



## TECHNICAL DATA

**Performance range:** flow up to 75 m<sup>3</sup>/h and max head of 670 m

**Max. quantity of sand/silt:** 50g/m<sup>3</sup>

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

**Outlet connection diameter (inside threaded):** SS6 A – SS6 B : 2 ½"  
SS6 C : 3"  
SS6 D – SS6 E : 4"

**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/m<sup>3</sup>).

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

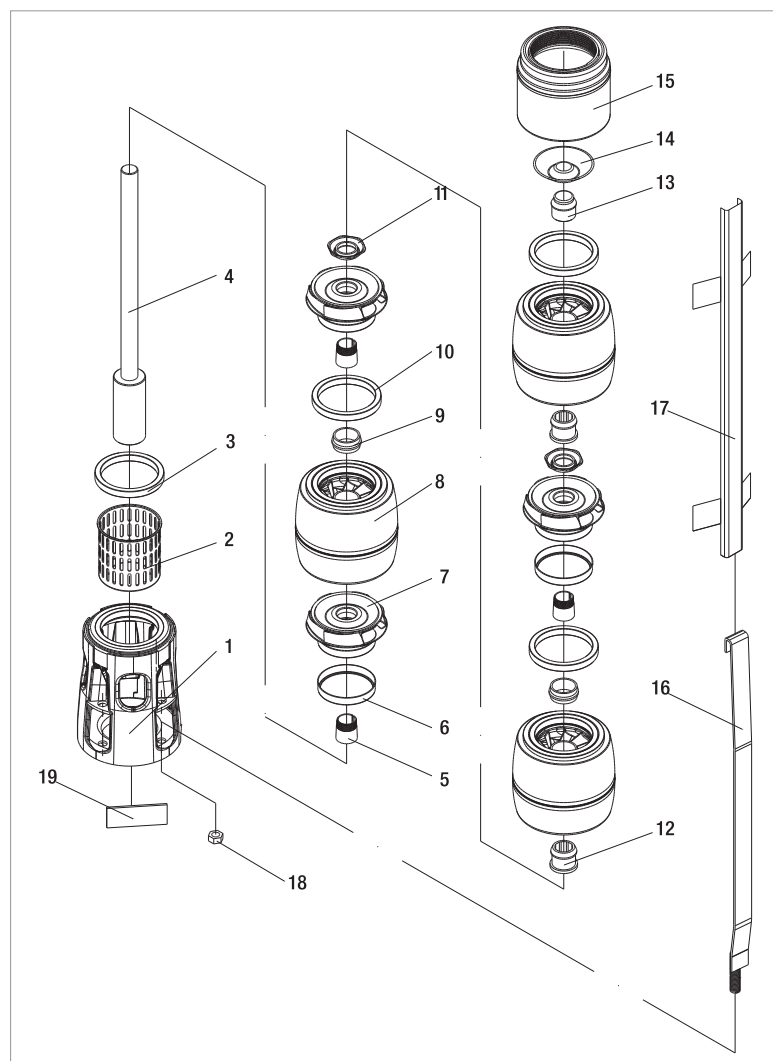
For inverter application refer to the detailed motor specification.

## ON REQUEST:

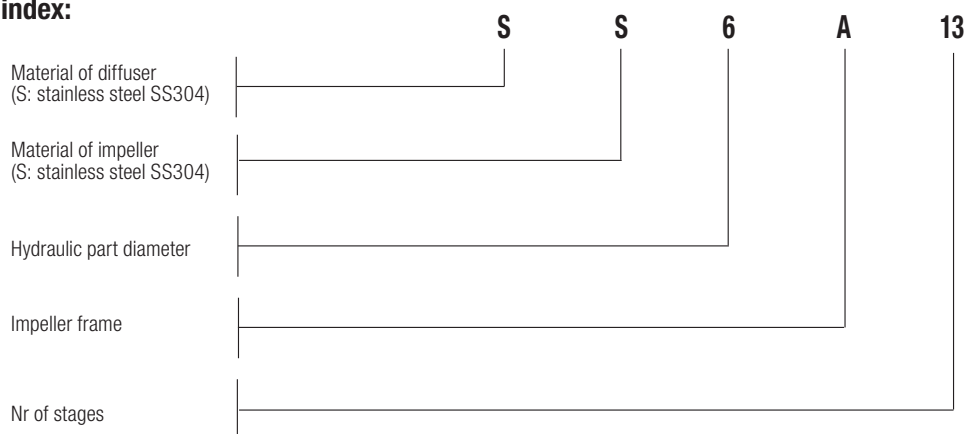
- Pump body stainless steel AISI 316 for aggressive water application
- Impellers stainless steel AISI 316
- Motors in full stainless steel AISI 316 for aggressive water application
- Star/Delta starting version
- Special version of the motor for high temperature application
- Non-standard power coupling

### 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)



**PERFORMANCE 50 Hz - 2 POLES**

MODEL	ELECTRICAL DATA		Q=m <sup>3</sup> h Q=l/min	HYDRAULIC DATA										STANDARD MOTOR COUPLING
	P2 NOMINAL			0	20	25	30	35	40	45	50	55	60	
	kW	HP		0	333,3	416,6	500	583,3	666,6	750	833,3	916,6	1000	
SS6D 03	5,5	7,5	H (m)	42	38	36	33	31	29	26	24	20	16	6"
SS6D 04	7,5	10		56	50	47	44	41	38	35	32	27	21	6"
SS6D 05	7,5	10		70	63	59	56	52	48	44	39	34	26	6"
SS6D 06	9,3	12,5		84	75	71	67	62	57	53	47	41	31	6"
SS6D 07	11	15		98	88	83	78	72	67	61	55	47	36	6"
SS6D 08	13	17,5		112	101	95	89	83	77	70	63	54	42	6"
SS6D 09	15	20		126	113	107	100	93	86	79	71	61	47	6"
SS6D 10	18,5	25		140	126	119	111	103	96	88	79	68	52	6"
SS6D 11	18,5	25		154	138	130	122	114	105	97	87	74	57	6"
SS6D 12	22	30		168	151	142	133	124	115	105	95	81	62	6"
SS6D 13	22	30		182	163	154	144	134	125	114	102	88	68	6"
SS6D 14	22	30		196	176	166	155	145	134	123	110	95	73	6"
SS6D 15	26,5	35		210	188	178	167	155	144	132	118	101	78	6"
SS6D 16	26,5	35		224	201	190	178	165	153	141	126	108	83	6"
SS6D 17	30	40		238	214	202	189	176	163	149	134	115	88	6"
SS6D 18	30	40		252	226	213	200	186	172	158	142	122	93	6"
SS6D 19	37	50		266	239	225	211	197	182	167	150	128	99	6"

### 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									
SS6 D3	6GF	5,5	7,5	14	●	●	1237	631	606	141	144	54,6
	TR6	5,5	7,5	13	○	●	1413	807	606	144	144	62
SS6 D4	6GF	7,5	10	18	●	●	1378	660	718	141	144	60,2
	TR6	7,5	10	18	○	●	1555	837	718	144	144	68
SS6 D5	6GF	7,5	10	18	●	●	1490	660	830	141	144	63,2
	TR6	7,5	10	18	○	●	1667	837	830	144	144	71
SS6 D6	6GF	9,2	12,5	22	●	●	1627	685	942	141	144	68,6
	TR6	9,2	12,5	21	○	●	1809	867	942	144	144	75
SS6 D7	6GF	11	15	25,5	●	●	1784	730	1054	141	144	76
	TR6	11	15	25	○	●	1951	897	1054	144	144	83
SS6 D8	6GF	15	20	33,4	●	●	1951	785	1166	141	144	85
	TR6	13	17,5	29	○	●	2093	927	1166	144	144	91
SS6 D9	6GF	15	20	33,4	●	●	2063	785	1278	141	144	87
	TR6	15	20	32	○	●	2275	997	1278	144	144	105
SS6 D10	6GF	18,5	25	41	●	●	2250	860	1390	141	144	98
	TR6	18,5	25	39	○	●	2447	1057	1390	144	144	114
SS6 D11	6GF	18,5	25	41	●	●	2362	860	1502	141	144	101
	TR6	18,5	25	39	○	●	2559	1057	1502	144	144	117
SS6 D12	6GF	22	30	47	●	●	2534	920	1614	141	144	106,6
	TR6	22	30	49	○	●	2701	1087	1614	144	144	131
SS6 D13	6GF	22	30	47	●	●	2646	920	1726	141	144	109,6
	TR6	22	30	49	○	●	2813	1087	1726	144	144	134
SS6 D14	6GF	22	30	47	●	●	2758	920	1838	141	144	112,6
	TR6	22	30	49	○	●	2925	1087	1838	144	144	137
SS6 D15	6GF	30	40	61,5	●	●	3000	1050	1950	141	144	130,8
	TR6	26	35	58	○	●	3107	1157	1950	144	144	149
SS6 D16	6GF	30	40	61,5	●	●	3112	1050	2062	141	144	133,8
	TR6	26	35	58	○	●	3219	1157	2062	144	144	152
SS6 D17	6GF	30	40	61,5	●	●	3224	1050	2174	141	144	135,8
	TR6	30	40	65	○	●	3386	1212	2174	144	144	159
SS6 D18	6GF	30	40	61,5	●	●	3336	1050	2286	141	144	138,8
	TR6	30	40	65	○	●	3498	1212	2286	144	144	162
SS6 D19	6GF	37	50	79,3	○	●	3578	1180	2398	141	144	153,8
	TR6	37	50	80	●	●	3710	1312	2398	144	144	175

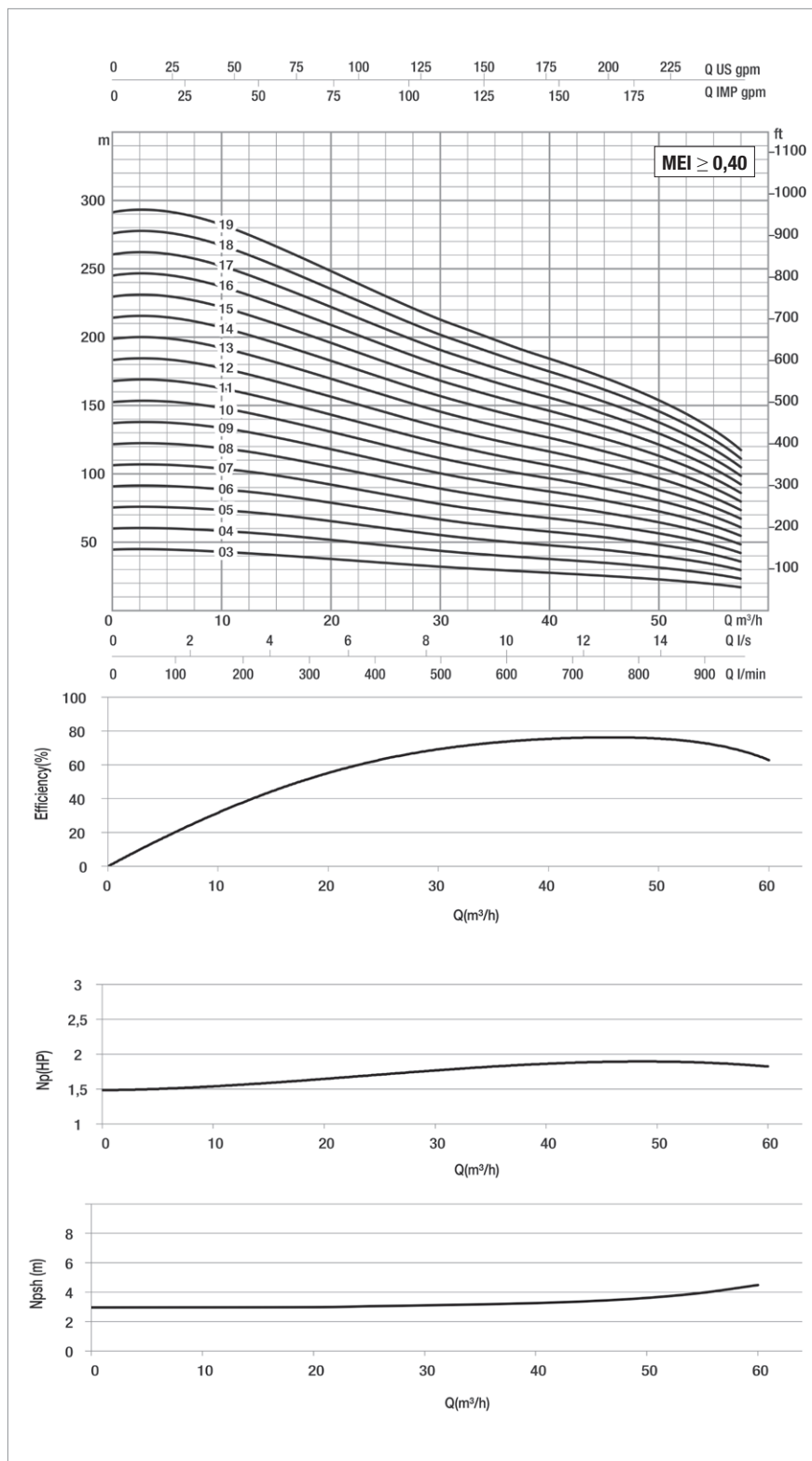
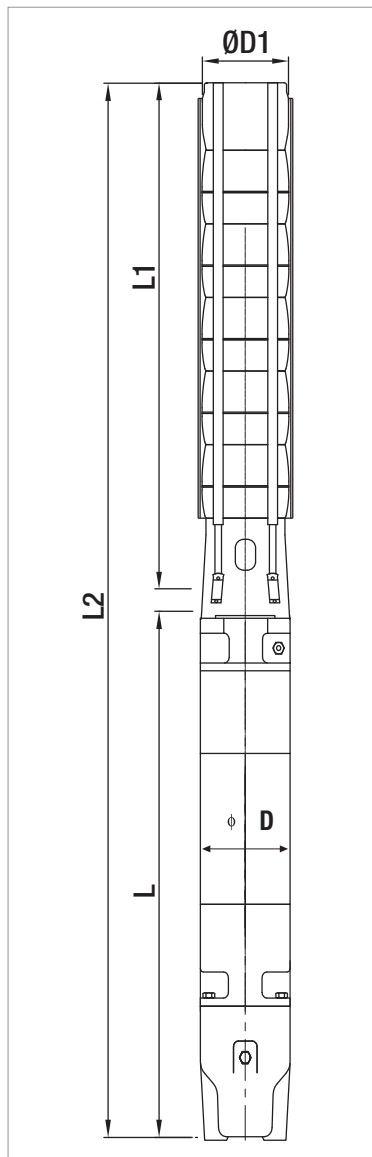
\* Motor 6GF: 6" canned submersible motors  
 Motor TR6: 6" rewindable submersible motors

●	Allowed
○	Only PE2 + PA version

# SS6D

## SUBMERSIBLE ELECTRIC PUMPS 6"

The performance curves are based on the kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 Kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



For hydraulic efficiency see pag. 233

### PERFORMANCE 50 Hz - 2 POLES

MODEL	ELECTRICAL DATA		HYDRAULIC DATA											STANDARD MOTOR COUPLING
	P2 NOMINAL		Q=m <sup>3</sup> h	0	20	25	30	35	40	45	50	55	60	
	kW	HP	Q=l/min	0	333,3	416,6	500	583,3	666,6	750	833,3	916,6	1000	
SS6D 20	37	50	H (mt)	280	251	237	222	207	192	176	158	135	104	6"
SS6D 21	37	50		294	264	249	233	217	201	184	166	142	109	6"
SS6D 22	37	50		308	276	261	244	228	211	193	173	149	114	6"
SS6D 23	37	50		322	289	273	255	238	220	202	181	155	119	6"
SS6D 24	45	60		336	302	285	267	248	230	211	189	162	125	8"
SS6D 25	45	60		350	314	296	278	259	239	220	197	169	130	8"
SS6D 26	45	60		364	327	308	289	269	249	228	205	176	135	8"
SS6D 27	45	60		378	339	320	300	279	259	237	213	182	140	8"
SS6D 28	45	60		392	352	332	311	290	268	246	221	189	145	8"
SS6D 29	45	60		406	364	344	322	300	278	255	229	196	151	8"
SS6D 30	45	60		420	377	356	333	310	287	264	237	203	156	8"
SS6D 31	55	75		434	390	368	344	321	297	272	244	209	161	8"
SS6D 32	55	75		448	402	379	355	331	307	281	252	216	166	8"
SS6D 33	55	75		462	415	391	366	341	316	290	260	223	171	8"

## ELECTRICAL DATA AND DIMENSIONS

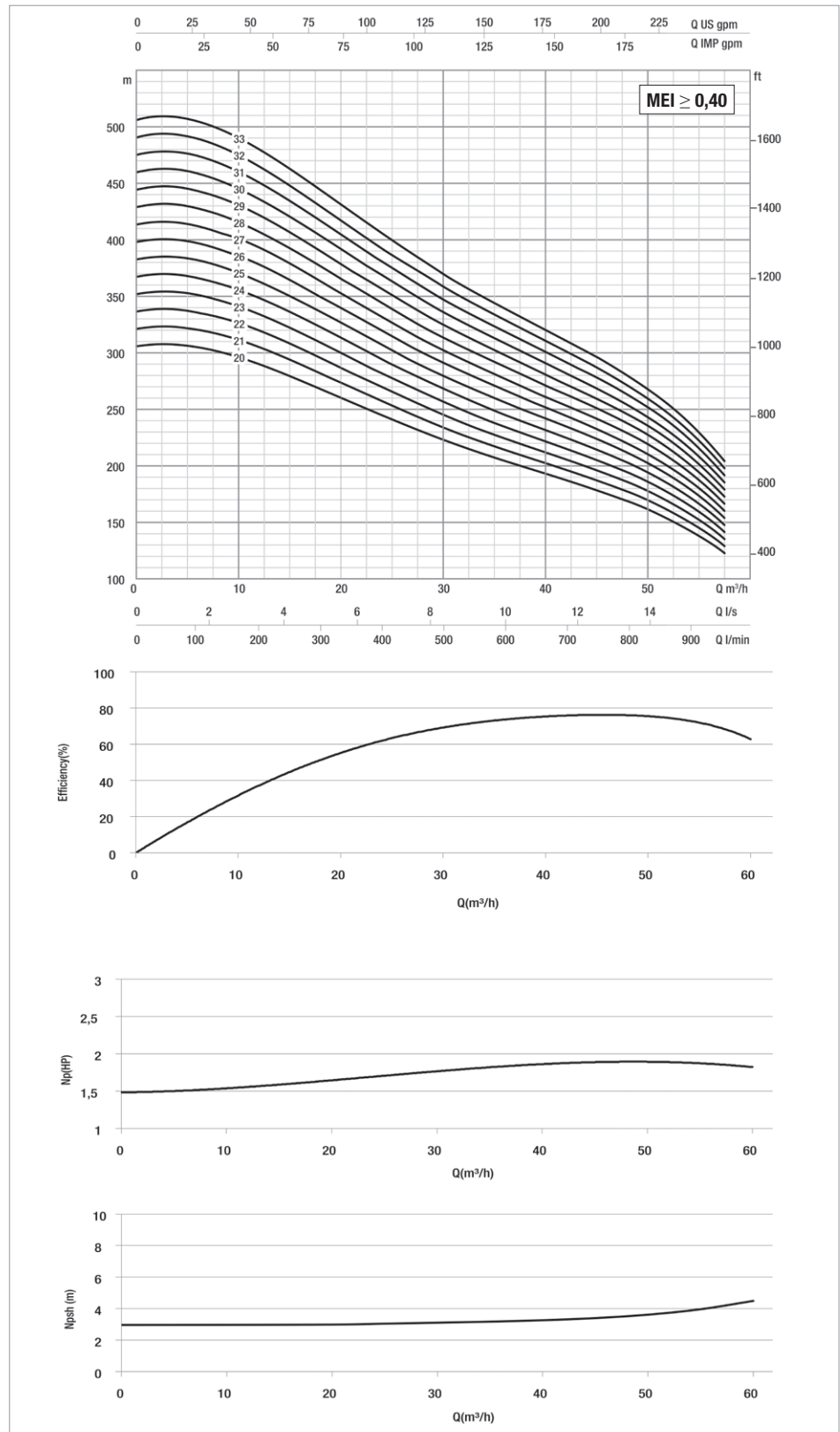
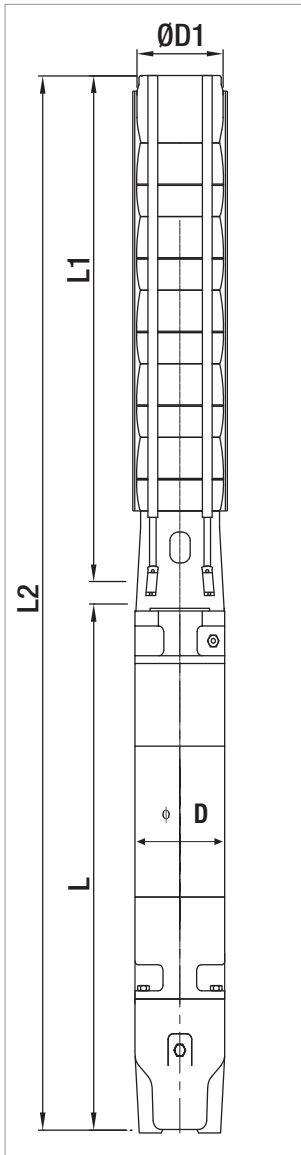
MODEL	MOTOR *	ELECTRICAL DATA				HORIZONTAL INSTALLATION	L2 mm	L mm	L1 mm	D mm	D1 mm	TOTAL WEIGHT Kg
		P2 NOMINAL		In A	OPERATING BY INVERTER							
		kW	HP									
SS6D 20	6GF	37	50	79,3	●	●	3690	1180	2510	141	144	155,8
	TR6	37	50	80	○	●	3822	1312	2510	144	144	177
SS6D 21	6GF	37	50	79,3	●	●	3802	1180	2622	141	144	158,8
	TR6	37	50	80	○	●	3934	1312	2622	144	144	180
SS6D 22	6GF	37	50	79,3	●	●	3914	1180	2734	141	144	161,8
	TR6	37	50	80	○	●	4046	1312	2734	144	144	183
SS6D 23	6GF	37	50	79,3	●	●	4026	1180	2846	141	144	163,8
	TR6	37	50	80	○	●	4158	1312	2846	144	144	185
SS6D 24	TR8	45	60	92	○	●	4228	1270	2958	192	144	245
SS6D 25	TR8	45	60	92	○	●	4340	1270	3070	192	144	248
SS6D 26	TR8	45	60	92	○	●	4452	1270	3182	192	144	250
SS6D 27	TR8	45	60	92	○	●	4564	1270	3294	192	144	253
SS6D 28	TR8	45	60	92	○	●	4676	1270	3406	192	144	256
SS6D 29	TR8	45	60	92	○	●	4788	1270	3518	192	144	258
SS6D 30	TR8	45	60	92	○	●	4900	1270	3630	192	144	261
SS6D 31	TR8	55	75	109	○	●	5092	1350	3742	192	144	278
SS6D 32	TR8	55	75	109	○	●	5204	1350	3854	192	144	281
SS6D 33	TR8	55	75	109	○	●	5316	1350	3966	192	144	284

\* Motor 6GF: 6" canned submersible motors.

Motor TR: 6" 8" rewindable submersible motors.

●	Allowed
○	Only PE2 + PA version

The performance curves are based on the kinematic viscosity values = 1 mm<sup>2</sup>/s and density equal to 1000 Kg/m<sup>3</sup>. Curve tolerance according to ISO 9906.



For hydraulic efficiency see pag. 233