

L.Nemitsas Ltd - Head Office

P.O.Box 54436

3724 Limassol, Cyprus

Tel: +357 25569225 & 25569226

Fax: +357 25 396955

L.Nemitsas Ltd - Nicosia Branch

F.Tsigaridi 19 Str.

2235, Latsia - Nicosia

Tel: +357-22467366

Fax: +357-22467372



E-mail: info@nemitsas.eu

URL: www.nemitsas.eu



SUBMERSIBLE ELECTROPUMPS 50 HZ

WATER SYSTEMS





STAINLESS STEEL SUBMERSIBLE BOREHOLE PUMP

EN6-17S

EN6-30S

EN6-46S

EN6-60S

Series

6" Submersible
Electric Pumps

50 Hz



MANUFACTURED BY L.NEMITSAS LTD

P.O.Box 54436, Limassol 3724, Cyprus

Tel:+35725569225 Fax:+35725396955

[e-mail:info@nemitsas.eu](mailto:info@nemitsas.eu)



MARKET SECTORS
CIVIL, AGRICULTURAL, INDUSTRIAL.
EN6-17S, EN6-30S, EN646S, EN6-60S, Series
APPLICATIONS

- Water supply from deep wells.
- Pressure boosting and water distribution in civil and industrial systems.
- Supply of surge tanks and reservoirs.
- Firefighting and washing systems.
- Water table level control.
- Irrigation.
- Mines.
- Golf courses.

SPECIFICATIONS PUMP

- Delivery: up to 78 m³/h.
- Head: up to 410 m.
- Maximum overall diameter of pump:
 - Standard version: 142 mm (one cable guard included).
- Maximum pump immersion depth: 350 m (with 6" motor).
- Maximum permissible quantity of suspended sand: 100 g/m³.
- Standard delivery port: - Standard version: Rp 2 1/2" EN6-17S version, Rp 3" for EN6-30, EN646S versions. Rp 4" for EN6-60S version.
- All the pumps can operate in the horizontal position.

CONSTRUCTION CHARACTERISTICS PUMP

- Sturdy and lightweight, easy maintenance and resistant to corrosion in non-aggressive environments.
- Head and motor support made of precision stainless steel.
- Delivery port equipped with holes for safety hooks and including delivery pipe fastening screws.
- Stainless steel integrated non return valve.
- Stainless steel impellers and diffusers.
- Stainless steel impeller with removable wear ring.
- Tungsten carbide upper and intermediate bearing.
- Techno polymer shaft guide bearings integrated in each stage.
- Self-centring wear rings of techno polymer integrated in each stage.
- Stainless steel suction support.
- Stainless steel shaft protected by stainless steel shaft sleeves.
- Replaceable coupling.
- The following elements combined:
 - Tungsten carbide guide bearing.
 - Technopolymer floating wear rings.
 - Sleeved shaft. Guarantee maximum resistance to wear and ensure stable long lasting hydraulic performances.

OPTIONAL FEATURES PUMP

- Different materials.
- Delivery ports with Rp 4" and 3" and 4" NPT.
- Versions for star/delta starting (SD).

MOTOR

- Different voltages and frequencies.
- High temperature versions.

ACCESSORIES

- Coupling flange.
- Control panels.
- Drop cables.



Parts List

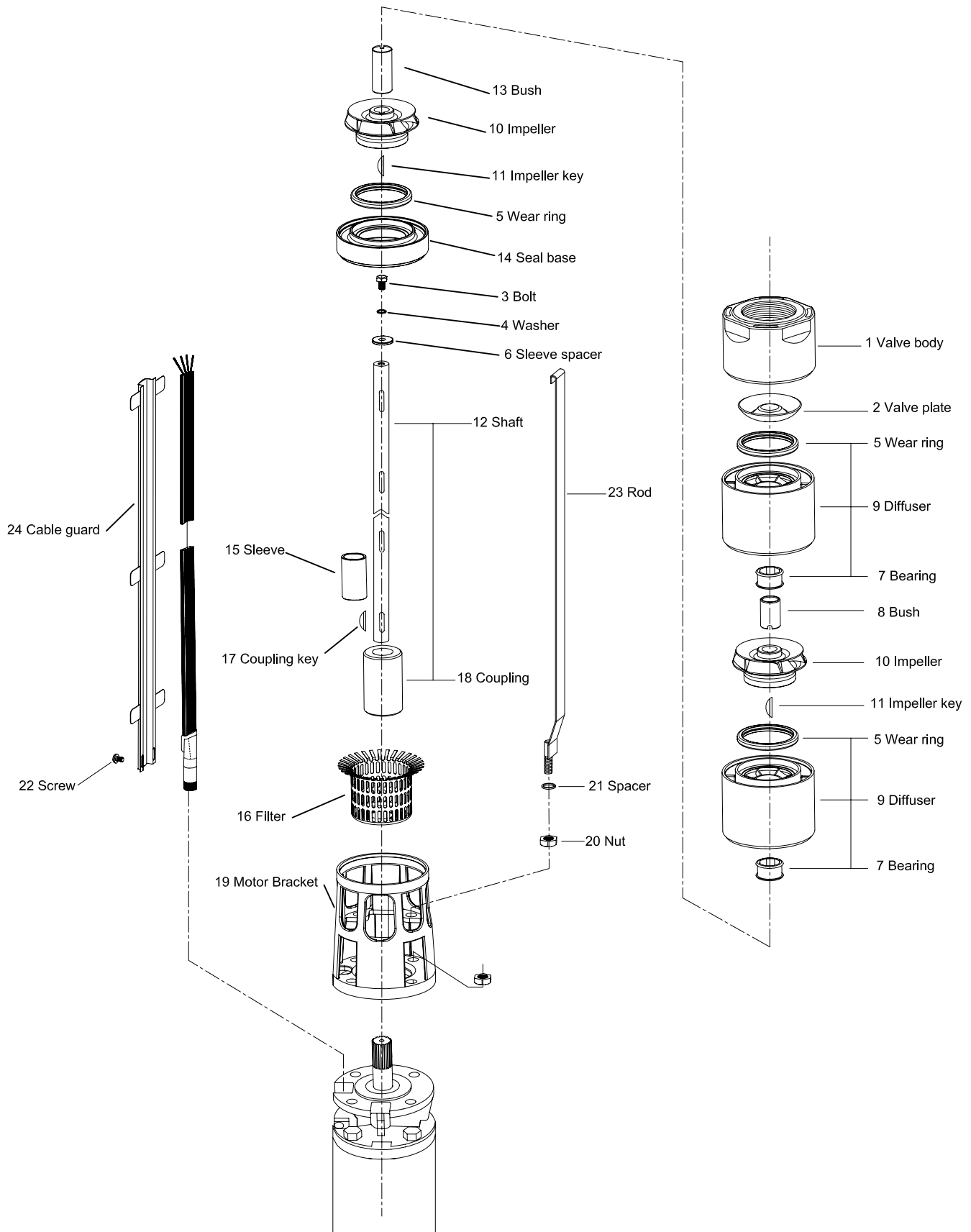




TABLE OF MATERIALS

Ref. No.	Name	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Valve Body	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
2	Valve Plate	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
3	Bolt	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
4	Washer	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
5	Wear Ring	Technopolymer PPO		
6	Sleeve Spacer	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
7	Bearing	Technopolymer PPO		
8	Bush	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
9	Diffuser	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
10	Impeller	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
11	Impeller Key	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
12	Shaft	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
13	Bush	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
14	Seal Base	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
15	Sleeve	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
16	Filter	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
17	Coupling Key	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
18	Coupling	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
19	Motor Braket	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
20	Nut	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
21	Spacer	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
22	Screw	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
23	Rob	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304
24	Cable Guard	Stainless Steel	EN 10088-1 - X5CrNi18-10 (1.4301)	AISI 304

PUMP IDENTIFICATION CODE

FOR EXAMPLE

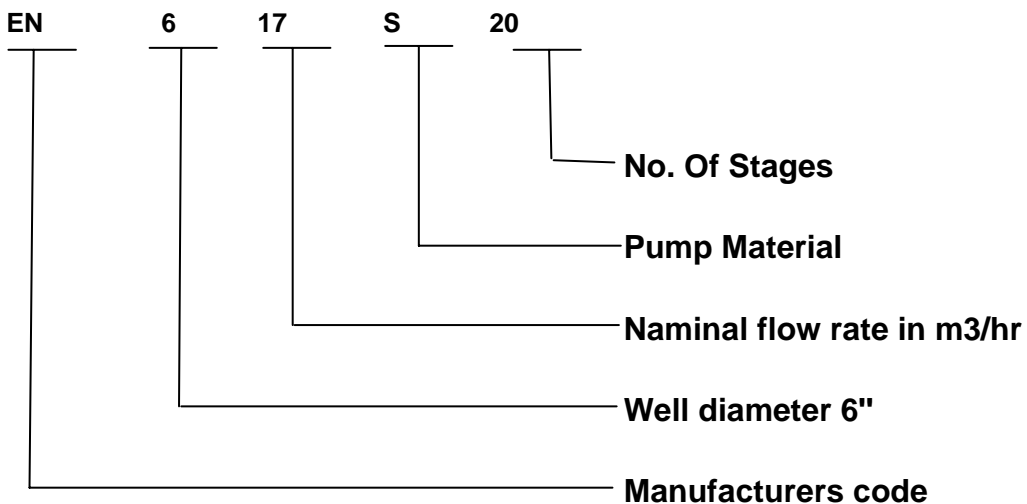


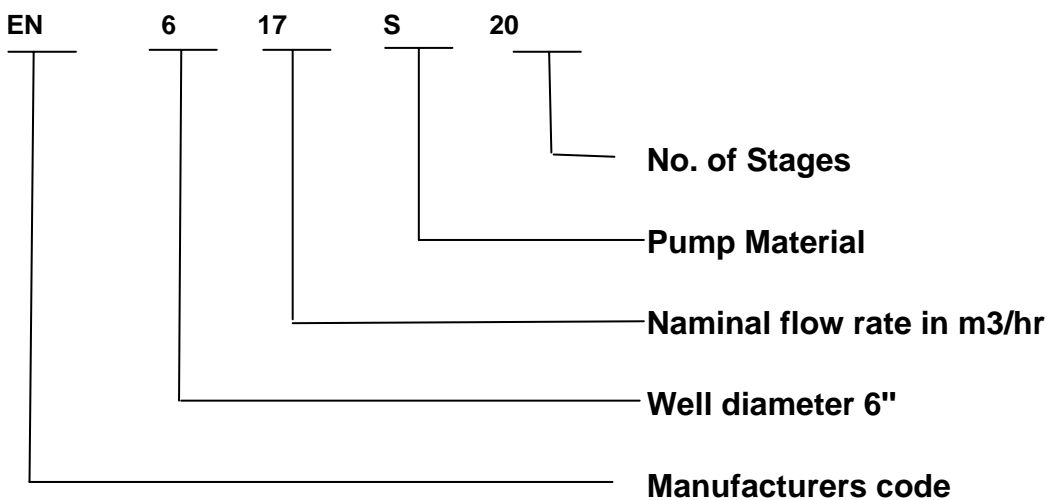


TABLE OF MATERIALS

Ref. No.	Name	MATERIAL	REFERENCE STANDARDS	
			EUROPE	USA
1	Valve Body	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
2	Valve Plate	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
3	Bolt	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
4	Washer	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
5	Wear Ring	Technopolymer PPO		
6	Sleeve Spacer	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
7	Bearing	Technopolymer PPO		
8	Bush	Tungsten Carbide		
9	Diffuser	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
10	Impeller	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
11	Impeller Key	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
12	Shaft	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
13	Bush	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
14	Seal Base	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
15	Sleeve	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
16	Filter	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
17	Coupling Key	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
18	Coupling	Duplex Stainless Steel	EN 10088-1 - X2CrNiN23-4 (1.4362)	UNS S32304
19	Motor Braket	Stainless Steel	EN 10088-1 - X2CrNiMo17-12-2 (1.4404)	AISI 316L
20	Nut	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
21	Spacer	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
22	Screw	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
23	Rob	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316
24	Cable Guard	Stainless Steel	EN 10088-1 - X5CrNiMo17-12-2 (1.4401)	AISI 316

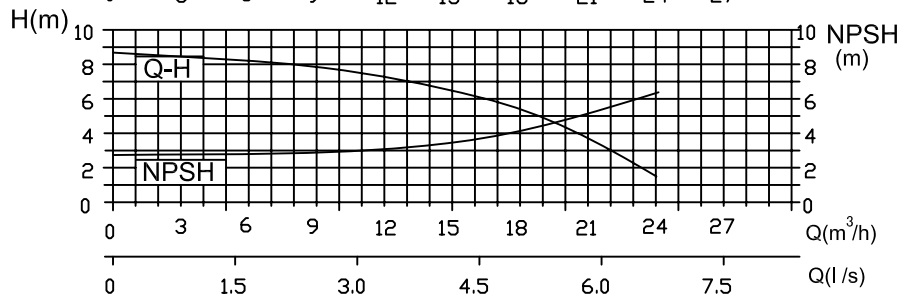
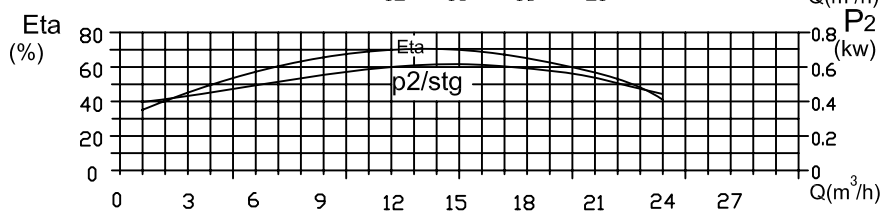
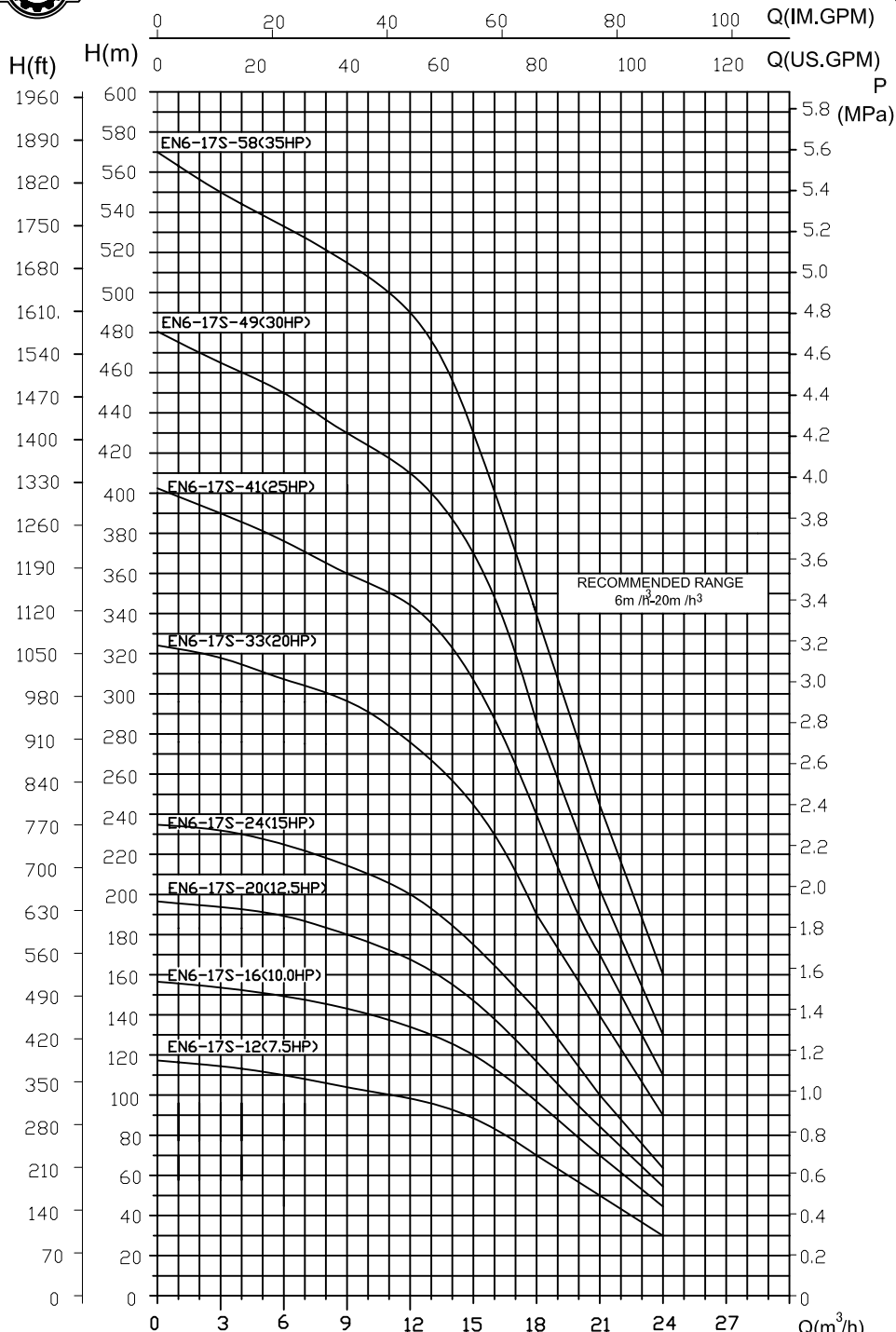
PUMP IDENTIFICATION CODE

FOR EXAMPLE





NEMITSAS PERFORMANCE CURVES AT 50 Hz



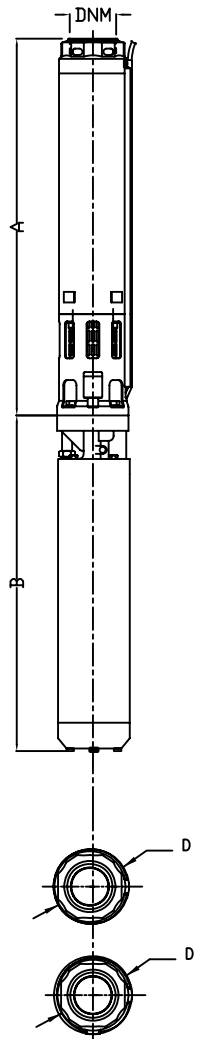
IMPELLER MATERIAL :Stainless Steel BOWL DIAMETER : 132 mm
TYPE :CLOSED BOWL MATERIAL :Stainless Steel

CONDITIONS OF TESTING : TEMPERATURE : 15°C SPEED : 2900 R.P.M.
These performances refer to cold water with no dissolved gases PRESSURE : 1Atm

TYPE
ENG-17S

EN6-17S SERIES TECHNICAL DATA (50 Hz 2900 rpm)

Pump Type	No. OF STAGES	POWER		Q:(l/min)	0	50	100	150	200	250	300	350
		(kW)	(Hp)	Q:(m³/h)	0	3	6	9	12	15	18	21
EN6-17S-12	12	5.5	7.5	H:(m)	120	115	110	105	99	87	70	50
EN6-17S-16	16	7.5	10		158	152	150	141	132	120	98	70
EN6-17S-20	20	9.2	12.5		196	190	185	180	170	145	116	85
EN6-17S-24	24	11	15		235	232	225	215	200	175	145	100
EN6-17S-33	33	15	20		325	320	306	295	275	245	190	140
EN6-17S-41	41	18.5	25		405	390	378	360	342	310	240	170
EN6-17S-49	49	22	30		485	466	450	430	410	370	290	203
EN6-17S-58	58	26	35		570	550	535	515	490	430	340	245

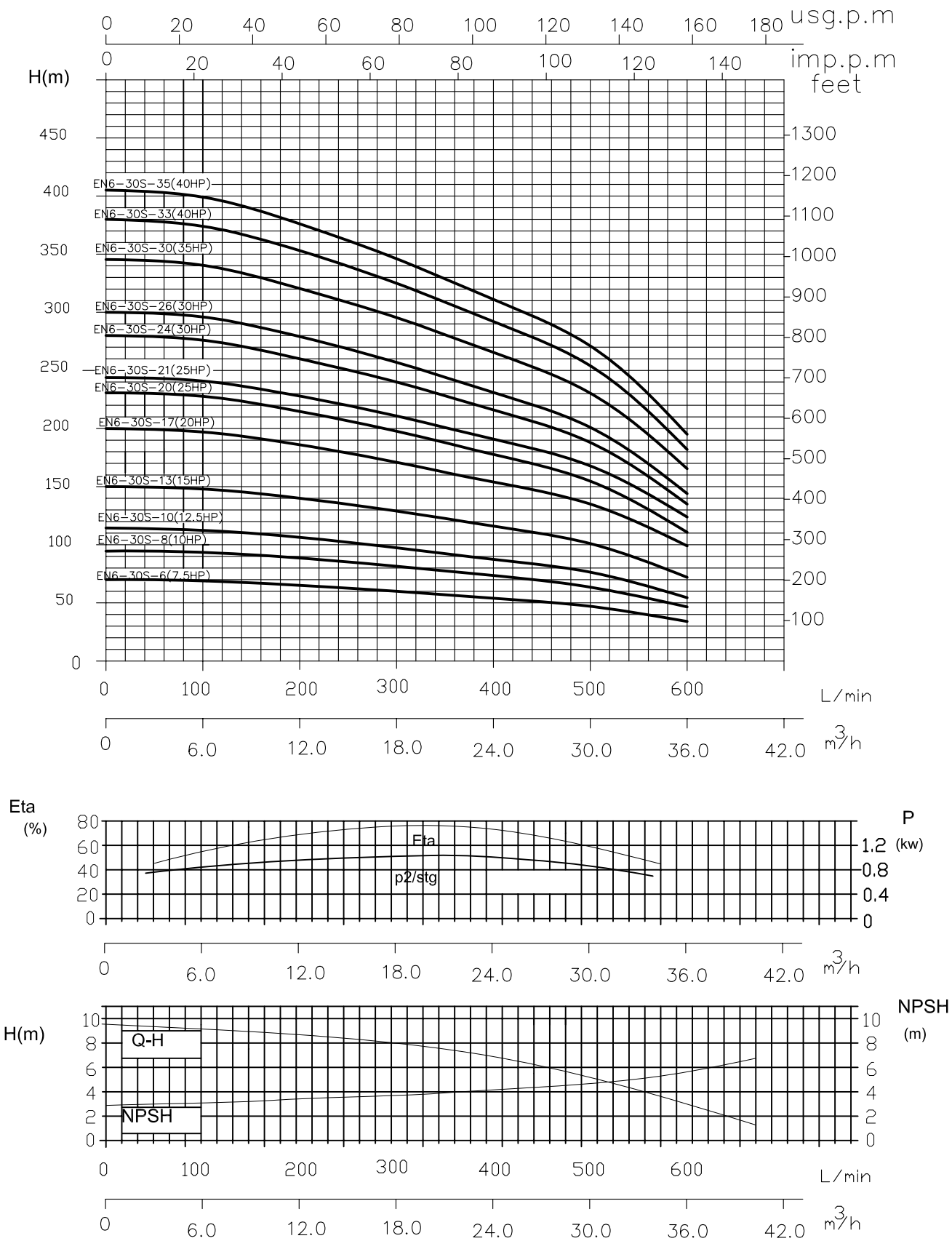


DIMENSIONS AND WEIGHTS

Pump Type	No. OF STAGES	DNM	D(mm)		Motor Type	Motor kW	Power HP	Pump Dimension(mm)		Pump Weight(Kg)	Electric Pump Weight(Kg)
			1 Cable	2 Cables				A	B		
EN6-17S-12	12	6 3"	144	146	6"	5.50	7.50	810	604	38.5	77.2
EN6-17S-16	16				6"	7.50	10.00	990	636	52.5	93.0
EN6-17S-20	20				6"	9.20	12.50	1170	685	66.5	108.5
EN6-17S-24	24				6"	11.00	15.00	1350	701	80.6	128.4
EN6-17S-33	33				6"	15.00	20.00	1755	766	113.0	170.8
EN6-17S-41	41				6"	18.50	25.00	1515	832	141.2	202.7
EN6-17S-49	49				6"	22.00	30.00	2475	897	169.5	237.5
EN6-17S-58	58				6"	26.00	35.00	2880	990	201.0	262.0



NEMITSAS PERFORMANCE CURVES AT 50 Hz



IMPELLER MATERIAL :Stainless Steel
 TYPE :CLOSED

BOWL DIAMETER : 132 mm
 BOWL MATERIAL :Stainless Steel

CONDITIONS OF TESTING : TEMPERATURE : 15°C SPEED : 2900 R.P.M.
 These performances refer to cold water with no dissolved gases PRESSURE : 1Atm

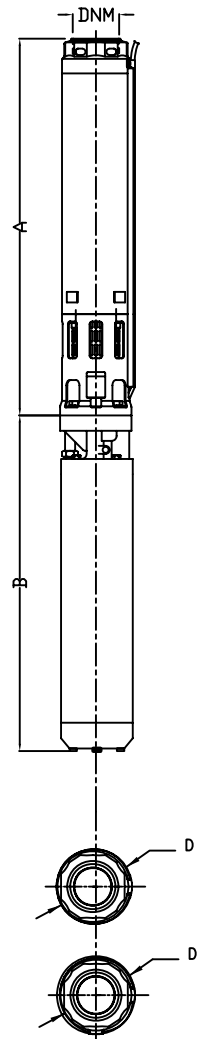
TYPE
EN6-30S

EN6-30S SERIES TECHNICAL DATA (50 Hz 2900 rpm)

Pump Type	No. OF STAGES	POWER		Q:(l/min)	0	100	200	300	400	500	600
		(kW)	(Hp)	Q:(m³/h)	0	6	12	18	24	30	36
EN6-30S-06	06	5.5	7.5	H:(m)	70	68	64	59	53	46	33
EN6-30S-08	08	7.5	10		92	91	85	79	71	61	44
EN6-30S-10	10	9.2	12.5		115	115	106	98	89	76	55
EN6-30S-13	13	11	15		150	148	136	127	115	99	72
EN6-30S-17	17	15	20		200	195	181	168	150	130	95
EN6-30S-20	20	18.5	25		230	227	212	197	177	152	110
EN6-30S-21	21	18.5	25		245	238	223	206	186	160	116
EN6-30S-24	24	22	30		280	272	255	235	213	182	132
EN6-30S-26	26	22	30		300	295	276	255	231	198	145
EN6-30S-30	30	26	35		350	340	320	296	266	228	165
EN6-30S-33	33	30	40		382	375	351	323	295	250	182
EN6-30S-35	35	30	40		405	397	372	345	310	265	195

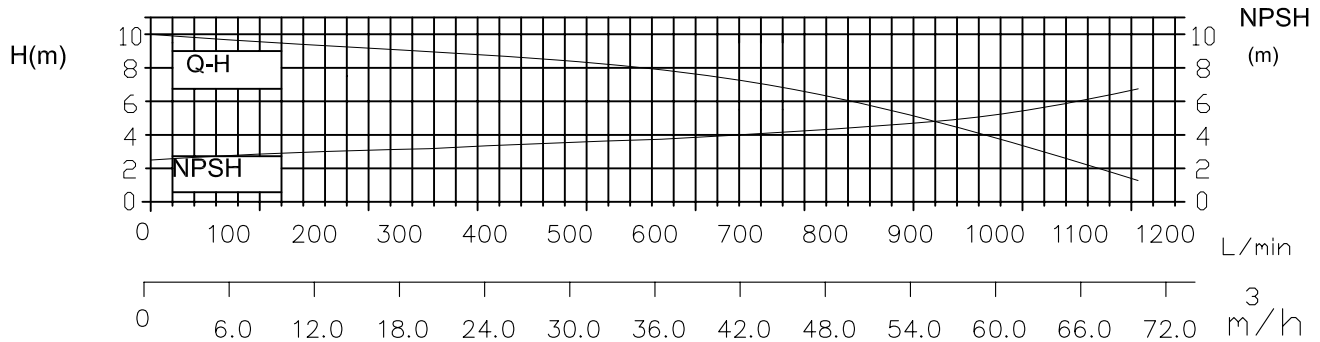
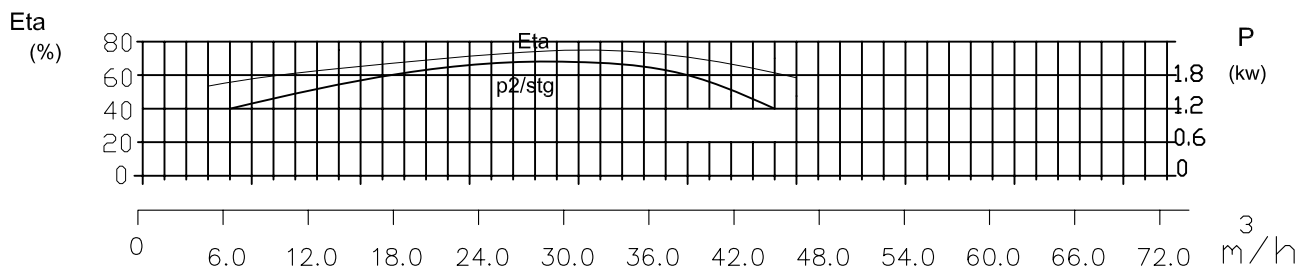
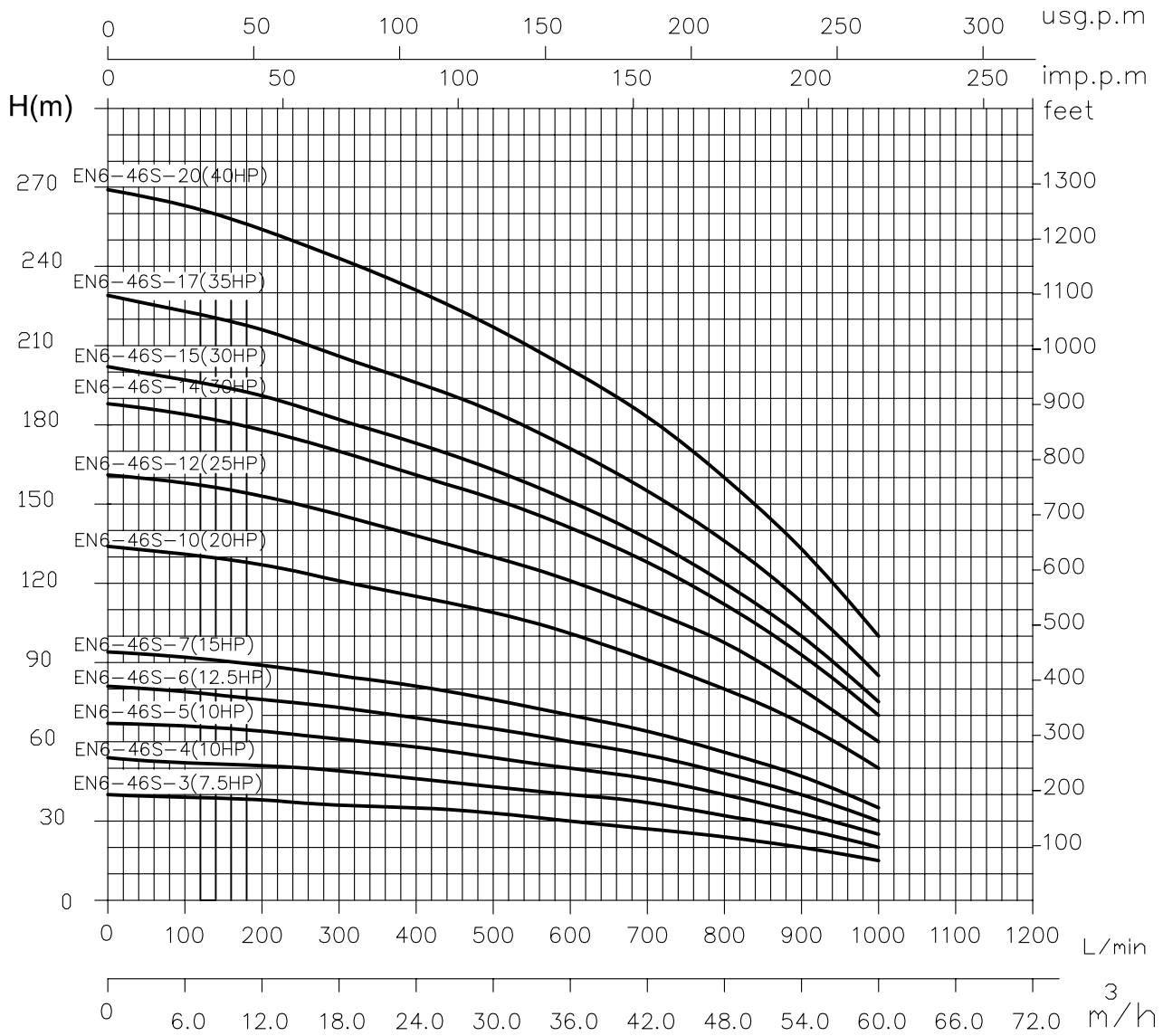
DIMENSIONS AND WEIGHTS

Pump Type	No. OF STAGES	DNM	D(mm)		Motor Type	Motor kW	Power HP	Pump Dimension(mm)		Pump Weight(Kg)	Electric Pump Weight(Kg)
			1 Cable	2 Cables				A	B		
EN6-30S-06	06	6 3"	144	146	6"	5.5	7.5	810	604	23.5	66.2
EN6-30S-08	08				6"	7.5	10	990	636	26.0	66.5
EN6-30S-10	10				6"	9.2	12.5	1170	685	31.0	73.0
EN6-30S-13	13				6"	11	15	1440	701	38.6	86.4
EN6-30S-17	17				6"	15	20	1800	766	49.1	107.0
EN6-30S-20	20				6"	18.5	25	2070	832	59.4	121.0
EN6-30S-21	21				6"	18.5	25	2160	832	62.0	123.5
EN6-30S-24	24				6"	22	30	2430	897	69.6	137.6
EN6-30S-26	26				6"	22	30	2610	897	74.9	142.9
EN6-30S-30	30				6"	26	35	2970	990	85.1	146.1
EN6-30S-33	33				6"	30	40	3240	1241	92.8	205.8
EN6-30S-35	35				6"	30	40	3420	1241	98.0	211.0





NEMITSAS PERFORMANCE CURVES AT 50 Hz



IMPELLER MATERIAL :Stainless Steel
TYPE :CLOSED

BOWL DIAMETER : 132 mm
BOWL MATERIAL :Stainless Steel

CONDITIONS OF TESTING : TEMPERATURE : 15°C SPEED : 2900 R.P.M.
These performances refer to cold water with no dissolved gases PRESSURE : 1Atm

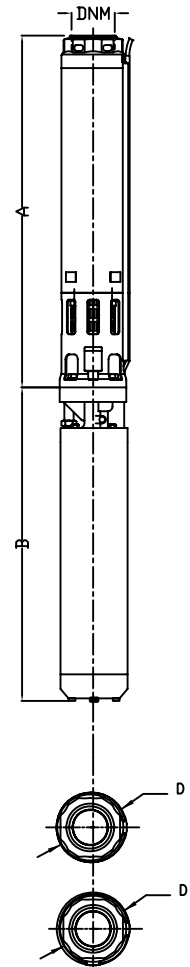
TYPE
EN6-46S

EN6-46S SERIES TECHNICAL DATA (50 Hz 2900 rpm)

Pump Type	No. OF STAGES	POWER		Q:(l/min)	0	100	200	300	400	500	600	700	800	900	1000
		(kW)	(Hp)												
EN6-46S-03	03	5.5	7.5	Q:(m³/h)	0	6	12	18	24	30	36	42	48	54	60
EN6-46S-04	04	7.5	10	H:(m)	40	39	38	36	35	33	30	27	24	20	15
EN6-46S-05	05	7.5	10		54	52	51	50	46	43	40	37	32	27	20
EN6-46S-06	06	9.2	12.5		67	66	65	61	58	54	50	46	40	33	25
EN6-46S-07	07	11	15		81	79	76	73	69	65	60	55	48	40	30
EN6-46S-10	10	15	20		94	92	90	85	81	76	70	64	56	47	35
EN6-46S-12	12	18.5	25		134	131	128	121	115	109	101	91	80	67	50
EN6-46S-14	14	22	30		161	158	153	146	138	130	121	110	96	80	60
EN6-46S-15	15	22	30		188	185	178	170	161	152	141	128	112	93	70
EN6-46S-17	17	26	35		202	198	191	182	173	163	150	137	120	100	75
EN6-46S-20	20	30	40		229	223	216	206	196	185	171	155	136	113	85
					270	265	255	243	231	217	201	183	160	133	100

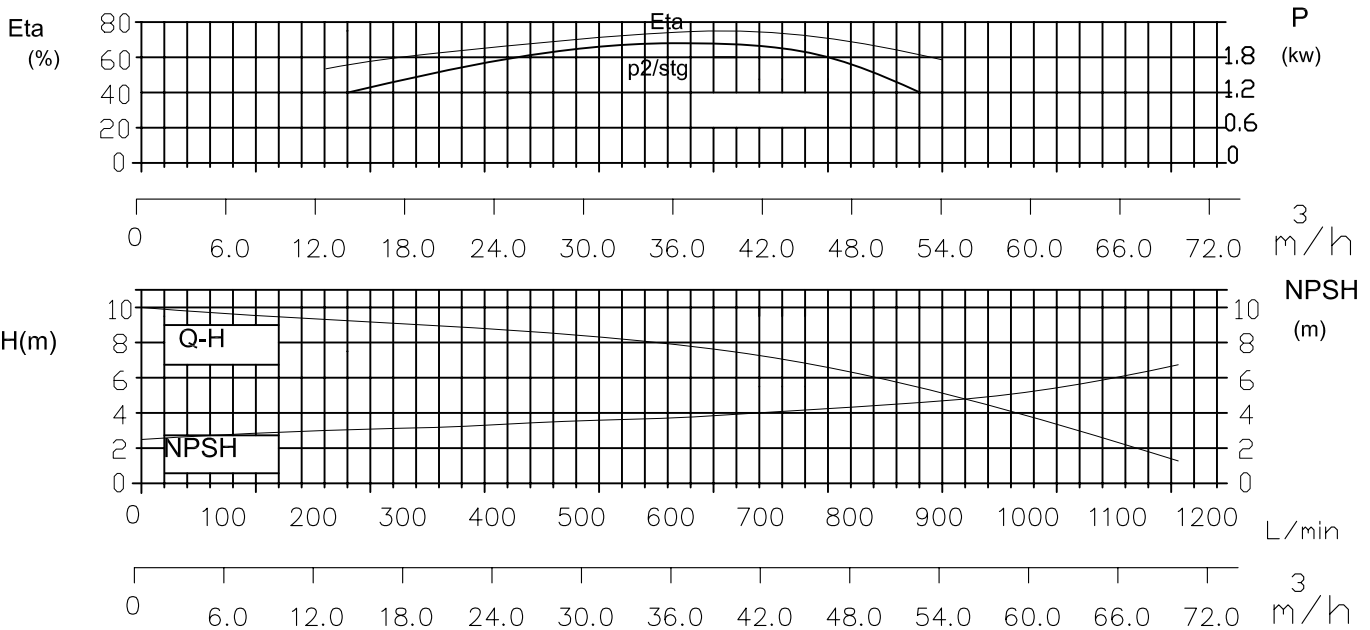
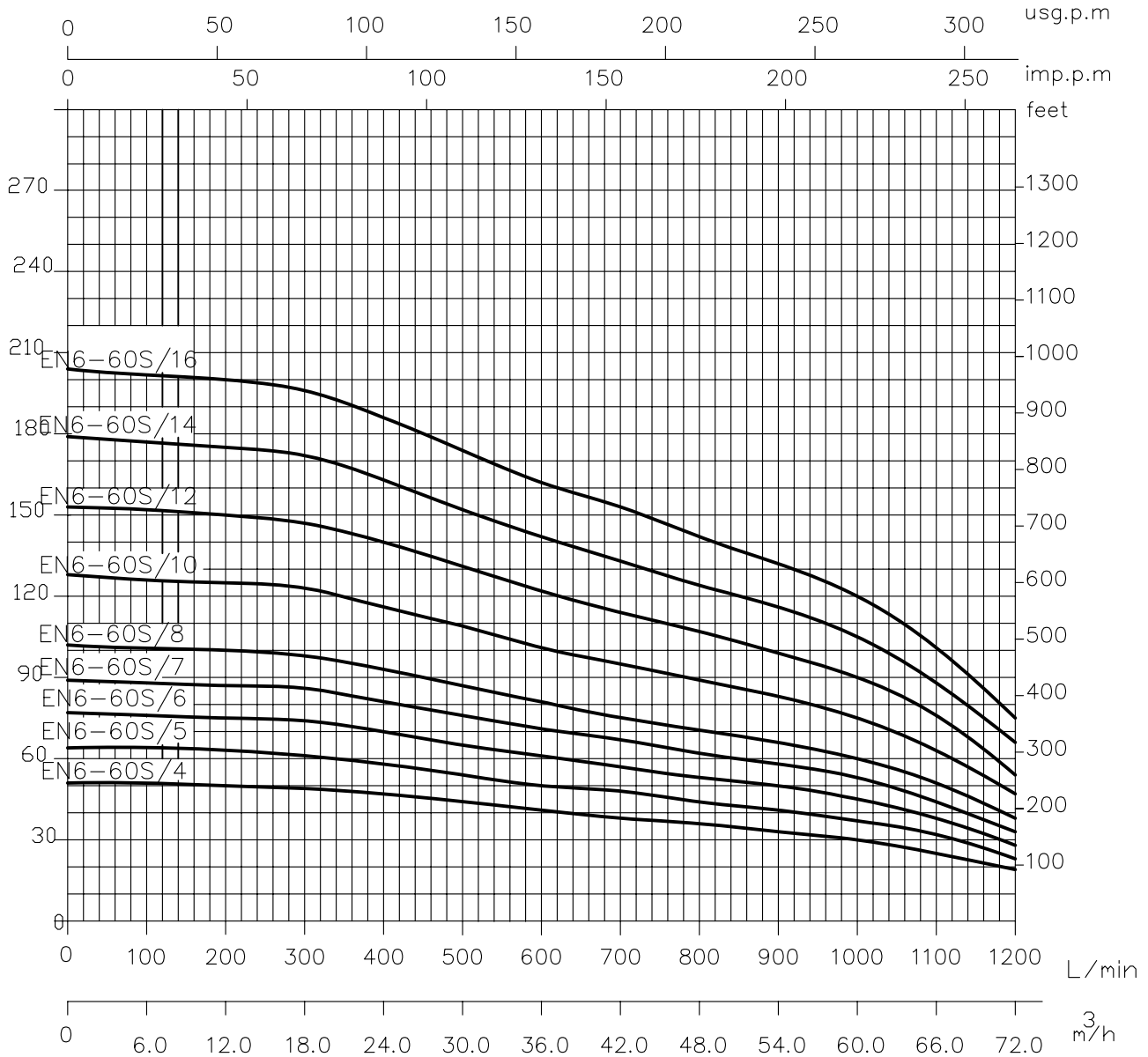
DIMENSIONS AND WEIGHTS

Pump Type	No. OF STAGES	DNM	D(mm)		Motor Type	Motor kW	Power HP	Pump Dimension(mm)		Pump Weight(Kg)	Electric Pump Weight(Kg)
			1 Cable	2 Cables				A	B		
EN6-46S-03	03	6 3"	144	146	6"	5.5	7.5	597	604	16.0	58.7
EN6-46S-04	04				6"	7.5	10	708	636	18.5	59.0
EN6-46S-05	05				6"	7.5	10	838	636	21.0	61.5
EN6-46S-06	06				6"	9.2	12.5	951	685	23.5	65.5
EN6-46S-07	07				6"	11	15	1064	701	26.0	73.8
EN6-46S-10	10				6"	15	20	1403	766	33.5	91.5
EN6-46S-12	12				6"	18.5	25	1630	832	38.6	100.2
EN6-46S-14	14				6"	22	30	1856	897	43.8	111.8
EN6-46S-15	15				6"	22	30	1968	897	46.6	114.6
EN6-46S-17	17				6"	26	35	2194	990	52.2	116.5
EN6-46S-20	20				6"	30	40	2615	1241	60.6	173.6





NEMITSAS PERFORMANCE CURVES AT 50 Hz



IMPELLER MATERIAL :Stainless Steel BOWL DIAMETER : 132 mm
 TYPE :CLOSED BOWL MATERIAL :Stainless Steel

CONDITIONS OF TESTING : TEMPERATURE : 15°C SPEED : 2900 R.P.M.
 These performances refer to cold water with no dissolved gases PRESSURE : 1Atm

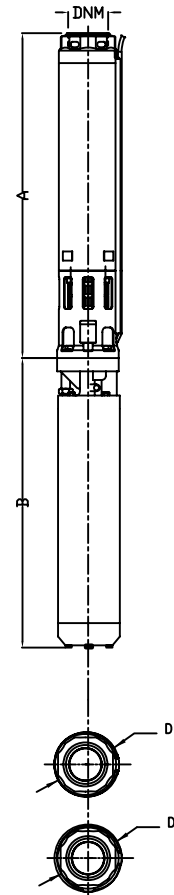
TYPE
EN6-60S

EN6-46S SERIES TECHNICAL DATA (50 Hz 2900 rpm)

Pump Type	No. OF STAGES	POWER		Q:(l/min)	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
		(kW)	(Hp)	Q:(m ³ /h)	0	6	12	18	24	30	36	42	48	54	60	66	72
EN6-60S-04	04	7.5	10	H:(m)	51	51	50	49	47	44	41	38	36	33	30	25	19
EN6-60S-05	05	9.2	12.5		64	63	62	61	58	55	50	48	44	41	37	32	23
EN6-60S-06	06	11	15		77	76	75	74	70	65	61	57	53	50	45	38	28
EN6-60S-07	07	13	17.5		89	88	87	86	81	76	71	67	62	58	53	44	33
EN6-60S-08	08	15	20		102	101	100	98	93	87	81	76	71	66	60	51	38
EN6-60S-10	10	18.5	25		128	126	125	123	115	109	101	95	89	83	75	63	47
EN6-60S-12	12	22	30		153	152	150	147	140	130	121	110	108	99	90	76	56
EN6-60S-14	14	26	35		180	177	178	170	161	152	141	133	125	116	105	88	66
EN6-60S-16	16	30	40		205	202	200	196	186	174	162	152	142	132	120	101	75

DIMENSIONS AND WEIGHTS

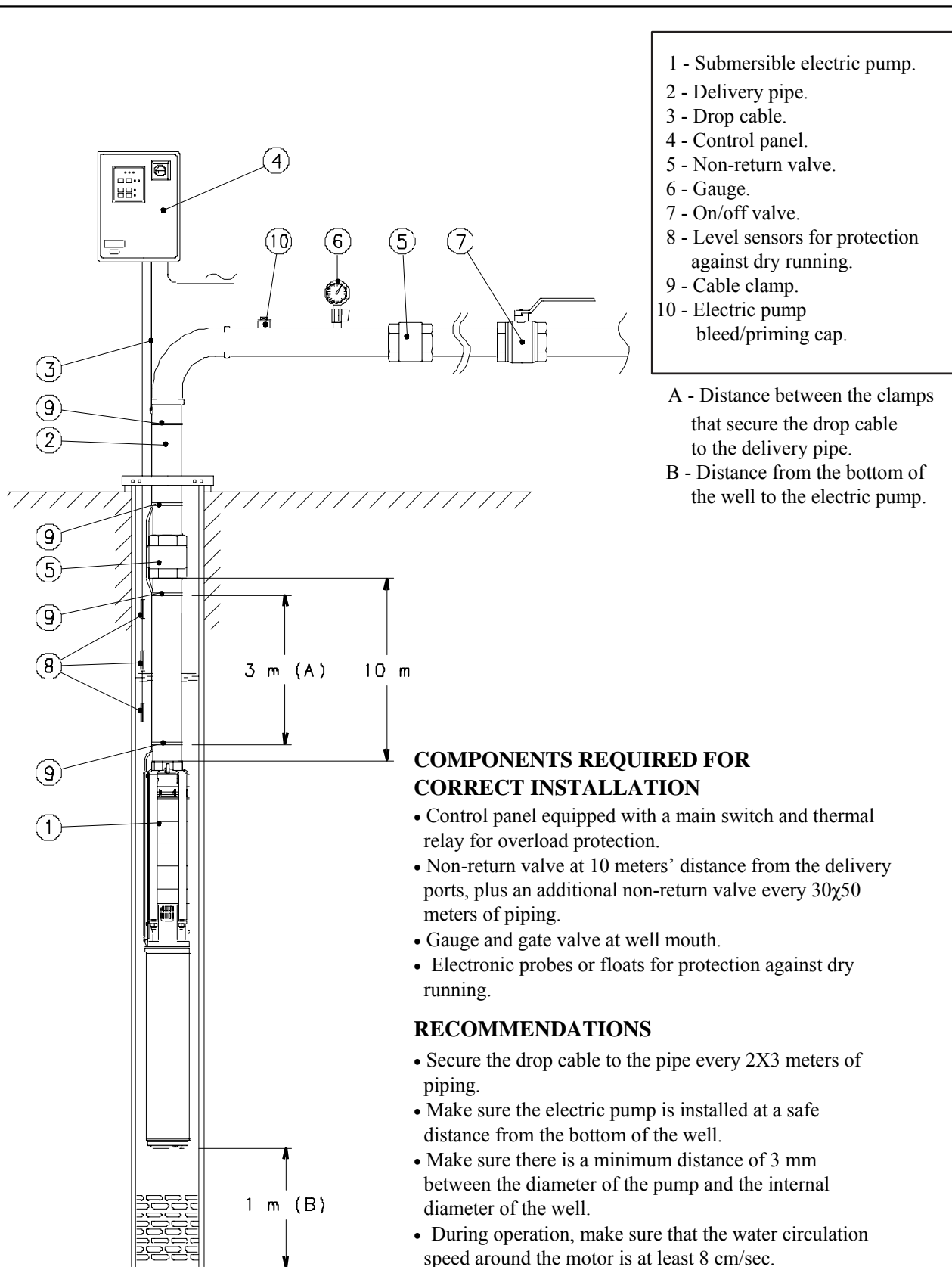
Pump Type	No. OF STAGES	DNM	D(mm)		Motor Type	Motor kW	Power HP	Pump Dimension(mm)		Pump Weight(Kg)	Electric Pump Weight(Kg)
			1 Cable	2 Cables				A	B		
EN6-60S-04	04	6 3"	144	146	6"	7.5	10	708	858	18.5	59.0
EN6-60S-05	05				6"	9.2	12.5	838	908	21.0	65.5
EN6-60S-06	06				6"	11	15	951	938	24.0	73.0
EN6-60S-07	07				6"	13	17.5	1064	998	28.0	85.5
EN6-60S-08	08				6"	15	20	1176	1038	33.5	90.5
EN6-60S-10	10				6"	18.5	25	1403	1118	38.8	100.0
EN6-60S-12	12				6"	22	30	1630	1228	44.0	112.0
EN6-60S-14	14				6"	26	35	1856	1340	50.0	120.0
EN6-60S-16	16				6"	30	40	2080	1488	60.0	160.0



MANUFACTURED BY: L.NEMITSAS LTD. LIMASSOL-CYPRUS.

WEB: www.nemitsas.eu E-mail: info@nemitsas.eu Tel: +35725569225-26 Fax: +35725396955.

SUBMERSIBLE ELECTRIC PUMP INSTALLATION DIAGRAM



- 1 - Submersible electric pump.
- 2 - Delivery pipe.
- 3 - Drop cable.
- 4 - Control panel.
- 5 - Non-return valve.
- 6 - Gauge.
- 7 - On/off valve.
- 8 - Level sensors for protection against dry running.
- 9 - Cable clamp.
- 10 - Electric pump bleed/priming cap.

A - Distance between the clamps that secure the drop cable to the delivery pipe.
 B - Distance from the bottom of the well to the electric pump.

COMPONENTS REQUIRED FOR CORRECT INSTALLATION

- Control panel equipped with a main switch and thermal relay for overload protection.
- Non-return valve at 10 meters' distance from the delivery ports, plus an additional non-return valve every 30x50 meters of piping.
- Gauge and gate valve at well mouth.
- Electronic probes or floats for protection against dry running.

RECOMMENDATIONS

- Secure the drop cable to the pipe every 2X3 meters of piping.
- Make sure the electric pump is installed at a safe distance from the bottom of the well.
- Make sure there is a minimum distance of 3 mm between the diameter of the pump and the internal diameter of the well.
- During operation, make sure that the water circulation speed around the motor is at least 8 cm/sec.
- Make sure that the minimum dynamic level of the water in the well is at least 1 m above the pump's delivery port.