

NØRDIK PUMPS



SK

ELECTRIC SUBMERSIBLE PUMP

50Hz

CONTENTS

4SK



Introduction

The motor and pump body of SD, SK, SP submersible electrical pump series are tightly coupled through the designed casing pipe shaft, and a suction filter is installed between the pump and the motor to effectively isolate the impurities in the liquid. The whole component is submerged in the liquid with the pump, which can prevent the cavitation of the pump. The centrifugal force generated by the motor rotating the impeller of the pump drives the fluid to push from the underground to the surface. pump mainly consists of ground components and underground components. The ground components include control cabinet, cable, transformer, etc., and the underground components include pipelines, pumps and other attached ground components, which extend to the bottom of the well through the transmission pipeline. The motor part of submersible electrical pump is usually installed under the hydraulic press. Three different materials are provided for selection according to different working conditions.

Pump material

- SD series 3", 4" all plastic submersible electrical pump
- SK series submersible pump with 4" plastic impeller and stainless steel diversion case
- SP series 4", 6", 8", 10" stainless steel submersible pump

Pump operating conditions

Pumping liquids which are thin, clean, non-flammable, non-combustible or non-explosive liquids, not containing solid particles or fibers.
 Maximum ambient temperature: +40 °C
 Maximum altitude above sea level: 1000 m
 Maximum depth: 70m

Motor

Enclosure class: IP68
 Insulation class: F
 Voltage: 3x220-240/380-415V
 1x220-240V
 available with single-phase motors(0.37kW-2.2kW)

Liquid temperature °C

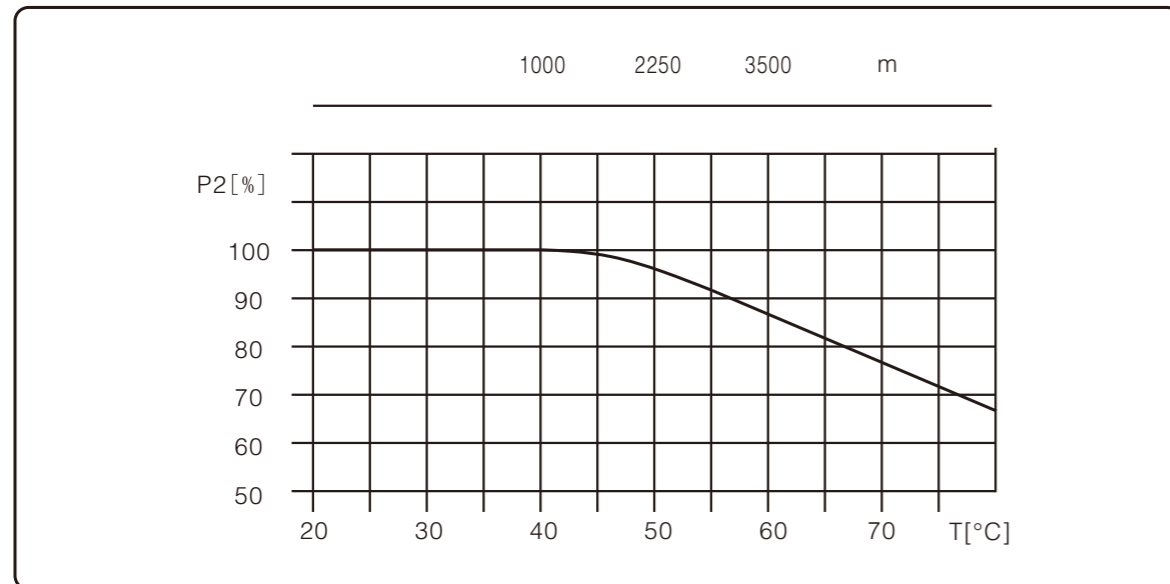
Normal temperature pump: -15°C to +70°C
 Hot temperature pump: -15°C to +105°C

Performance curves

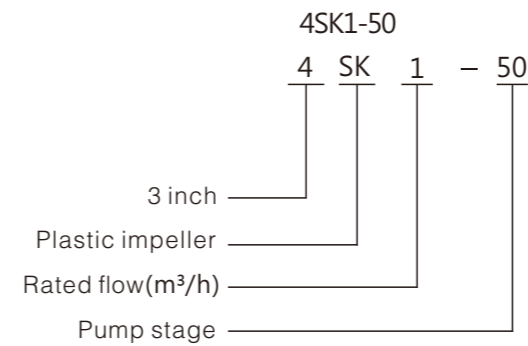
The motors used for the measurements are based on 2900rpm or 2950 rom
 Tolerances to ISO 9906
 Measurements have been made with airless water at a temperature of 20 °C
 The curves apply to the following kinematic viscosity: = 1 mm²/s
 Select a best efficiency of the pump which is operating within the bold curve of the pump performance.

Ambient temperature

If the ambient temperature exceeds the 40 °C or the pump is installed at an altitude exceeding 1000 m, the motor output power P2 will decrease. In such cases, it necessary to use a motor with a higher rated output.



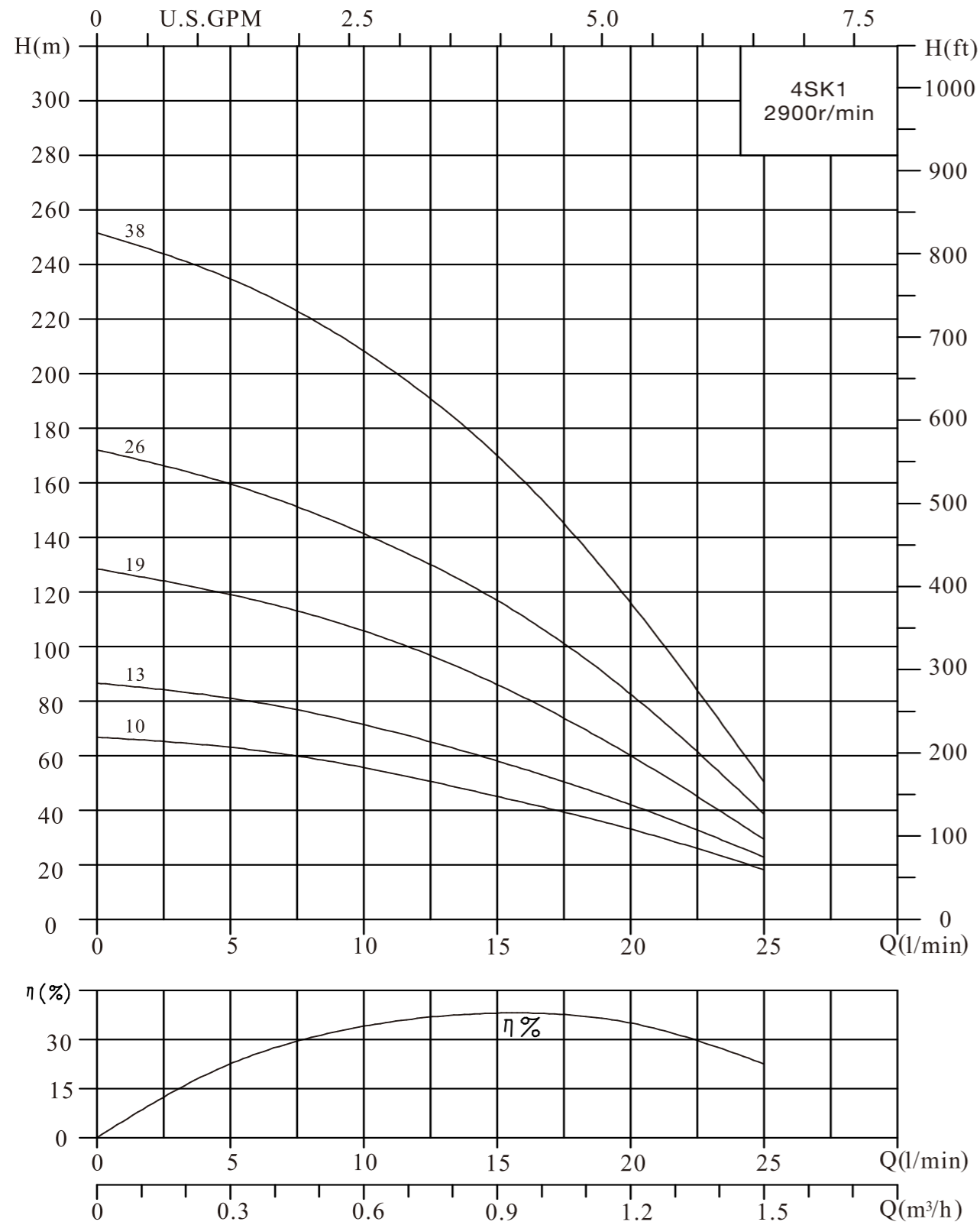
Model specification



Applications

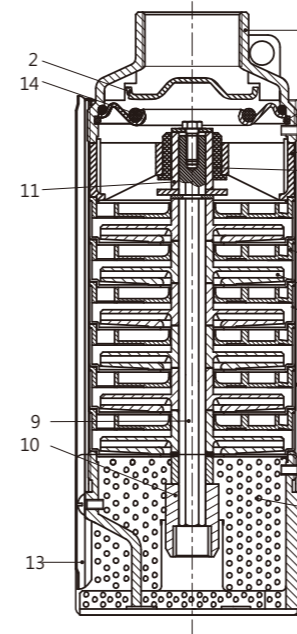
- Groundwater pumping
- Residential water
 - Wells pumping
 - Municipal water
 - Industrial water
 - Water villa
 - Water supply system
 - Municipal water supply
 - The system pressure
 - Pipeline pressurization
 - Spray irrigation system
 - The air conditioning system
 - Fire protection system
 - Cooling circulation system

Performance curve (50Hz)

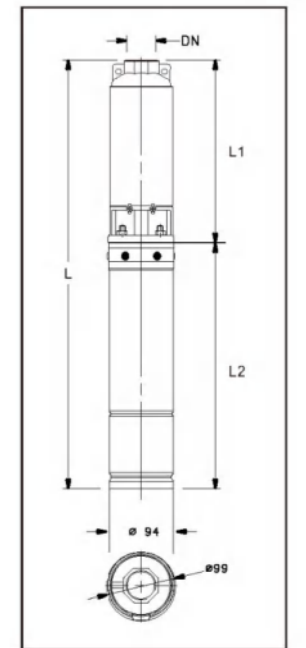


Performance curve (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	0.3	0.6	0.9	1.2	1.5	Dimension(mm)			Weight(kg)	
	kW	Hp			0	5	10	15	20	25	L1	L2	L	Pump	M+P
4SK1-10	0.37	0.5	1.25"	H(m)	67	63	55	46	33	18	331	324	655	3.3	12.3
4SK1-13	0.37	0.5			86	78	70	56	42	23	383	324	707	3.7	12.7
4SK1-19	0.55	0.75			126	118	105	86	60	30	488	344	832	4.7	14.5
4SK1-26	0.75	1			173	160	141	117	81	39	610	369	979	5.8	16.8
4SK1-38	1.1	1.5			253	234	208	169	117	52	896	404	1300	10.1	21.2
4SK1-50	1.5	2			318	295	266	218	158	70	1110	449	1559	8.2	25.1

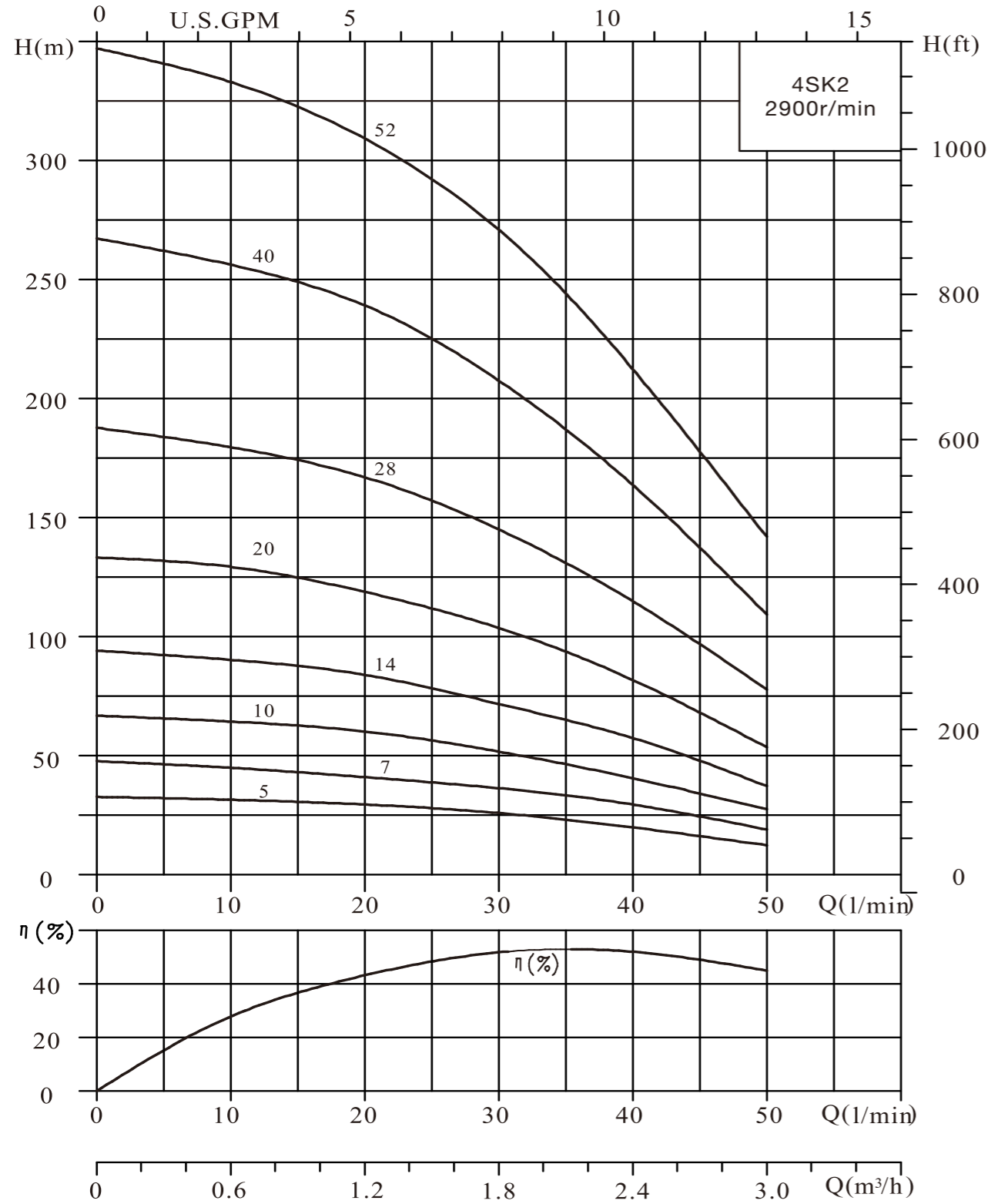


No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



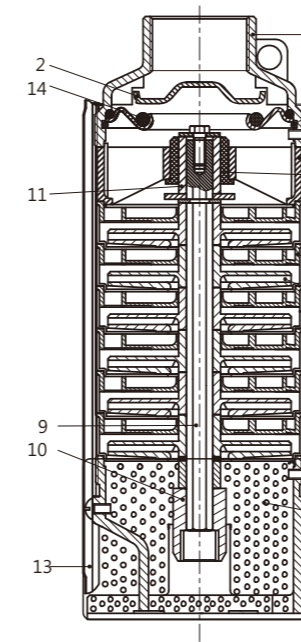
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK1-10	0.37	0.5	1.25"	331	324	655	3.3	9	12.3
4SK1-13	0.37	0.5		383	324	707	3.7	9	12.7
4SK1-19	0.55	0.75		488	344	832	4.7	9.8	14.5
4SK1-26	0.75	1		610	369	979	5.8	11	16.8
4SK1-38	1.1	1.5		896	404	1300	8.2	13	21.2
4SK1-50	1.5	2		1110	449	1559	10.1	15	25.1

Performance curve (50Hz)

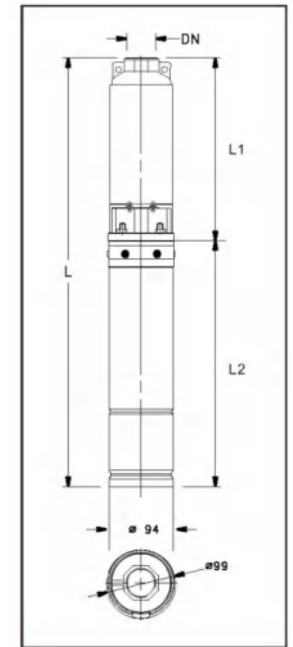


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	1.5	1.8	2.1	2.4	2.7	3
	kW	Hp			H(m)						
4SK2-5	0.37	0.5	1.25"	H(m)	0	25	30	35	40	45	50
4SK2-7	0.37	0.5			33	28	26	24	20	17	13
4SK2-10	0.55	0.75			47	39	35	32	28	24	19
4SK2-14	0.75	1			67	56	52	47	41	35	27
4SK2-20	1.1	1.5			93	78	73	66	57	50	37
4SK2-28	1.5	2			133	113	104	97	82	72	53
4SK2-40	2.2	3			187	158	146	130	115	97	74
4SK2-52	3	4			267	226	208	186	164	136	106
					347	294	271	243	213	178	138



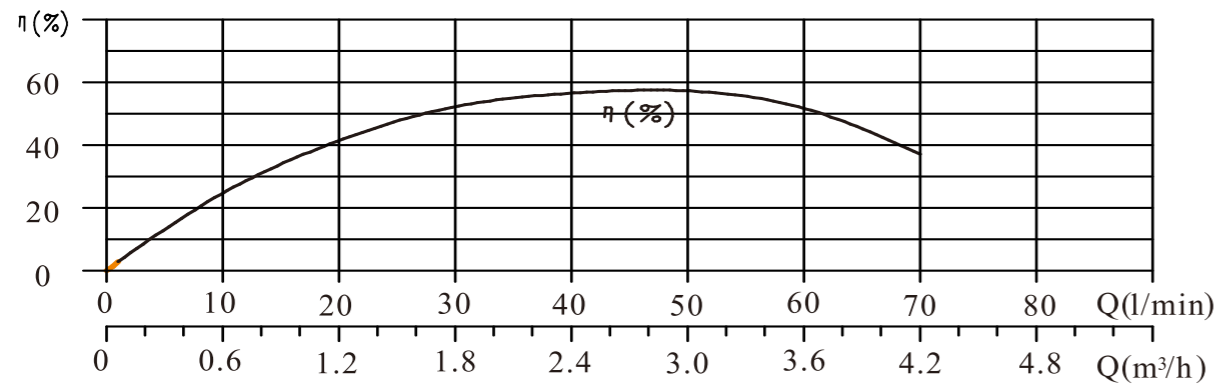
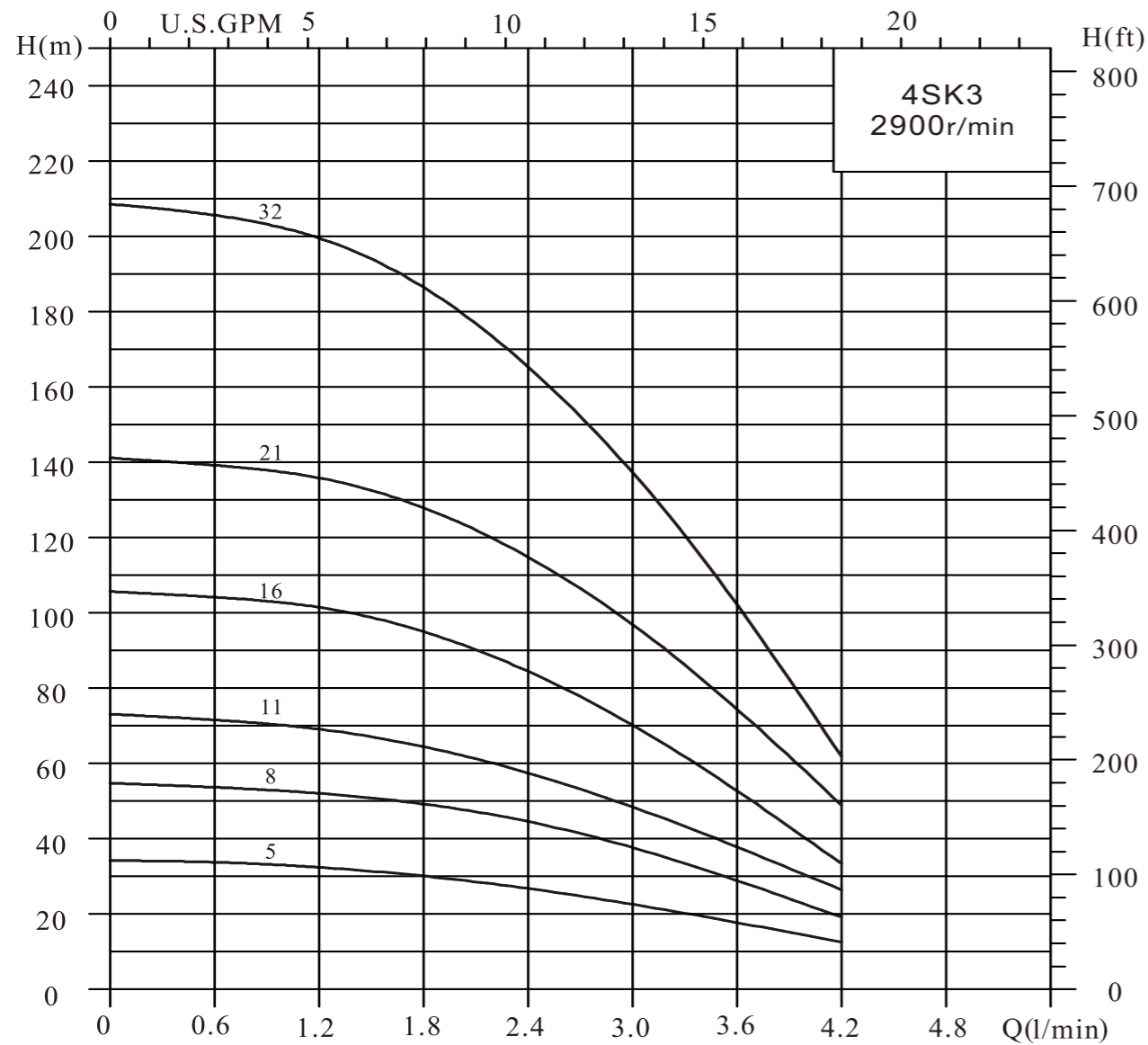
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

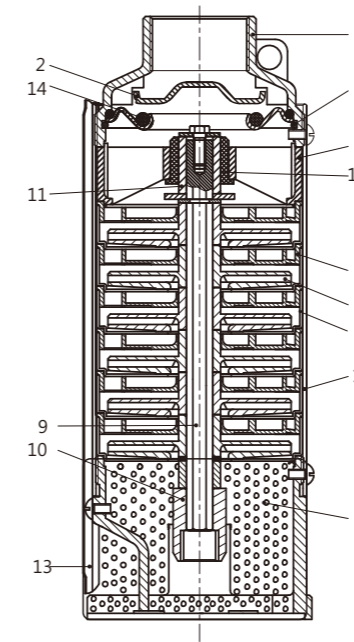
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK2-5	0.37	0.5	1.25"	253	324	577	2.6	9	11.6
4SK2-7	0.37	0.5		292	324	616	2.9	9	11.9
4SK2-10	0.55	0.75		350	344	694	3.5	9.8	13.3
4SK2-14	0.75	1		428	369	797	4.2	11	15.2
4SK2-20	1.1	1.5		545	404	949	5.3	13	18.3
4SK2-28	1.5	2		701	449	1150	7.1	15	22.1
4SK2-40	2.2	3		1011	539	1550	10.1	17	27.1
4SK2-52	3	4		1153	557	1710	12.2	17.6	29.8

Performance curve (50Hz)

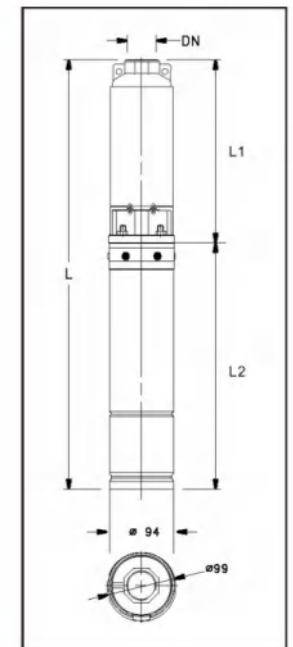


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	2.1	2.4	2.7	3.0	3.6	4.2
	kW	Hp			0	35	40	45	50	60	70
4SK3-5	0.37	0.5	1.25"	H(m)	34	29	27	25	23	18	12
4SK3-8	0.55	0.75			54	46	43	41	38	30	19
4SK3-11	0.75	1			72	61	56	54	49	38	28
4SK3-16	1.1	1.5			106	89	83	77	70	54	34
4SK3-21	1.5	2			142	122	115	108	100	79	49
4SK3-32	2.2	3			208	177	165	152	138	104	64



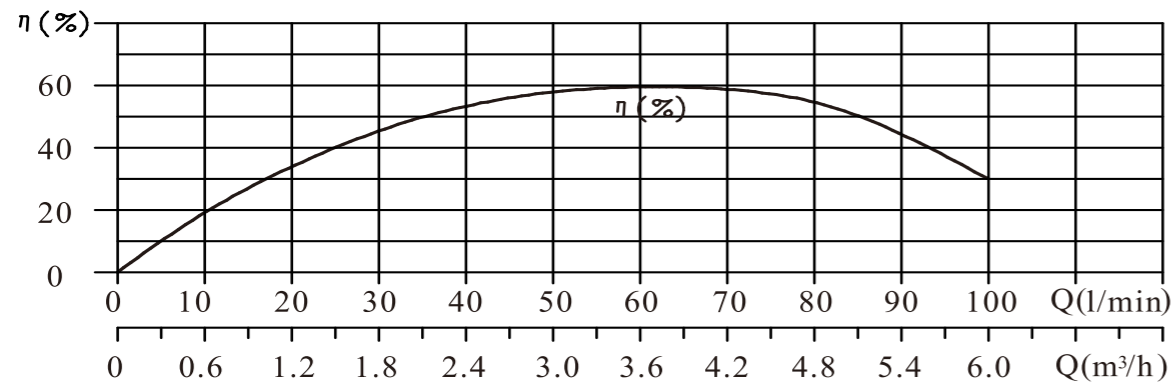
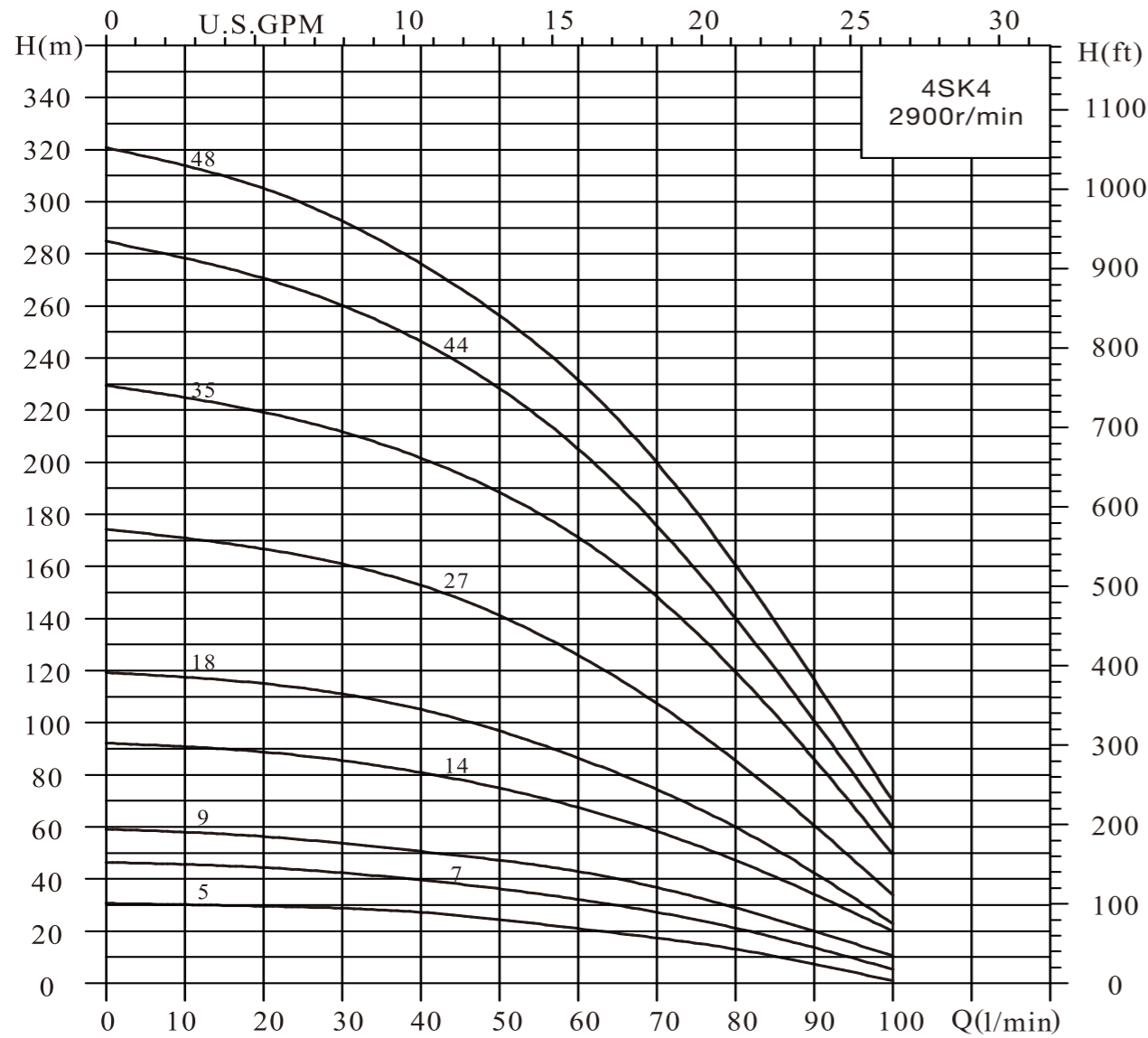
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

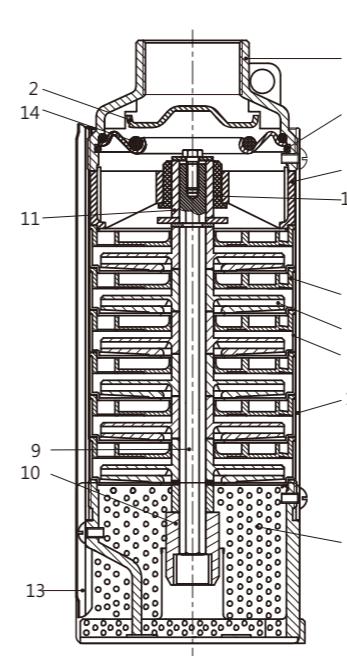
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK3-5	0.37	0.5	1.25"	253	324	577	2.5	9	11.5
4SK3-8	0.55	0.75		313	344	657	2.9	9.8	12.7
4SK3-11	0.75	1		370	369	739	3.4	11	14.4
4SK3-16	1.1	1.5		468	404	872	4.2	13	17.2
4SK3-21	1.5	2		565	449	1014	5	15	20
4SK3-32	2.2	3		856	539	1395	7.1	17	24.1

Performance curve (50Hz)

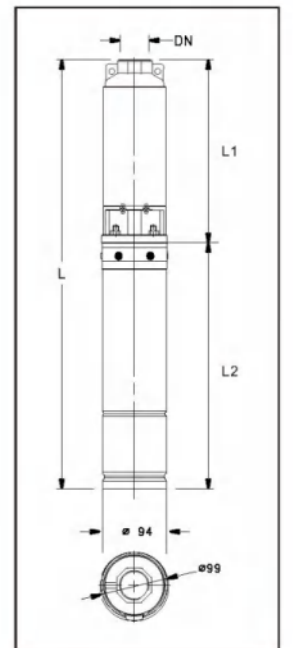


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	3	3.6	4.2	4.8	5.4	6
	kW	Hp			0	50	60	70	80	90	100
4SK4-5	0.37	0.5	1.25"	H(m)	33	22	21	17	13	8	3
4SK4-7	0.55	0.75			46	36	33	28	21	13	7
4SK4-9	0.75	1			59	47	43	37	28	20	10
4SK4-14	1.1	1.5			93	76	68	58	47	33	19
4SK4-18	1.5	2			120	98	88	75	60	42	25
4SK4-27	2.2	3			175	141	127	109	87	61	35
4SK4-35	3	4			231	184	166	145	119	85	49
4SK4-44	4	5.5			285	223	201	173	139	99	55
4SK4-48	4	5.5			322	248	228	198	160	118	70



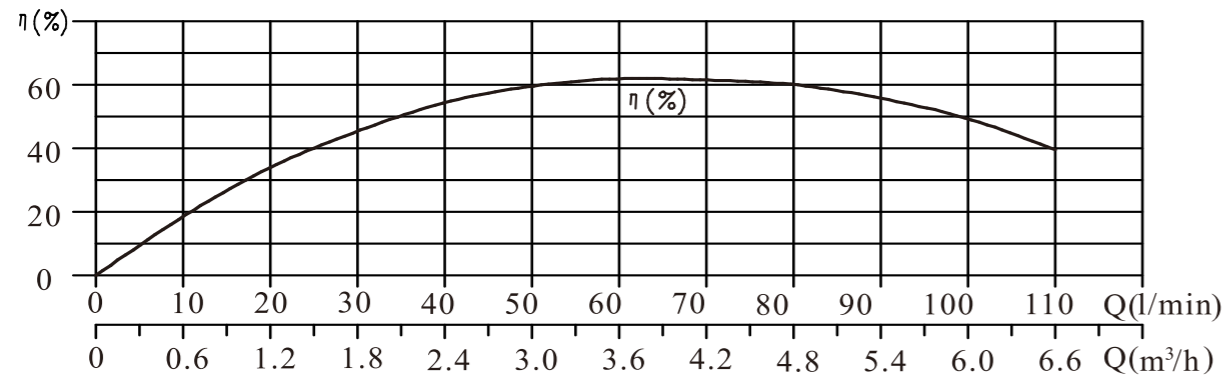
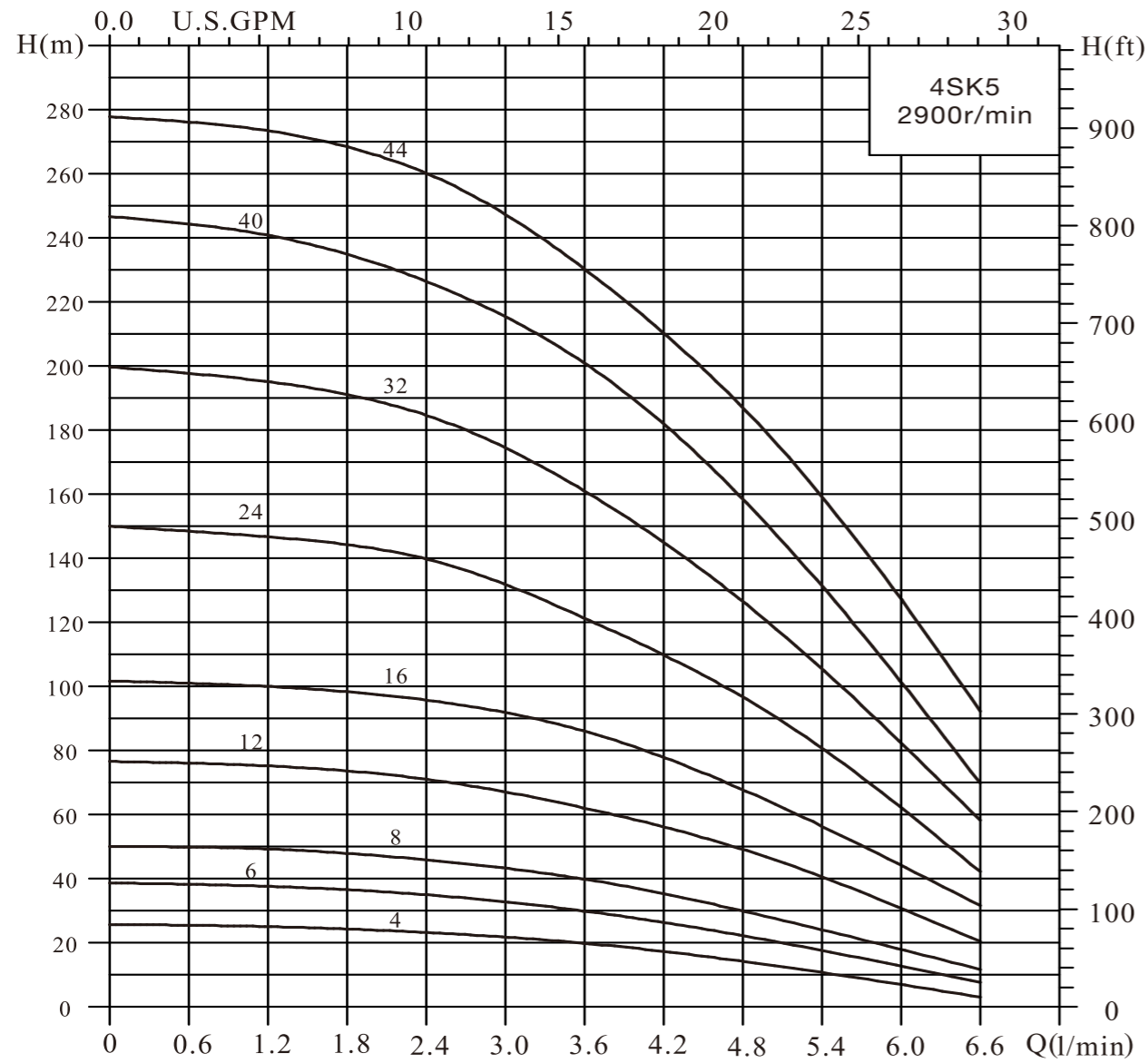
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

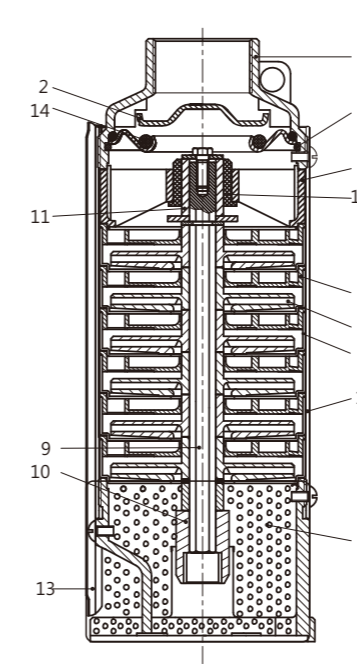
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK4-5	0.37	0.5	1.25"	263	324	587	2.7	9	11.7
4SK4-7	0.55	0.75		306	344	650	3	9.8	12.8
4SK4-9	0.75	1		350	369	719	3.3	11	14.3
4SK4-14	1.1	1.5		458	404	862	4.1	13	17.1
4SK4-18	1.5	2		545	449	994	4.7	15	19.7
4SK4-27	2.2	3		740	539	1279	6.2	17	23.2
4SK4-35	3	4		990	557	1547	7.9	17.6	25.5
4SK4-44	4	5.5		1185	637	1822	9.3	20.7	30
4SK4-48	4	5.5		1272	637	1909	9.9	20.7	30.6

Performance curve (50Hz)

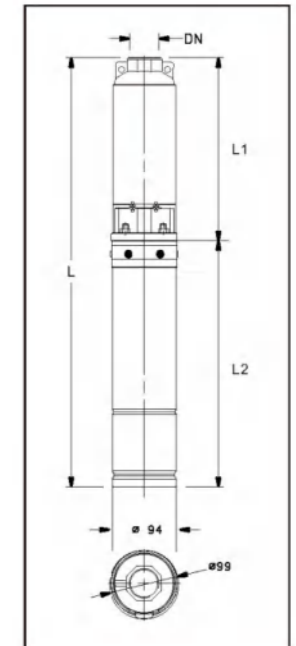


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	3.6	4.2	4.8	5.4	6	6.6
	kW	Hp			0	60	70	80	90	100	110
4SK5-4	0.37	0.5	1.25"	H(m)	26	19	17	14	11	7	4
4SK5-6	0.55	0.75			38	30	26	22	18	12	8
4SK5-8	0.75	1			51	39	35	30	24	18	14
4SK5-12	1.1	1.5			77	63	57	49	41	31	21
4SK5-16	1.5	2			102	86	77	68	57	46	34
4SK5-24	2.2	3			151	122	111	97	80	62	44
4SK5-32	3	4			203	162	146	127	105	80	59
4SK5-40	4	5.5			253	202	182	159	131	102	70
4SK5-44	4	5.5			278	230	210	187	159	127	94



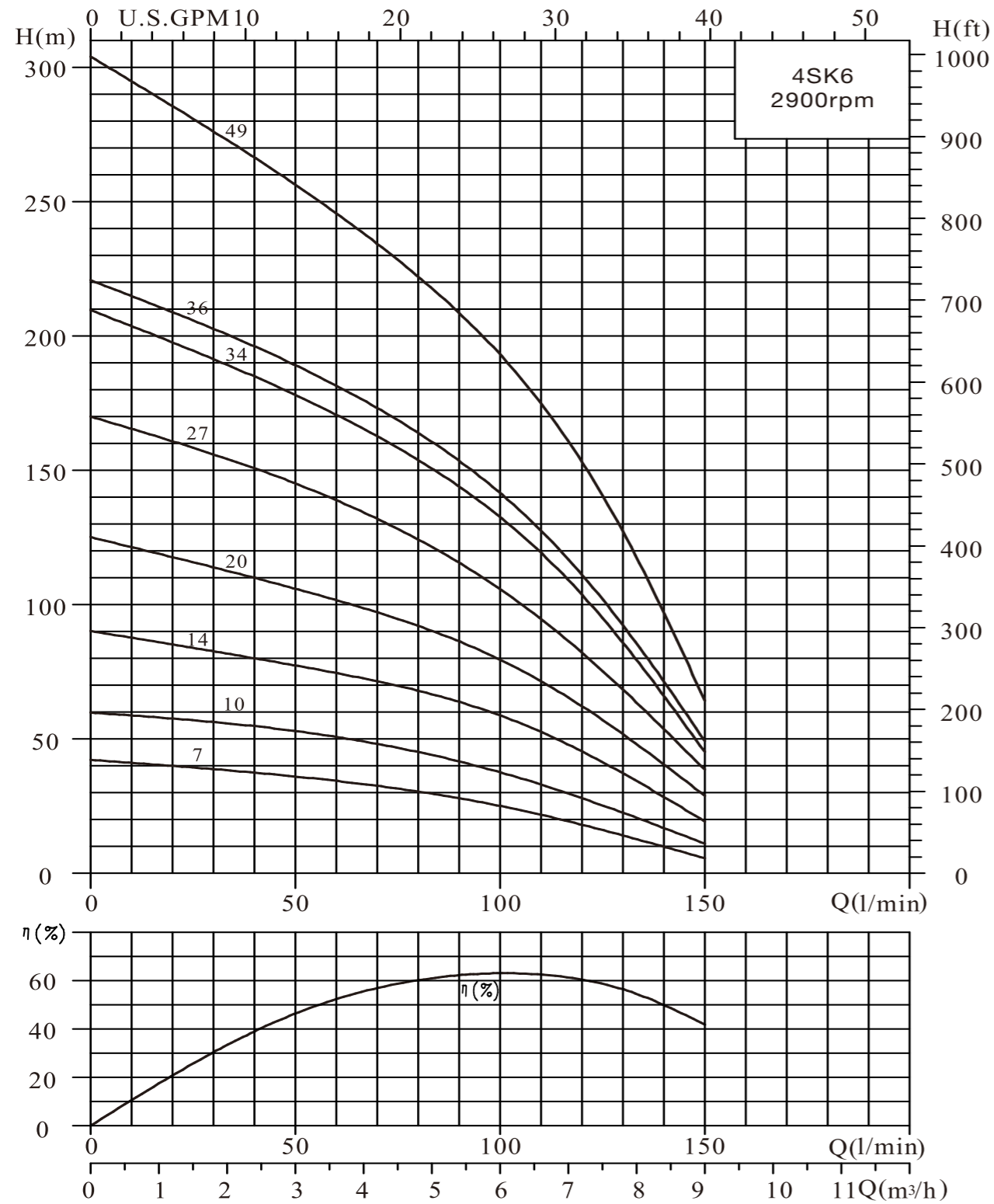
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

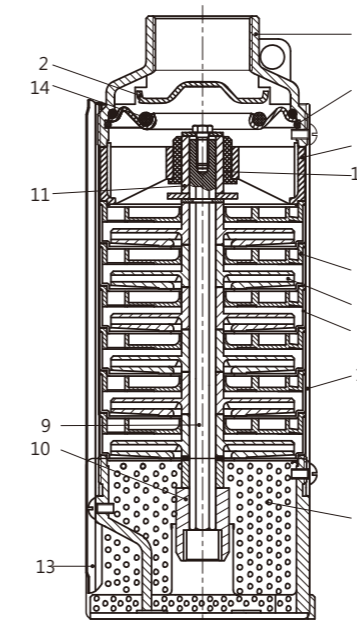
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK5-4	0.37	0.5	1.25"	253	324	577	2.4	9	11.4
4SK5-6	0.55	0.75		303	344	647	2.9	9.8	12.8
4SK5-8	0.75	1		353	369	722	3.3	11	14.3
4SK5-12	1.1	1.5		451	404	855	4.1	13	17.1
4SK5-16	1.5	2		549	449	998	5	15	20
4SK5-24	2.2	3		747	539	1286	6.6	17	23.6
4SK5-32	3	4		1021	557	1578	8.7	17.6	26.3
4SK5-40	4	5.5		1217	637	1854	10.4	20.7	31.1
4SK5-44	4	5.5		1316	637	1953	11.2	20.7	31.9

Performance curve (50Hz)

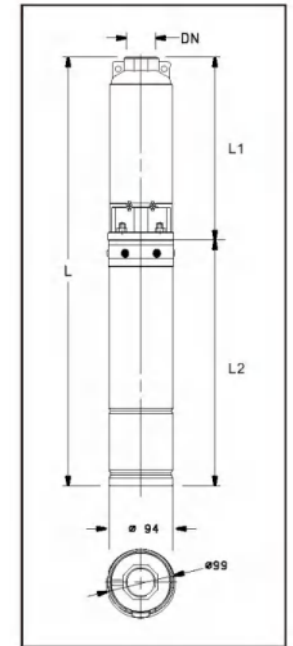


Performance data (50Hz)

Model	Power		Outlet (inch)	m ³ /h l/min	0	5.4	6	6.6	7.2	7.8	9
	kW	Hp			0	90	100	110	120	130	150
4SK6-7	0.75	1	1.25"	H(m)	42	28	25	22	19	15	8
4SK6-10	1.1	1.5			62	41	38	34	29	23	12
4SK6-14	1.5	2			90	63	59	53	46	37	19
4SK6-20	2.2	3			125	86	80	71	62	52	29
4SK6-27	3	4			169	115	107	96	84	70	39
4SK6-34	4	5.5			208	143	132	120	103	86	48
4SK6-36	4	5.5			221	154	143	127	112	93	49
4SK6-49	5.5	7.5			302	209	193	171	151	123	64



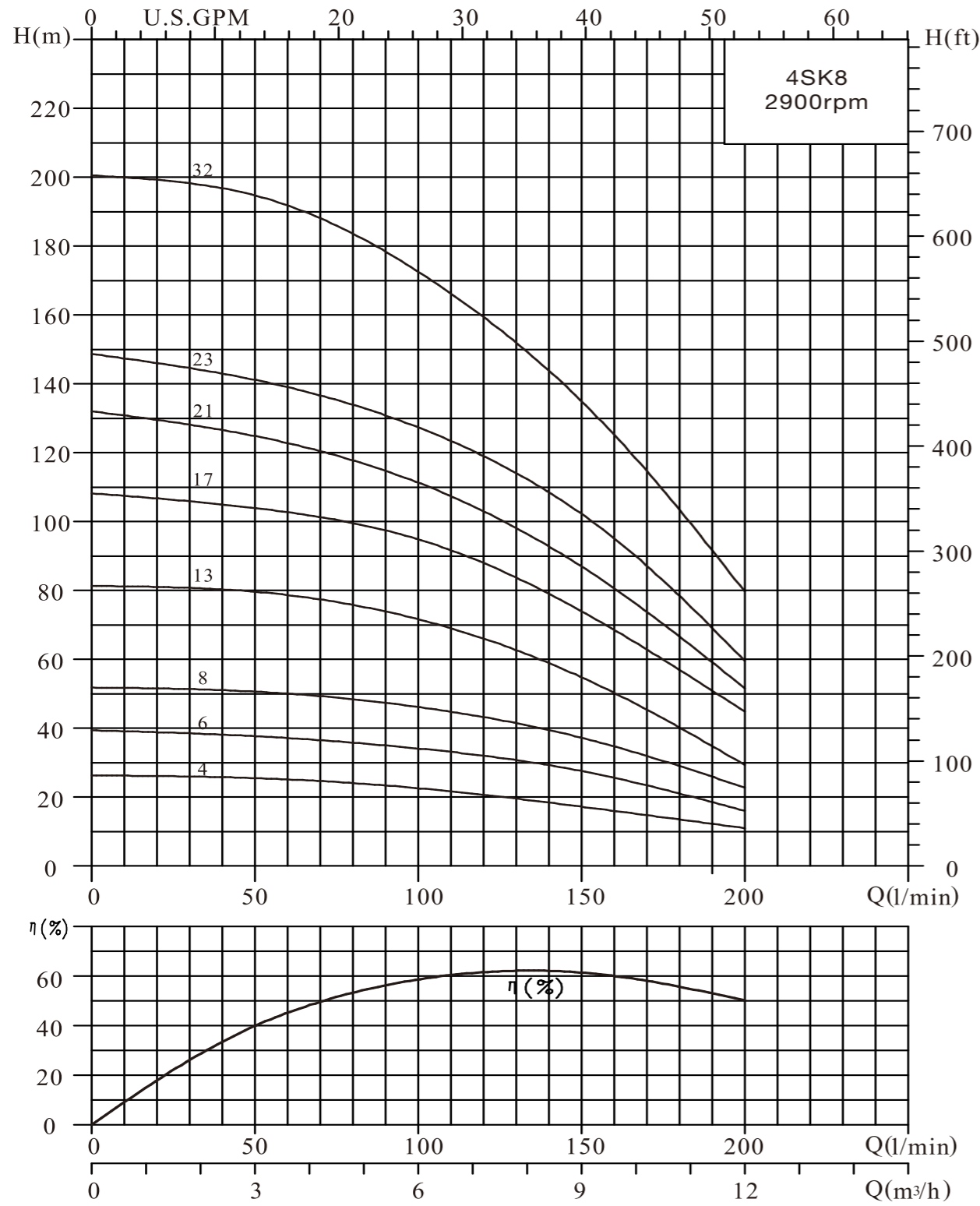
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

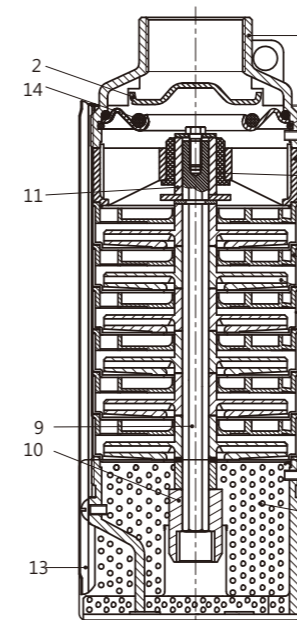
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK6-7	0.75	1	2"	393	369	762	3.7	11	14.7
4SK6-10	1.1	1.5		488	404	892	4.6	13	17.6
4SK6-14	1.5	2		612	449	1061	5.7	15	20.7
4SK6-20	2.2	3		798	539	1337	7.5	17	24.5
4SK6-27	3	4		1015	557	1572	9.6	17.6	27.2
4SK6-34	4	5.5		1307	637	1944	11.6	20.7	32.3
4SK6-36	4	5.5		1369	637	2006	12.2	20.7	32.9
4SK6-49	5.5	7.5		1773	712	2485	15.9	25.7	41.6

Performance curve (50Hz)

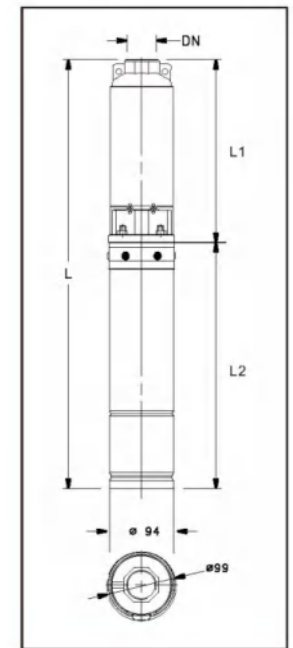


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	7.2	7.8	8.4	9.0	9.6	12
	kW	Hp			0	120	130	140	150	160	200
4SK8-4	0.75	1	1.25"	H(m)	26	21	20	19	18	17	11
4SK8-6	1.1	1.5			39	32	30	29	27	26	18
4SK8-8	1.5	2			52	43	40	39	37	35	24
4SK8-13	2.2	3			82	66	62	59	53	50	30
4SK8-17	3	4			108	87	83	79	75	70	47
4SK8-21	4	5.5			132	103	98	93	88	82	52
4SK8-23	4	5.5			148	118	113	108	101	95	60
4SK8-32	5.5	7.5			202	160	151	143	133	125	80



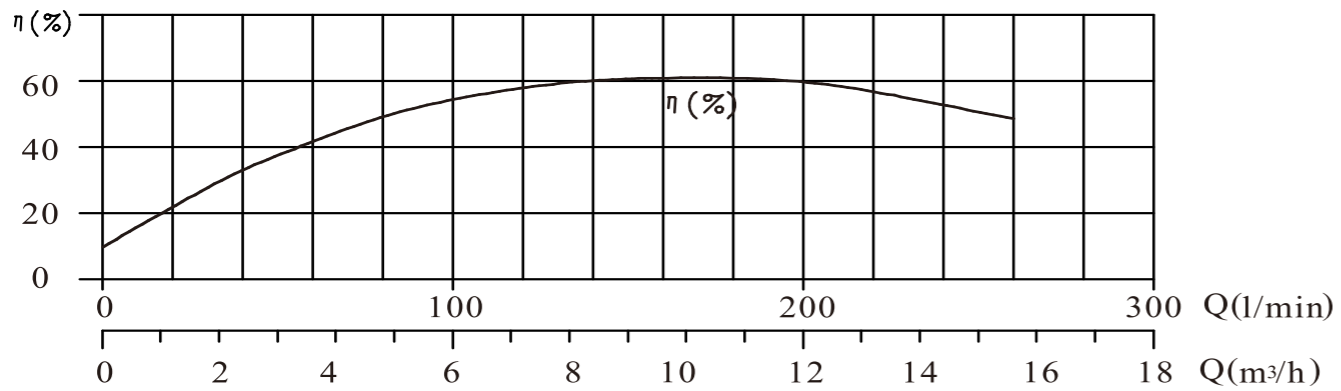
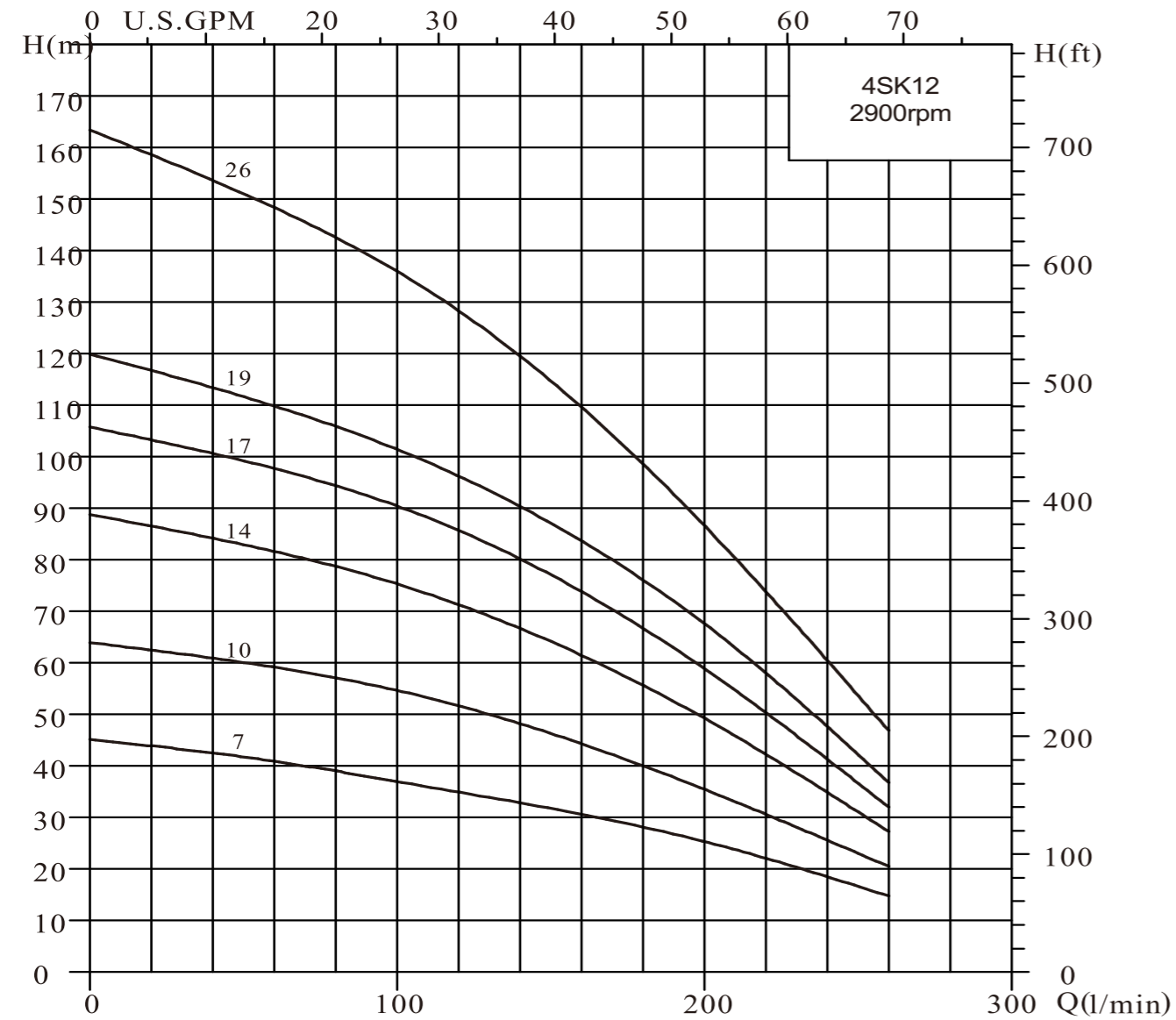
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

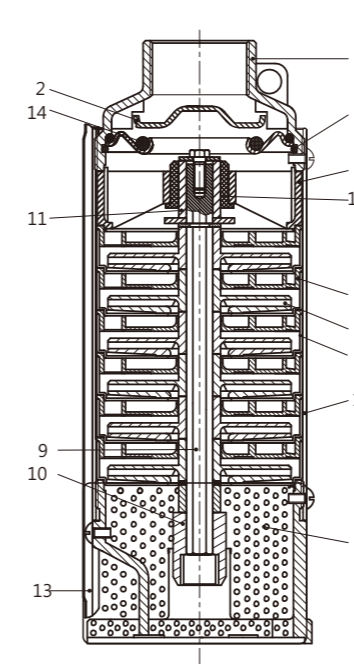
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK8-4	0.75	1	2"	302	369	671	2.8	11	13.8
4SK8-6	1.1	1.5		363	404	767	3.4	13	16.4
4SK8-8	1.5	2		426	449	875	4	15	19
4SK8-13	2.2	3		581	539	1120	5.5	17	22.5
4SK8-17	3	4		705	557	1262	6.6	17.6	24.2
4SK8-21	4	5.5		829	637	1466	7.8	20.7	28.5
4SK8-23	4	5.5		891	637	1528	8.4	20.7	29.1
4SK8-32	5.5	7.5		1146	712	1858	11	25.7	36.7

Performance curve (50Hz)

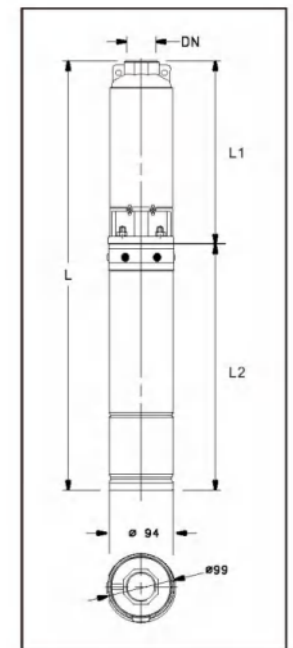


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	9.6	10.8	12	13.2	14.4	15.6
	kW	Hp			0	160	180	200	220	240	260
4SK12-7	1.5	2	2"	H(m)	45	31	28	25	22	18	14
4SK12-10	2.2	3			64	44	41	36	32	26	20
4SK12-14	3	4			89	62	56	49	43	35	29
4SK12-17	4	5.5			107	74	67	59	51	42	33
4SK12-19	4	5.5			120	89	76	68	58	48	38
4SK12-26	5.5	7.5			163	111	100	87	75	61	47
4SK12-25	7.5	10			221	155	140	125	108	90	67



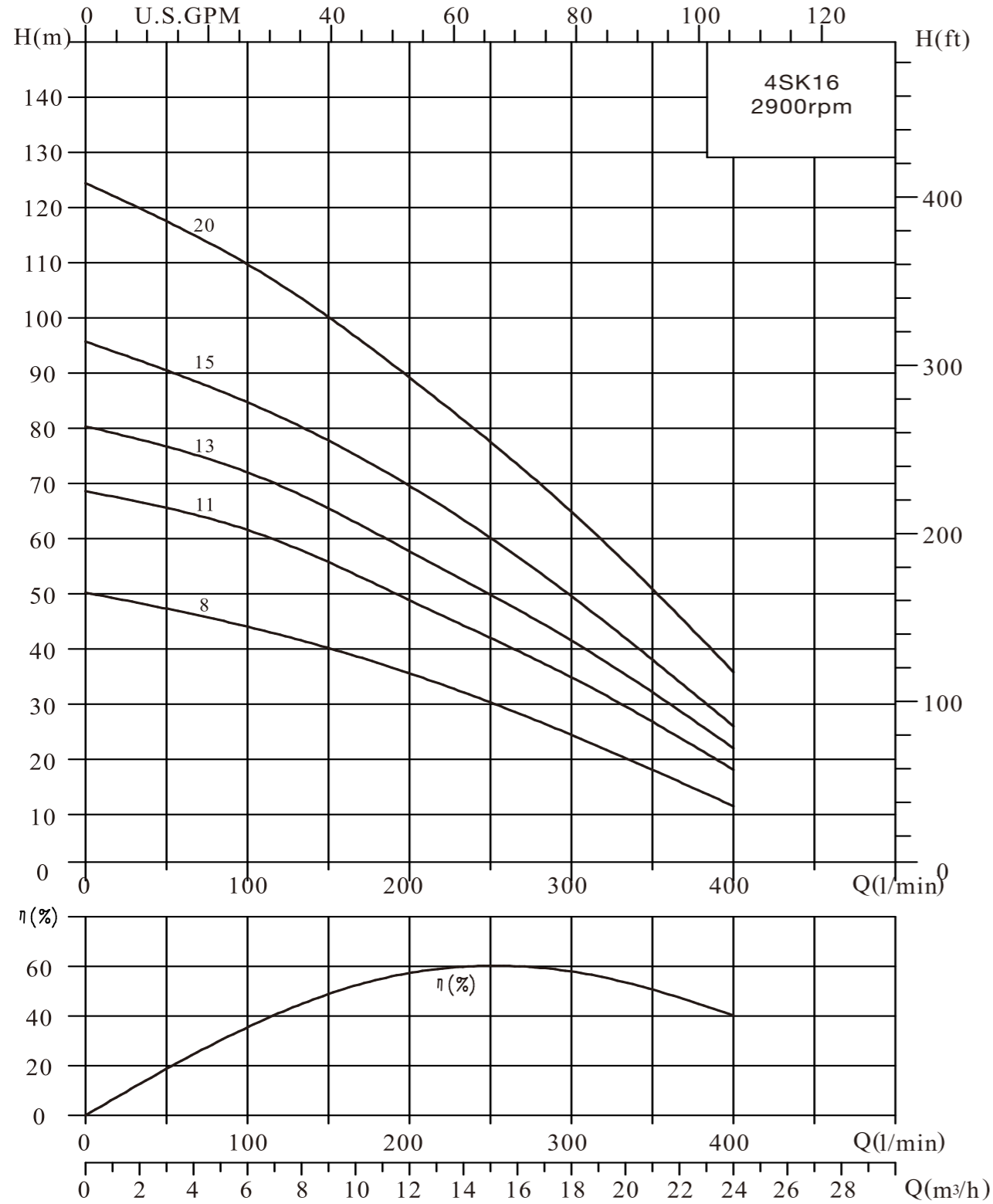
No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

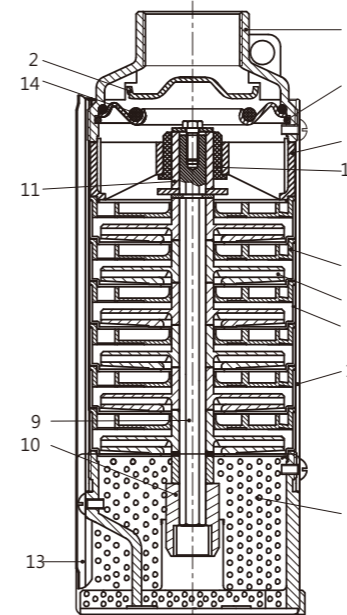
Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK12-7	1.5	2	2"	341	449	990	5.3	15	20.3
4SK12-10	2.2	3		697	539	1236	6.7	17	23.7
4SK12-14	3	4		905	557	1462	8.6	17.6	26.2
4SK12-17	4	5.5		1060	637	1697	10.1	20.7	30.8
4SK12-19	4	5.5		1164	637	1801	11	20.7	31.7
4SK12-26	5.5	7.5		1603	712	2315	14	25.7	39.7
4SK12-25	7.5	10		2070	847	2917	20.9	32.3	53.2

Performance curve (50Hz)

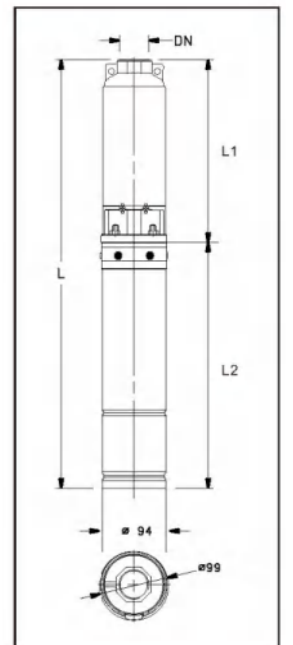


Performance data (50Hz)

Model	Power		Outlet (inch)	m³/h l/min	0	15.6	16.8	18	19.2	24.4	24
	kW	Hp			0	260	280	300	320	240	400
4SK16-8	2.2	3	1.25"	H(m)	49	28	25	23	20	18	9
4SK16-10	3	4			67	39	36	33	30	27	16
4SK16-14	4	5.5			79	47	43	40	36	32	20
4SK16-15	4	5.5			93	55	51	47	43	39	25
4SK16-20	5.5	7.5			122	72	67	61	56	50	32
4SK16-28	7.5	10			151	92	85	78	70	62	40



No.	Component	Material
1	Discharge chamber	Stainless steel
2	Check valve	Stainless steel
3	Check valve retainer	Stainless steel
4	Top diffuser	PC
5	Diffuser	PC
6	Wear box	Stainless steel
7	Impeller	PPO
8	Strainer	Stainless steel
9	Pump shaft	Stainless steel
10	Coupling	Stainless steel
11	Sleeve	Stainless steel
12	Cylinder	Stainless steel
13	Cable guard	Stainless steel
14	O ring	NBR
15	Bearing	Polyurethane



Installation dimensions and weight (50Hz)

Model	Power		DN	Dimensions(mm)			Weight(kg)		
	kW	Hp		Pump(L1)	Motor(L2)	Electric Pump(L)	Pump	Motor	Electric Pump
4SK16-8	2.2	3	2"	720	539	1259	6.3	17	23.3
4SK16-10	3	4		855	557	1412	8	17.6	25.6
4SK16-14	4	5.5		1060	637	1697	9.3	20.7	30
4SK16-15	4	5.5		1193	637	1830	10.5	20.7	31.2
4SK16-20	5.5	7.5		1608	712	2320	13.5	25.7	39.2
4SK16-28	7.5	10		2149	847	2996	21.2	32.3	53.5