42	40	37	34	28	21	13
S4P8-9	1.1	1.5		58	54	51	48	45	42	38	32	24	15
S4P8-11	1.5	2		71	66	62	58	55	51	47	39	29	18
S4P8-13	1.5	2		84	79	73	69	64	61	55	46	34	21
S4P8-15	2.2	3		97	91	84	79	74	70	63	53	39	24
S4P8-17	2.2	3		109	103	96	90	84	79	72	61	45	28
S4P8-21	3	4		135	127	118	111	104	98	89	75	55	34
S4P8-24	3	4		155	145	135	127	119	112	101	85	63	39
S4P8-28	4	5.5		180	169	158	148	139	131	118	100	73	45
S4P8-32	4	5.5		206	193	180	169	159	149	135	114	84	52
S4P8-36	5.5	7.5		232	218	203	191	179	168	152	128	94	58
S4P8-40	5.5	7.5		258	242	225	212	198	187	169	143	105	65
S4P8-44	7.5	10	283	266	248	233	218	205	186	157	116	72	
S4P8-48	7.5	10	309	290	270	254	238	224	203	171	126	78	





**Performance table**

Type	Motor power		Q(m³/h)	Delivery N≈2850r/min								
	KW	H		0	1.8	3.6	5.4	7.2	9.0	10.8	12.6	14.4
S4P10-4	0.75	1	H(m)	24	23	22	20	19	16	13	10	6
S4P10-5	0.75	1		30	29	27	25	23	20	17	12	7
S4P10-6	1.1	1.5		36	34	33	30	28	24	20	15	9
S4P10-7	1.1	1.5		42	40	38	35	33	28	23	17	10
S4P10-8	1.5	2		48	46	44	40	37	32	27	20	12
S4P10-9	1.5	2		54	51	49	46	42	37	30	22	13
S4P10-11	2.2	3		66	63	60	56	51	45	37	27	16
S4P10-13	2.2	3		78	74	71	66	61	53	44	32	19
S4P10-16	3	4		96	91	87	81	75	65	54	40	23
S4P10-18	3	4		108	103	98	91	84	73	60	45	26
S4P10-21	4	5.5		126	120	114	106	98	85	70	52	30
S4P10-23	4	5.5		138	121	125	116	108	93	77	57	33
S4P10-25	5.5	7.5		150	143	136	126	117	101	84	62	36
S4P10-28	5.5	7.5		168	160	152	142	131	114	94	70	40
S4P10-31	7.5	10		186	177	169	157	145	126	104	77	45
S4P10-34	7.5	10	204	194	185	172	159	138	114	85	49	

**Performance table**

Type	Motor power		Q(m³/h)	Delivery N≈2850r/min										
	KW	H		0	6	8	10	12	14	16	18	20	21	22
S4P16-7	1.5	2	H(m)	38	34	31	28	26	24	19	15	9	5	1
S4P16-10	2.2	3		49	44	40	37	34	30	25	19	11	7	1
S4P16-16	3	4		71	63	58	53	49	44	36	27	16	10	2
S4P16-17	4	5.5		92	82	75	69	64	57	47	35	21	13	3
S4P16-22	5.5	7.5		120	106	98	89	83	74	61	45	27	16	4
S4P16-28	7.5	10		153	136	125	114	105	95	78	58	34	21	6

# S3P 50Hz 3"

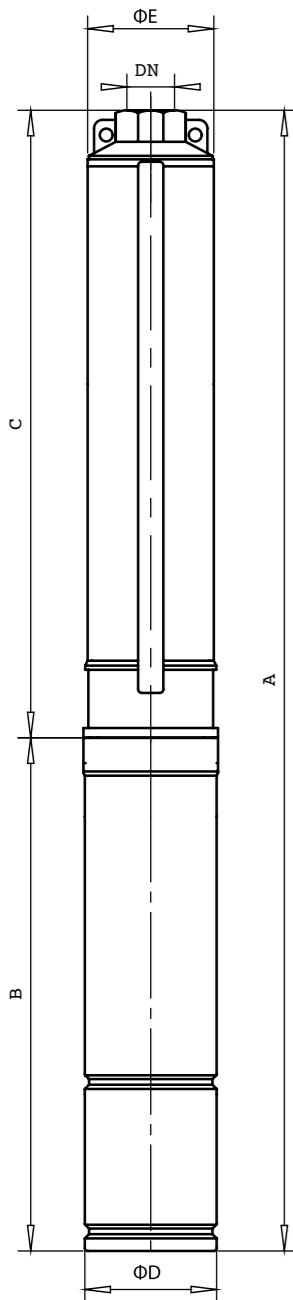
Installation  
dimension

hydroo®

# S3.5P 50Hz 3,5"

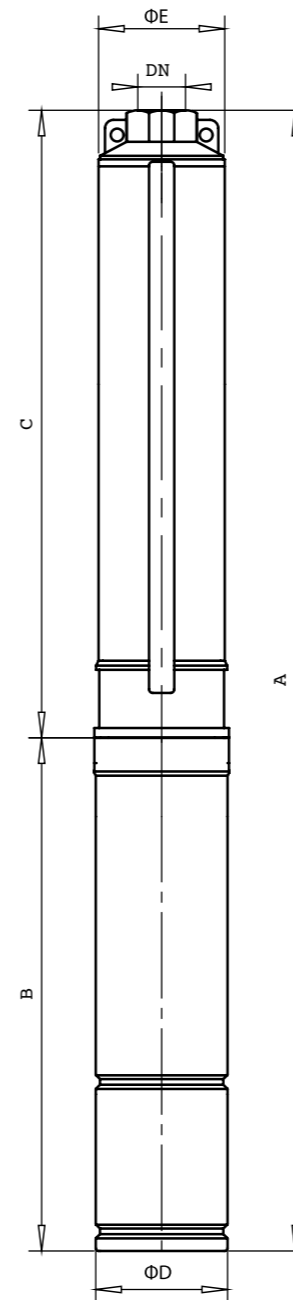
Installation  
dimension

hydroo®



Model	Size (mm)						Weight (kg)	
	A	B	C	DN	ΦE	ΦD	Pump with motor	Controller
S3P2-10	777	338	439	1"	69	72	7.3	0.75
S3P2-14	891	363	528	1"	69	72	8.3	0.75
S3P2-20	1093	407	686	1"	69	72	10.3	0.75
S3P2-27	1324	458	866	1"	69	72	12.5	0.75
S3P2-37	1636	523	1113	1"	69	72	15.2	0.75

Model	Size (mm)						Weight (kg)	
	A	B	C	DN	ΦE	ΦD	Pump with motor	Controller
S3P3-7	736	338	398	1"	69	72	7.1	0.75
S3P3-10	839	363	476	1"	69	72	8.1	0.75
S3P3-15	1037	407	630	1"	69	72	10.1	0.75
S3P3-20	1219	458	761	1"	69	72	12.1	0.75
S3P3-28	1516	523	993	1"	69	72	14.7	0.75



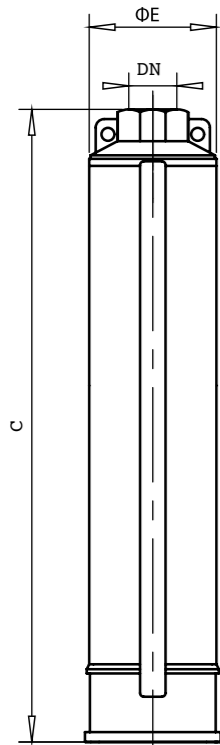
Model	Size (mm)						Weight (kg)	
	A	B	C	DN	ΦE	ΦD	Pump with motor	Controller
S3.5P2-9	841	375	466	1.5"	90	88	13.5	0.75
S3.5P2-13	1011	400	611	1.5"	90	88	16	0.75
S3.5P2-16	1110	415	695	1.5"	90	88	17.62	0.75
S3.5P2-18	1185	435	750	1.5"	90	88	18	0.75
S3.5P2-22	1382	486	896	1.5"	90	88	24	0.75
S3.5P2-28	1600	536	1064	1.5"	90	88	27	0.75

Model	Size (mm)						Weight (kg)	
	A	B	C	DN	ΦE	ΦD	Pump with motor	Controller
S3.5P3-8	854	375	479	1.5"	90	88	14.1	0.75
S3.5P3-11	978	400	578	1.5"	90	88	15	0.75
S3.5P3-13	1093	415	678	1.5"	90	88	16.3	0.75
S3.5P3-15	1179	435	744	1.5"	90	88	17.4	0.75
S3.5P3-16	1212	435	777	1.5"	90	88	18	0.75
S3.5P3-18	1328	486	842	1.5"	90	88	18.2	0.75
S3.5P3-19	1361	486	875	1.5"	90	88	19	0.75
S3.5P3-23	1577	536	1041	1.5"	90	88	23.6	0.75

# S4P 50Hz 4"

Installation  
dimension

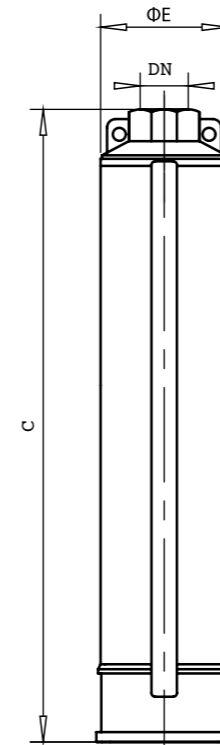
hydroo®



Model	Size (mm)			Weight (kg)
	C	DN	ØE	
S4P2-7	387	1.25"	90	4.25
S4P2-8	412	1.25"	90	4.95
S4P2-9	437	1.25"	90	5.3
S4P2-11	487	1.25"	90	6.7
S4P2-13	573	1.25"	90	6.9
S4P2-15	623	1.25"	90	7.15
S4P2-18	697	1.25"	90	7.7
S4P2-21	808	1.25"	90	8.3
S4P2-24	882	1.25"	90	9.05
S4P2-28	1018	1.25"	90	11.25
S4P2-34	1167	1.25"	90	12.2
S4P2-40	1353	1.25"	90	13.5
S4P2-46	1503	1.25"	90	17.3
S4P2-52	1838	1.25"	90	21.1

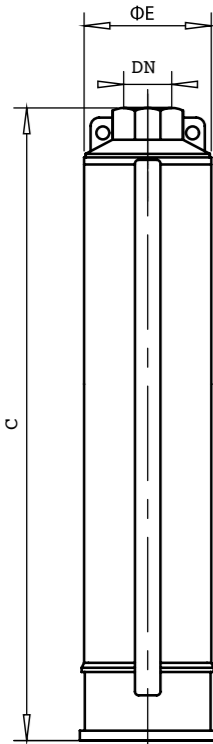
Model	Size (mm)			Weight (kg)
	C	DN	ØE	
S4P3-5	337	1.25"	90	3.85
S4P3-6	362	1.25"	90	4.45
S4P3-7	387	1.25"	90	4.8
S4P3-8	412	1.25"	90	6
S4P3-9	437	1.25"	90	6.1
S4P3-11	487	1.25"	90	6.5
S4P3-13	573	1.25"	90	6.7
S4P3-16	648	1.25"	90	7
S4P3-18	697	1.25"	90	7.65
S4P3-22	833	1.25"	90	9.85
S4P3-26	932	1.25"	90	10.3
S4P3-30	1067	1.25"	90	11.3
S4P3-35	1192	1.25"	90	14.9
S4P3-40	1353	1.25"	90	18.6
S4P3-45	1478	1.25"	90	19.05
S4P3-50	1639	1.25"	90	20.3

hydroo®



Model	Size (mm)			Weight (kg)
	C	DN	ØE	
S4P4-4	329	1.25"	90	3.75
S4P4-5	358	1.25"	90	4.45
S4P4-6	387	1.25"	90	4.8
S4P4-7	417	1.25"	90	6
S4P4-8	446	1.25"	90	6.3
S4P4-10	504	1.25"	90	6.5
S4P4-12	599	1.25"	90	6.7
S4P4-14	656	1.25"	90	6.9
S4P4-16	715	1.25"	90	7.65
S4P4-19	839	1.25"	90	9.75
S4P4-22	926	1.25"	90	10
S4P4-26	1076	1.25"	90	11.1
S4P4-30	1194	1.25"	90	14.5
S4P4-34	1310	1.25"	90	15.4
S4P4-39	1492	1.25"	90	19.2
S4P4-44	1638	1.25"	90	20.4

Model	Size (mm)			Weight (kg)
	C	DN	ØE	
S4P6-3	328	2.0"	90	3.85
S4P6-4	359	2.0"	90	4.45
S4P6-5	391	2.0"	90	4.7
S4P6-6	422	2.0"	90	6
S4P6-7	453	2.0"	90	6.3
S4P6-9	516	2.0"	90	6.5
S4P6-10	548	2.0"	90	6.7
S4P6-12	647	2.0"	90	6.9
S4P6-14	710	2.0"	90	7.6
S4P6-16	773	2.0"	90	9.15
S4P6-19	903	2.0"	90	9.7
S4P6-22	997	2.0"	90	10.4
S4P6-26	1122	2.0"	90	13.9
S4P6-30	1284	2.0"	90	15.1
S4P6-34	1409	2.0"	90	15.3
S4P6-38	1571	2.0"	90	15.5
S4P6-42	1696	2.0"	90	15.7
S4P6-46	1822	2.0"	90	16.6



Model	Size (mm)			Weight (kg)
	C	DN	ØE	Pump
S4P8-4	383	2.0"	90	4.6
S4P8-5	420	2.0"	90	5.9
S4P8-6	458	2.0"	90	6.1
S4P8-7	496	2.0"	90	6.3
S4P8-8	533	2.0"	90	6.5
S4P8-9	571	2.0"	90	6.7
S4P8-11	682	2.0"	90	7.15
S4P8-13	757	2.0"	90	8.85
S4P8-15	831	2.0"	90	9
S4P8-17	906	2.0"	90	9.6
S4P8-21	1091	2.0"	90	13.3
S4P8-24	1204	2.0"	90	14.2
S4P8-28	1389	2.0"	90	14.5
S4P8-32	1538	2.0"	90	14.7
S4P8-36	1688	2.0"	90	15
S4P8-40	1873	2.0"	90	16.35
S4P8-44	2022	2.0"	90	17.15
S4P8-48	2208	2.0"	90	22.75

Model	Size (mm)			Weight (kg)
	C	DN	ØE	Pump
S4P16-7	745	2.0"	90	9.6
S4P16-10	952	2.0"	90	13.8
S4P16-16	1365	2.0"	90	14.6
S4P16-17	1434	2.0"	90	15
S4P16-22	1778	2.0"	90	16.7
S4P16-28	2192	2.0"	90	19.55

Model	Size (mm)			Weight (kg)
	C	DN	ØE	Pump
S4P10-4	383	2.0"	90	4.3
S4P10-5	420	2.0"	90	5.3
S4P10-6	458	2.0"	90	5.7
S4P10-7	496	2.0"	90	6.45
S4P10-8	533	2.0"	90	7.5
S4P10-9	571	2.0"	90	8.9
S4P10-11	682	2.0"	90	11.1
S4P10-13	757	2.0"	90	11.5
S4P10-16	869	2.0"	90	11.8
S4P10-18	980	2.0"	90	12.2
S4P10-21	1091	2.0"	90	12.4
S4P10-23	1166	2.0"	90	12.6
S4P10-25	1241	2.0"	90	12.8
S4P10-28	1389	2.0"	90	13
S4P10-31	1501	2.0"	90	13.35
S4P10-34	1613	2.0"	90	14.15

## HYA4

4" Water cooled  
Submersible motors  
Canned type



Motors designed to work in 4" or wider wells. The use of very high quality Made in Italy materials and our strict tests together with consolidated know how ensure high mechanical resistance and high performing electrical features.

All parts in contact with water are in AISI 304 stainless steel which ensures resistance to corrosion even in the most extreme conditions of use.

### Product features

#### Stator:

With 24 slots, specifically developed to achieve maximum electrical performance. Airtight sealed and resin encapsulated. A solution which ensures excellent heat exchange and extremely high mechanical resistance with high pressure, something typical of very deep immersions.

#### Removable Power Cable-Connector:

It ensures perfect sealing in the most critical conditions and it aids maintenance operations. The power cable complies with all major standards on the use in drinking water (KTW, ACS, WRAS).

#### Filling Liquid:

Mixture of water and propylene glycol to ensure adequate lubrication of the thrust bearing system together with the ability to lower the freezing point when stored in very cold places.

#### Vanne liquide de restauration :

It allows water in to restore internal level.

#### Shaft:

Carbon-steel alloys in the rotor area, to foster electrical features. AISI 304 stainless steel projection. DUPLEX, a special type of stainless steel, replaces AISI 304 in motors bigger than 3Hp. This steel combines excellent resistance to corrosion and high mechanical resistance, which is necessary where static torque becomes really important.

#### Thrust Bearing System:

Kingsbury-type with stainless steel thrust bearing runners oscillating on a self-aligning system. A specific runner lapping process makes this system extremely reliable and efficient.

#### 100% Tested:

All motors are tested at the end of the line.

### SINGLE PHASE SUBMERSIBLE MOTORS 50HZ 230V WATER COOLED

Type	P <sub>2</sub> [Hp]	P <sub>2</sub> [kW]	Voltage [V]	Ph	In [A]	I <sub>avv</sub> [A]	rpm	φ cos	η [%]	Capacitor [µF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm <sup>2</sup> ]	Cable Length [m]
HYA4-037S230	0,5	0,37	230	1	3,5	12,5	2860	0,88	52	20	2000	237	6,8	4 x 1,5	1,7
HYA4-055S230	0,75	0,55	230	1	4,8	17,2	2855	0,88	57	25	2000	257	7,9	4 x 1,5	1,7
HYA4-075S230	1	0,75	230	1	5,7	19,7	2840	0,91	63	35	2000	272	9,1	4 x 1,5	1,7
HYA4-110S230	1,5	1,1	230	1	8,2	27,2	2845	0,91	64	40	2000	297	11,2	4 x 1,5	1,7
HYA4-150S230	2	1,5	230	1	10,5	36,4	2840	0,92	68	50	3000	332	13,4	4 x 1,5	1,7
HYA4-220S230	3	2,2	230	1	15,2	48,9	2840	0,91	69	70	3000	387	14,2	4 x 1,5	1,7
HYA4-370S230	5	3,7	230	1	25	98,8	2845	0,95	68	90	6500	634	27,8	4 x 2	2,7

### THREE PHASE SUBMERSIBLE MOTORS 50HZ 230V WATER COOLED

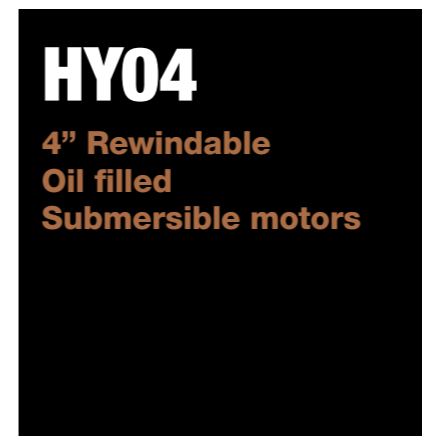
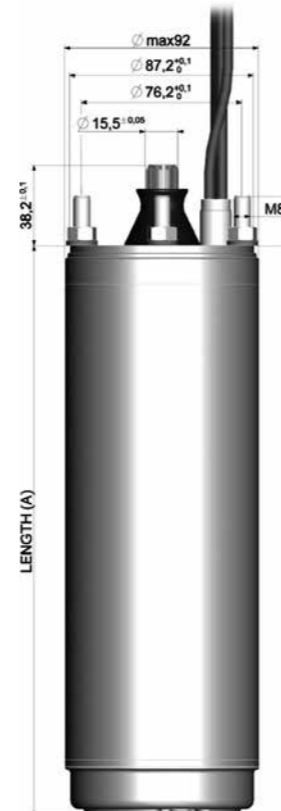
Type	P <sub>2</sub> [Hp]	P <sub>2</sub> [kW]	Voltage [V]	Ph	In [A]	I <sub>av</sub> [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm <sup>2</sup> ]	Cable Length [m]
HYA4-037T230	0,5	0,37	230	3	2,3	9,3	2855	0,57	71	-	2000	212	5,8	4 x 1,5	1,7
HYA4-055T230	0,75	0,55	230	3	2,8	14,0	2855	0,65	76	-	2000	237	6,8	4 x 1,5	1,7
HYA4-075T230	1	0,75	230	3	3,4	16,1	2850	0,72	77	-	2000	257	7,9	4 x 1,5	1,7
HYA4-110T230	1,5	1,1	230	3	5	26,0	2820	0,77	72	-	2000	272	9,1	4 x 1,5	1,7
HYA4-150T230	2	1,5	230	3	6,6	28,6	2835	0,80	71	-	3000	297	11,2	4 x 1,5	1,7
HYA4-220T230	3	2,2	230	3	9,8	41,1	2835	0,80	70	-	3000	332	13,4	4 x 1,5	1,7
HYA4-300T230	4	3	230	3	13	78,5	2855	0,79	73	-	3000	387	18,9	4 x 1,5	1,7
HYA4-400T230	5,5	4	230	3	17,2	89,4	2845	0,76	77	-	6500	574	23,4	4 x 2	2,7
HYA4-550T230	7,5	5,5	230	3	24,5	113,4	2850	0,76	74	-	6500	634	27,8	4 x 2	2,7

### THREE PHASE SUBMERSIBLE MOTORS 50HZ 400V WATER COOLED

Type	P <sub>2</sub> [Hp]	P <sub>2</sub> [kW]	Voltage [V]	Ph	In [A]	I <sub>av</sub> [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm <sup>2</sup> ]	Cable Length [m]
HYA4-037T400	0,5	0,37	400	3	1,4	6,0	2850	0,54	70	-	2000	212	5,8	4 x 1,5	1,7
HYA4-055T400	0,75	0,55	400	3	1,7	8,3	2855	0,62	75	-	2000	237	6,8	4 x 1,5	1,7
HYA4-075T400	1	0,75	400	3	2,1	9,8	2825	0,76	68	-	2000	257	7,9	4 x 1,5	1,7
HYA4-110T400	1,5	1,1	400	3	3,2	16,1	2825	0,68	73	-	2000	272	9,1	4 x 1,5	1,7
HYA4-150T400	2	1,5	400	3	4,1	18,7	2840	0,75	71	-	3000	297	11,2	4 x 1,5	1,7
HYA4-220T400	3	2,2	400	3	5,9	28,1	2830	0,78	69	-	3000	332	13,4	4 x 1,5	1,7
HYA4-300T400	4	3	400	3	7,9	48,4	2850	0,76	72	-	3000	387	18,9	4 x 1,5	1,7
HYA4-400T400	5,5	4	400	3	10,1	51,5	2850	0,74	77	-	6500	574	23,4	4 x 2	2,7
HYA4-550T400	7,5	5,5	400	3	13,9	66,6	2850	0,77	74	-	6500	634	27,8	4 x 2	2,7
HYA4-750T400	10	7,5	400	3	16,9	91,5	2845	0,76	74	-	6500	734	31,4	4 x 2	2,7

### TECHNICAL SPECIFICATIONS

Motor/Pump Flange	4" Nema Standard
Degree of protection	IP 68
Insulation Class	F
Voltage tolerance	- 10% / + 10%
Pumped liquid temperature	0°C - 35°C 32°F - 95°F
Min. Cooling Flow	0,1 m/s 0,328 ft/s
Max. Starts / Hour	30
Mounting	Vertical And/Or Horizontal
Max. Immersion Depth	300M
Thrust Load From 0,5 Until 1,5 HP From 3 Until 4 HP From 5,5 Until 10 HP	2000N 3000N 5000N
<b>Single Phase Version: PSC Type (Permanent Split Capacitor)</b>	
<b>Cables, Voltage, Thrust Loads [...] Special Versions Available.</b>	



hydroo®

Motors designed to work in 4" or wider wells. The use of very high quality Made in Italy materials and our strict tests together with consolidated know how ensure high mechanical resistance and high performing electric features.

All parts in contact with water are in AISI 304 stainless steel. The power cable with removable connector ensures perfect water-tightness.

#### Product features

**External sleeve and bottom:**  
Made in AISI 304 stainless steel. More specifically, sleeve is made of AISI 304L (Low carbon) to avoid possible corrosions on the welding.

#### Upper Bracket:

Cast iron with cathoporesis treatment and protected with an AISI 304 stainless steel cover. Sleeve clamping is ensured by 4 inserts in low power motors and 6 inserts in motors bigger than 3Hp.

#### Mechanical Seal:

Graphite/ceramic in the standard version; SIC-SIC version available upon request.

#### Ball Bearings:

Duly oversized to ensure a long lasting motor.

#### Stator:

With 24 slots, specifically developed to achieve maximum electrical yield. Airtight sealed and immersed in selected mineral white and highly refined oil, suitable to be used in drinking water (F.D.A., Food and Drug Administration, approved)

#### Removable Power Cable-Connector:

It ensures perfect sealing in the most critical conditions and it aids maintenance operations. More specifically, the connector prevents oil from rising in the conductors up to the joint, thus enabling immersion at greater depths. The power cable complies with all major standards on the use in drinking water (KTW, ACS, WRAS).

#### Shaft:

Carbon-steel alloys in the rotor area, to foster electrical features. AISI 304 stainless steel projection. DUPLEX, a special type of stainless steel, replaces AISI 304 in motors bigger than 3Hp. This steel combines excellent resistance to corrosion and high mechanical resistance, which is necessary where static torque becomes really important.

#### 100% tested:

All motors are tested at the end of the line. An extremely effective seal check is also carried out on all motors.



### SINGLE PHASE SUBMERSIBLE MOTORS 50Hz 230V OIL FILLED

Type	P <sub>2</sub> [Hp]	P <sub>2</sub> [kW]	Voltage [V]	Ph	In [A]	I <sub>av</sub> [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm <sup>2</sup> ]	Cable Length [m]
HYO4-037S230	0,5	0,37	230	1	3,6	12	2810	0,87	52	20	2000	311,3	6,45	4 x 1,5	1,7
HYO4-055S230	0,75	0,55	230	1	4,7	16,5	2810	0,88	57	25	2000	331,3	7,2	4 x 1,5	1,7
HYO4-075S230	1	0,75	230	1	5,9	18,9	2825	0,9	62	35	2000	356,3	8,45	4 x 1,5	1,7
HYO4-110S230	1,5	1,1	230	1	8,3	26,2	2840	0,91	64	40	2000	386,3	10,2	4 x 1,5	1,7
HYO4-150S230	2	1,5	230	1	10,7	35	2845	0,93	66	60	2000	436,3	11,65	4 x 1,5	1,7
HYO4-220S230	3	2,2	230	1	15,2	47	2820	0,93	67	80	2000	481,3	14,9	4 x 1,5	1,7
HYO4-370S230	5	3,7	230	1	24,5	95	2810	0,95	73	100+315/400	5000	699,5	24,15	4 x 2	2,7



### THREE PHASE SUBMERSIBLE MOTORS 50Hz 230V OIL FILLED

Type	P <sub>2</sub> [Hp]	P <sub>2</sub> [kW]	Voltage [V]	Ph	In [A]	I <sub>avv</sub> [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm <sup>2</sup> ]	Cable Length [m]
HYO4-037T230	0,5	0,37	230	3	2,2	8,9	2855	0,75	57	-	2000	311,3	6,45	4 x 1,5	1,7
HYO4-055T230	0,75	0,55	230	3	3,4	13,5	2830	0,70	62	-	2000	331,3	7,2	4 x 1,5	1,7
HYO4-075T230	1	0,75	230	3	4,1	15,5	2820	0,74	62	-	2000	356,3	8,45	4 x 1,5	1,7
HYO4-110T230	1,5	1,1	230	3	5,9	25	2825	0,68	68	-	2000	371,3	9,35	4 x 1,5	1,7
HYO4-150T230	2	1,5	230	3	8,2	27,5	2830	0,64	70	-	2000	386,3	10,2	4 x 1,5	1,7
HYO4-220T230	3	2,2	230	3	10,6	39,5	2815	0,70	72	-	2000	436,3	11,65	4 x 1,5	1,7
HYO4-300T230	4	3	230	3	12,8	39,5	2830	0,81	75	-	3000	481,3	14,9	4 x 1,5	1,7
HYO4-400T230	5,5	4	230	3	15,6	86	2840	0,83	76	-	5000	609,5	20,05	4 x 2	2,7
HYO4-550T230	7,5	5,5	230	3	22,7	109	2825	0,78	79	-	5000	699,5	24,65	4 x 2	2,7

## Notes

### THREE PHASE SUBMERSIBLE MOTORS 50Hz 400V OIL FILLED

Type	P <sub>2</sub> [Hp]	P <sub>2</sub> [kW]	Voltage [V]	Ph	In [A]	I <sub>avv</sub> [A]	rpm	φ cos	η [%]	Capacitor [μF]	Thrust load [N]	Length A [mm]	Weight [kg]	Cable section [mm <sup>2</sup> ]	Cable Length [m]
HYO4-037T400	0,5	0,37	400	3	1,8	5,8	2850	0,54	58	-	2000	311,3	6,45	4 x 1,5	1,7
HYO4-055T400	0,75	0,55	400	3	2	8	2835	0,65	63	-	2000	331,3	7,2	4 x 1,5	1,7
HYO4-075T400	1	0,75	400	3	2,5	9,4	2825	0,77	63	-	2000	356,3	8,45	4 x 1,5	1,7
HYO4-110T400	1,5	1,1	400	3	3,4	15,5	2825	0,69	68	-	2000	371,3	9,35	4 x 1,5	1,7
HYO4-150T400	2	1,5	400	3	4,8	18	2835	0,63	71	-	2000	386,3	10,2	4 x 1,5	1,7
HYO4-220T400	3	2,2	400	3	6,1	39,5	2810	0,69	72	-	2000	436,3	11,65	4 x 1,5	1,7
HYO4-300T400	4	3	400	3	7,1	39,5	2835	0,69	75	-	3000	481,3	14,9	4 x 1,5	1,7
HYO4-400T400	5,5	4	400	3	9,2	49,5	2845	0,83	76	-	5000	609,5	20,05	4 x 2	2,7
HYO4-550T400	7,5	5,5	400	3	11,7	64	2835	0,86	79	-	5000	699,5	24,65	4 x 2	2,7
HYO4-750T400	10	7,5	400	3	16,4	88	2840	0,81	81	-	5000	799,5	28,95	4 x 2	2,7

### TECHNICAL SPECIFICATIONS

Motor/Pump Flange	4" Nema Standard
Degree of protection	IP 68
Insulation Class	F
Voltage tolerance	- 10% / + 10%
Pumped liquid temperature	0°C - 35°C 32°F - 95°F
Min. Cooling Flow	0,1 m/s 0,328 ft/s
Max. Starts / Hour	30
Mounting	Vertical And/Or Horizontal
Max. Immersion Depth	200M
Thrust Load	
From 0,5 to 3 Hp	2000N
From 3 to 4 Hp	3000N
From 5,5 to 10 Hp	5000N
Single Phase Version: Psc Type (Permanent Split Capacitor)	
Rewindable Motor Version	
Cables, Voltage, Thrust Loads [...] Special Versions Available.	





# hydroo®

Be pumping partners

**HYDROO Pump Industries SL**  
**Ctra. Girona-Banyoles, km. 10**  
**17843 Palol de Revardit**  
**Catalonia. Spain**  
**Tel. +34 972 394 654**  
**E-mail: [info@hydroo.com](mailto:info@hydroo.com)**  
**[www.hydroo.com](http://www.hydroo.com)**

201835-CTL-SJP-EN  
subject to amendments

