

SS7

SUBMERSIBLE ELECTRIC PUMPS 7"



TECHNICAL DATA

Performance range: flow up to 110 m³/h and max head of 423 m

Max. quantity of sand/silt: 50g/m³

Max. ambient temperature: 30°C (50°C available on request)

Outlet connection diameter (inside threaded): 5"

Nr of starts: refer to the motor specification

Motor Cooling flow: refer to the motor specification

Installation: horizontal or vertical, refer to the motor specification

APPLICATIONS

Multistage mixed-flow borehole electric pumps, completely made in stainless steel (AISI 304L or AISI 316 on request), usable for wells from a minimum diameter equal to pump size or greater and capable of developing a wide range of Flows and Heads.

These pumps can be used in a wide range of lifting, distributing, and pressuring application: domestic and general water supply; sprinkler and drip irrigations systems; fire-fighting installations; lowering of groundwater level; industrial supplies as mining, hot springs, autoclaves and tanks.

These pumps are suitable both for standard water and for aggressive water applications by choosing the proper manufacturing material (AISI 304L or AISI 316) both for hydraulic part and motor.

Special version of motors with PE2+PA windings can be used on request for high-temperature water applications up to maximum 50°C.

Pumps can be installed both vertically and horizontally simply by removing the non-return valve and adding a cooling sleeve to the suction case (the only remark is to check the motor applicability to horizontal operations, refer to the motor specifications section).

CONSTRUCTION FEATURES OF PUMP

Mixed flow pumps with diffusers, impellers, brackets, suction case and discharge case completely made of stainless steel AISI 304 in order to provide maximum strength, durability, wear and tear resistance.

The impellers are balanced and locked to the shaft with a specially shaped collet and nut coupling, in order to guarantee ease-to-assembly feature and avoid vibration sensitive malfunctions and noise increase during rotation.

Rubber bearings that drive the shaft are water lubricated and have sand channels to make enable the sand particles leave the pump with the pumped liquid (maximum permissible sand content 50 gr/m³).

Built-in non returned valve provided in order to minimize local friction losses.

Stainless steel strainer provided in order to prevent particles over a certain size from entering the pump.

Coupling with 6", 8" or 10" motor depending on the power requested by hydraulic part:

- 6GF: 6" canned submersible motor
- TR6: 6" rewindable submersible motor
- TR8: 8" rewindable submersible motor
- TR10: 10" rewindable submersible motor

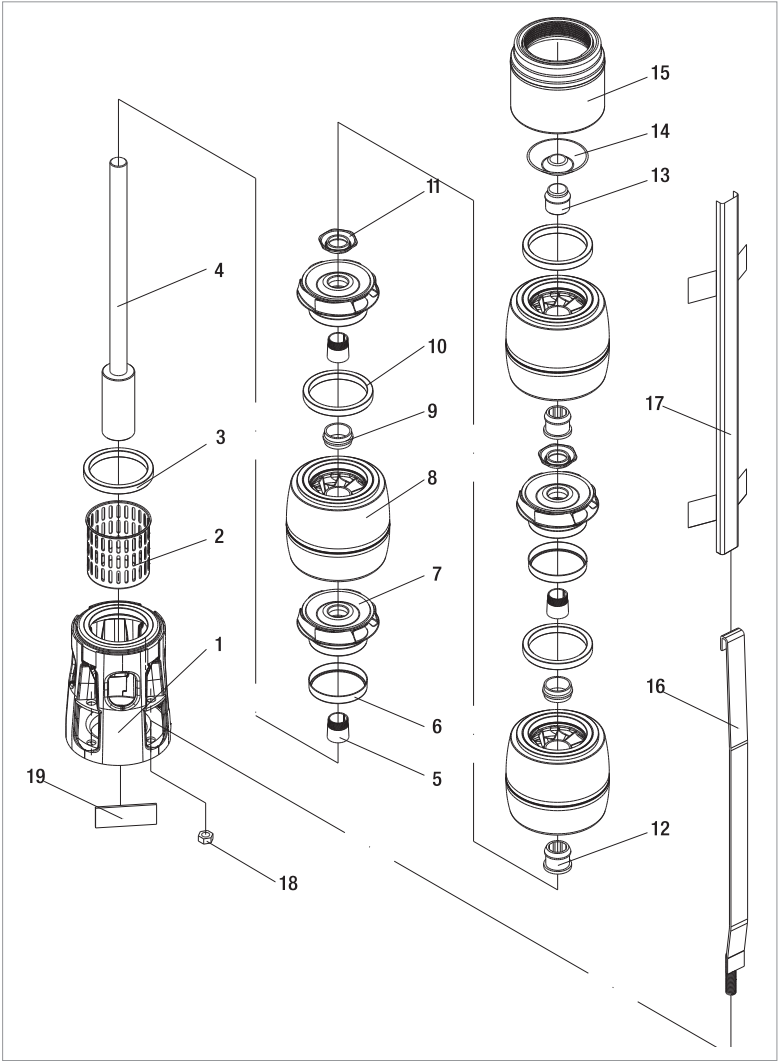
For inverter application refer to the detailed motor specification.

ON REQUEST:

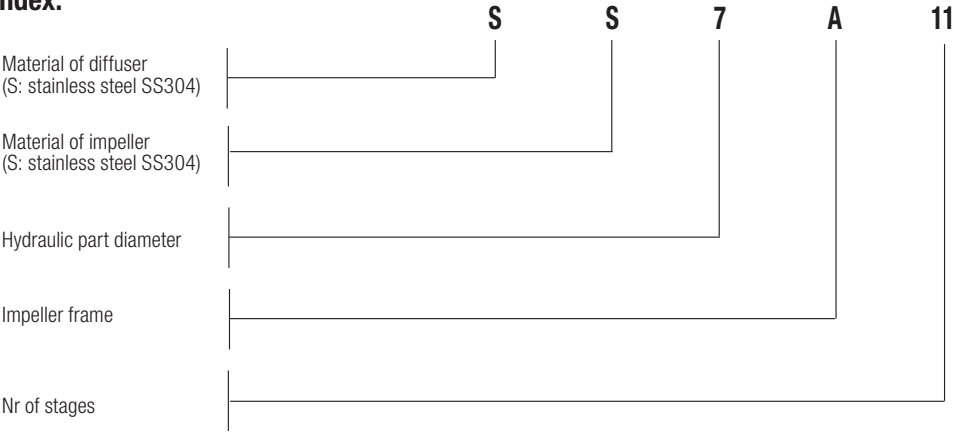
- Pump body stainless steel AISI 316 for aggressive water application
- Impellers stainless steel AISI 316
- Motors in full stainless steel AISI 316 for aggressive water application
- Star/Delta starting version
- Special version of the motor for high temperature application
- Non-standard power coupling

MATERIALS

N°	Part Name	Material
1	Suction Case	Stainless Steel (AISI 304L)
2	Filter	Stainless Steel (AISI 304L)
3	Suction Case Wear Ring	Bronze (ASTM B145-4A)
4	Pump Shaft	Stainless Steel (AISI 420)
5	Collet	Stainless Steel
6	Impeller Wear Ring	STAINLESS STEEL (AISI 304)
7	Impeller	Stainless Steel (AISI 304L)
8	Diffuser	Stainless Steel (AISI 304L)
9	Rubber Bearing	Rubber
10	Diffuser Wear Ring	Rubber
11	Nut for Stop Ring	Stainless Steel (AISI 304L)
12	Bearing	Rubber
13	Shaft Stopper	Bronze (ASTM B145-4A)
14	Valve	Stainless Steel (AISI 304)
15	Discharge Case	Stainless Steel (AISI 304)
16	TIE ROD	STAINLESS STEEL (AISI 304L)
17	CABLE GUARD	STAINLESS STEEL (AISI 304)
18	TIR ROD NUT	STAINLESS STEEL (AISI 303)
19	NAME PLATE	STAINLESS STEEL (AISI 304)



– Denomination index:
(EXAMPLE)



SS7A

SUBMERSIBLE ELECTRIC PUMPS 7"

PERFORMANCE 50 Hz - 2 POLES

MODEL	ELECTRICAL DATA		HYDRAULIC DATA											STANDARD MOTOR COUPLING
	P2 NOMINAL		Q=m ³ /h	0	20	30	40	50	60	70	80	90	100	
	kW	HP	Q=l/min	0	333,3	500	666,6	833,3	1000	1166,6	1333,3	1500	1666,6	
SS7A 01	4	5,5	H (m)	19	19	18	17	16	15	14	12	11	8	6"
SS7A 02	7,5	10		38	37	36	34	32	30	28	25	21	17	6"
SS7A 03	11	15		58	56	54	51	49	45	42	37	32	25	6"
SS7A 04	15	20		77	74	72	69	65	61	56	50	42	33	6"
SS7A 05	18,5	25		96	93	90	86	81	76	69	62	53	41	6"
SS7A 06	22	30		115	111	108	103	97	91	83	74	63	50	6"
SS7A 07	26	35		135	130	126	120	114	106	97	87	74	58	6"
SS7A 08	30	40		154	149	144	137	130	121	111	99	84	66	6"
SS7A 09	37	50		173	167	161	154	146	136	125	111	95	75	6"
SS7A 10	37	50		192	186	179	172	162	152	139	124	105	83	6"
SS7A 11	45	60		211	204	197	189	179	167	153	136	116	91	8"
SS7A 12	45	60		231	223	215	206	195	182	167	149	127	99	8"
SS7A 13	55	75		250	241	233	223	211	197	181	161	137	108	8"
SS7A 14	55	75		269	260	251	240	227	212	195	173	148	116	8"
SS7A 15	55	75		288	278	269	257	244	227	208	186	158	124	8"
SS7A 16	63	85		307	297	287	275	260	243	222	198	169	133	8"
SS7A 17	75	100		327	316	305	292	276	258	236	210	179	141	8"
SS7A 18	75	100		346	334	323	309	292	273	250	223	190	149	8"
SS7A 19	75	100		365	353	341	326	309	288	264	235	200	158	8"
SS7A 20	75	100		384	371	359	343	325	303	278	248	211	166	8"
SS7A 21	75	100		404	390	377	360	341	318	292	260	221	174	8"
SS7A 22	92	125		423	408	395	378	357	334	306	272	232	182	8"

ELECTRICAL DATA AND DIMENSIONS

MODEL	MOTOR *	ELECTRICAL DATA				HORIZONTAL INSTALLATION	L2 mm	L mm	L1 mm	D mm	D1 mm	TOTAL WEIGHT Kg
		P2 NOMINAL		In A	OPERATING BY INVERTER							
		kW	HP									
SS7A 01	6GF	4	5,5	10,6	●	●	1171	600	571	141	172	65,4
SS7A 02	6GF	7,5	10	18	●	●	1359	660	699	141	172	75,2
	TR6	7,5	10	18	○	●	1536	837	699	144	172	83
SS7A 03	6GF	11	15	25,5	●	●	1557	730	827	141	172	87
	TR6	11	15	25	○	●	1724	897	827	144	172	94
SS7A 04	6GF	15	20	33,4	●	●	1740	785	955	141	172	97
	TR6	15	20	32	○	●	1952	997	955	144	172	115
SS7A 05	6GF	18,5	25	41	●	●	1943	860	1083	141	172	109
	TR6	18,5	25	39	○	●	2140	1057	1083	144	172	125
SS7A 06	6GF	22	30	47	●	●	2131	920	1211	141	172	116,6
	TR6	22	30	49	○	●	2298	1087	1211	144	172	141
SS7A 07	6GF	30	40	61,5	●	●	2389	1050	1339	141	172	136,8
	TR6	26	35	58	○	●	2496	1157	1339	144	172	155
SS7A 08	6GF	30	40	61,5	●	●	2517	1050	1467	141	172	140,8
	TR6	30	40	65	○	●	2679	1212	1467	144	172	164
SS7A 09	6GF	37	50	79,3	●	●	2775	1180	1595	141	172	156,8
	TR6	37	50	80	○	●	2907	1312	1595	144	172	178
SS7A 10	6GF	37	50	79,9	●	●	2903	1180	1723	141	172	160,8
	TR6	37	50	80	○	●	3035	1312	1723	144	172	182
SS7A 11	TR8	45	60	92	○	●	3121	1270	1851	192	172	243
SS7A 12	TR8	45	60	92	○	●	3249	1270	1979	192	172	247
SS7A 13	TR8	55	75	109	○	●	3457	1350	2107	192	172	266
SS7A 14	TR8	55	75	109	○	●	3585	1350	2235	192	172	270
SS7A 15	TR8	55	75	109	○	●	3713	1350	2363	192	172	274
SS7A 16	TR8	63	85	126	○	●	3981	1490	2491	192	172	304
SS7A 17	TR8	75	100	145	○	●	4209	1590	2619	192	172	326
SS7A 18	TR8	75	100	145	○	●	4337	1590	2747	192	172	330
SS7A 19	TR8	75	100	145	○	●	4465	1590	2875	192	172	334
SS7A 20	TR8	75	100	145	○	●	4593	1590	3003	192	172	338
SS7A 21	TR8	75	100	145	○	●	4721	1590	3131	192	172	342
SS7A 22	TR8	92	125	177	○	●	5089	1830	3259	192	172	392

* Motor 6GF: 6" canned submersible motors.

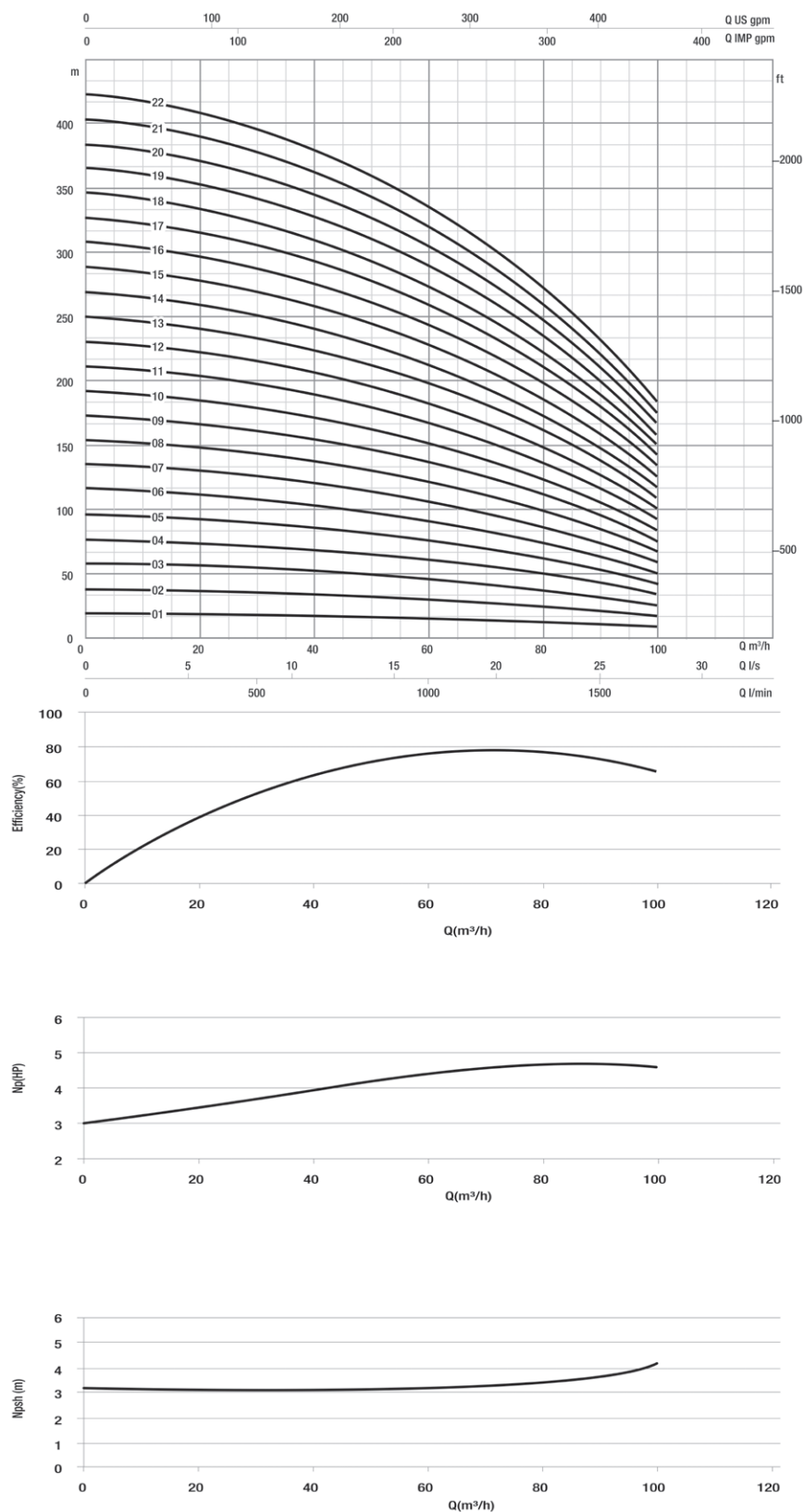
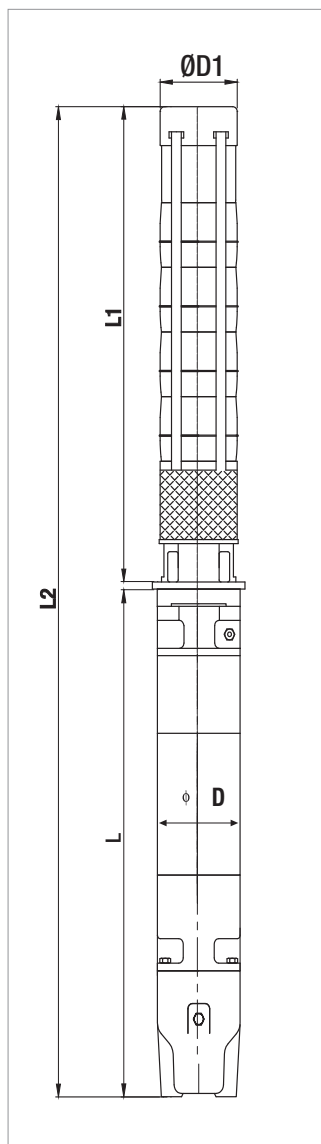
Motor TR: 6"-8" rewindable submersible motors.

●	Allowed
○	Only PE2 + PA version

SS7A

SUBMERSIBLE ELECTRIC PUMPS 7"

The performance curves are based on the kinematic viscosity values = 1 mm²/s and density equal to 1000 Kg/m³. Curve tolerance according to ISO 9906.



SS7B

SUBMERSIBLE ELECTRIC PUMPS 7”

SUBMERSIBLE PUMPS

PERFORMANCE 50 Hz - 2 POLES

MODEL	ELECTRICAL DATA		HYDRAULIC DATA											STANDARD MOTOR COUPLING
	P2 NOMINAL		Q=m³/h	0	20	40	50	60	70	80	90	100	115	
	kW	HP	Q=l/min	0	333,3	666,6	833,3	1000	1166,6	1333,3	1500	1666,6	1916,6	
SS7B 01	5,5	7,5	H (m)	21	21	20	20	19	18	17	16	14	11	6"
SS7B 02	11	15		43	43	41	39	38	36	34	32	28	21	6"
SS7B 03	15	20		64	64	61	59	56	54	51	47	43	32	6"
SS7B 04	22	30		85	86	81	78	75	72	68	63	57	43	6"
SS7B 05	30	40		106	107	101	98	94	90	85	79	71	54	6"
SS7B 06	37	50		128	128	122	117	113	108	102	95	85	64	6"
SS7B 07	37	50		149	150	142	137	132	126	119	111	100	75	6"
SS7B 08	45	60		170	171	162	156	150	144	136	126	114	86	8"
SS7B 09	45	60		192	193	183	176	169	162	153	142	128	96	8"
SS7B 10	55	75		213	214	203	196	188	180	170	158	142	107	8"
SS7B 11	63	85		234	235	223	215	207	197	187	174	157	118	8"
SS7B 12	75	100		256	257	243	235	225	215	204	190	171	128	8"
SS7B 13	75	100		277	278	264	254	244	233	221	206	185	139	8"
SS7B 14	75	100		298	300	284	274	263	251	238	221	199	150	8"
SS7B 15	92	125		319	321	304	293	282	269	255	237	214	161	8"
SS7B 16	92	125		341	342	325	313	301	287	272	253	228	171	8"
SS7B 17	92	125		362	364	345	332	319	305	289	269	242	182	8"
SS7B 18	110	150		383	385	365	352	338	323	306	285	256	193	8"
SS7B 19	110	150		405	407	385	372	357	341	323	300	271	203	8"
SS7B 20	110	150		426	428	406	391	376	359	340	316	285	214	8"

ELECTRICAL DATA AND DIMENSIONS

MODEL	MOTOR *	ELECTRICAL DATA				HORIZONTAL INSTALLATION	L2 mm	L mm	L1 mm	D mm	D1 mm	TOTAL WEIGHT Kg
		P2 NOMINAL		In A	OPERATING BY INVERTER							
		kW	HP									
SS7B 01	6GF	5,5	7,5	14	●	●	1202	631	571	141	172	68,6
	TR6	5,5	7,5	13	○	●	1378	807	571	144	172	76
SS7B 02	6GF	11	15	25,5	●	●	1429	730	699	141	172	81,8
	TR6	11	15	25	○	●	1596	897	699	144	172	90
SS7B 03	6GF	15	20	33,4	●	●	1612	785	827	141	172	93
	TR6	15	20	32	○	●	1824	997	827	144	172	111
SS7B 04	6GF	22	30	47	●	●	1875	920	955	141	172	108,6
	TR6	22	30	49	○	●	2042	1087	955	144	172	133
SS7B 05	6GF	30	40	61,5	●	●	2133	1050	1083	141	172	128,8
	TR6	30	40	65	○	●	2295	1212	1083	144	172	152
SS7B 06	6GF	37	50	79,3	●	●	2391	1180	1211	141	172	144,8
	TR6	37	50	80	○	●	2523	1312	1211	144	172	166
SS7B 07	6GF	37	50	79,3	●	●	2519	1180	1339	141	172	148,8
	TR6	37	50	80	○	●	2651	1312	1339	144	172	170
SS7B 08	TR8	45	60	92	○	●	2737	1270	1467	192	172	231
SS7B 09	TR8	45	60	92	○	●	2865	1270	1595	192	172	235
SS7B 10	TR8	55	75	109	○	●	3073	1350	1723	192	172	254
SS7B 11	TR8	63	85	126	○	●	3341	1490	1851	192	172	284
SS7B 12	TR8	75	100	145	○	●	3569	1590	1979	192	172	307
SS7B 13	TR8	75	100	145	○	●	3697	1590	2107	192	172	311
SS7B 14	TR8	75	100	145	○	●	3825	1590	2235	192	172	315
SS7B 15	TR8	92	125	177	○	●	4193	1830	2363	192	172	365
SS7B 16	TR8	92	125	177	○	●	4321	1830	2491	192	172	369
SS7B 17	TR8	92	125	177	○	●	4449	1830	2619	192	172	373
SS7B 18	TR8	110	150	213	○	●	4807	2060	2747	192	172	427
SS7B 19	TR8	110	150	213	○	●	4935	2060	2875	192	172	431
SS7B 20	TR8	110	150	213	○	●	5063	2060	3003	192	172	435

* Motor 6GF: 6" canned submersible motors.

Motor TR: 6"-8" rewindable submersible motors.

●	Allowed
○	Only PE2 + PA version

SS7B

SUBMERSIBLE ELECTRIC PUMPS 7"

The performance curves are based on the kinematic viscosity values = 1 mm2/s and density equal to 1000 Kg/m3. Curve tolerance according to ISO 9906.

SUBMERSIBLE PUMPS

