

# SS - STAINLESS STEEL

SUBMERSIBLE PUMPS AND MOTORS





## CERTIFICATE

IQNet and its partner  
**CISQ/IMQ-CSQ**  
hereby certify that the organization  
**DWT HOLDING SPA**  
VIA MARCO POLO 14 - 35035 MESTRINO (PD)  
BRENDOLA (VI) - CASTELLO DI GODEGO (TV) - BIENTINA (PI) -  
SAN GERMANO DEI BERICI (VI) - GESSATE (MI) -  
PRC CHINA

for the following field of activities  
*Design, production, sale and assistance of components and electronic controls for pumps, electropumps, and pump sets for cold and hot water for civil, industrial and agricultural use*  
Refer to quality manual for details of applications to ISO 9001:2008 requirements

has implemented and maintains a  
**Quality Management System**  
which fulfills the requirements of the following standard

**ISO 9001:2008**

Issued on: 2013 - 09 - 23      Expiry date: 2015 - 06 - 15

Registration Number: IT - 824



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All. 1 di 1  
Ann. 1 of 1



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ALLEGATO CERTIFICATO n. **9101.COGE**  
ANNEX CERTIFICATE

(\*) Unità Operative:  
(\*) Operative Units:

**DAB PUMPS SPA**  
VIA BONANNO RISANO 1 - 56031 BIENTINA (PI)

**TESLA SRL**  
VIA DEL LAVORO 3 - 36040 SAN GERMANO DEI BERICI (VI)

**TESLA SRL**  
VIA BERGAMO 2 - 20060 GESSATE (MI)

**DAB PUMPS QINGDAO CO. LTD.**  
40 KAITUO ROAD, QINGDAO DEVELOPMENT ZONE - SHANGDONG PROVINCE, PRC CHINA

DATE	PRIMA CERTIFICAZIONE FIRST CERTIFICATION	EMISSIONE CORRENTE CURRENT ISSUE	SCADENZA EXPIRY
	1995-07-17	2013-09-23	2015-06-15

*Provetti*  
IMQ S.p.A. - VIA QUINTILIANO, 43 - 20138 MILANO



EA 18, 19

La validità del certificato è subordinata a rinnovata approvazione e verifica obbligatoria del Sistema di Gestione per periodici (3) rinnovi.  
The validity of the certificate is subjected to annual issue and a re-assessment of the whole Management System within three years

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CERTIFICATO N. **9101.COGE**  
CERTIFICATE N. **9101.COGE**

SI CERTIFICA CHE IL SISTEMA QUALITÀ DI  
WE HEREBY CERTIFY THAT THE QUALITY SYSTEM OPERATED BY  
**DWT HOLDING SPA**  
VIA MARCO POLO 14 - 35035 MESTRINO (PD)

UNITÀ OPERATIVE  
OPERATIVE UNITS  
**DAB PUMPS**  
VIA MARCO POLO 14 - 35035 MESTRINO (PD)  
**DAB PUMPS**  
VIA EINAUDI 2 - 36040 BRENDOLA (VI)  
**DAB PUMPS**  
VIA E. FERMI 6-8-10 - 31030 CASTELLO DI GODEGO (TV)

Vedere gli Allegati per le altre Unità Operative (n° 1 pagina)  
View the Annexes for the other Operative Units (n° 1 page)

È CONFORME ALLA NORMA  
IS IN COMPLIANCE WITH THE STANDARD  
**ISO 9001:2008**

PER LE SEGUENTI ATTIVITÀ  
FOR THE FOLLOWING ACTIVITIES

Progettazione, produzione, vendita e assistenza di componenti e controlli elettronici per pompe, elettropompe e gruppi di pompaggio per acqua fredda e calda ad uso civile, industriale ed agricolo  
*Design, production, sale and assistance of components and electronic controls for pumps, electropumps, and pump sets for cold and hot water for civil, industrial and agricultural use*  
Refer to quality manual for details of applications to ISO 9001:2008 requirements

IL PRESENTE CERTIFICATO È SOGGETTO AL RISPECTO DEL  
REGOLAMENTO PER LA CERTIFICAZIONE DEI SISTEMI ORGANIZZAZIONE  
THE USE AND THE VALIDITY OF THE CERTIFICATE SHALL SATISFY THE  
REQUIREMENTS OF THE RULES FOR CERTIFICATION OF MANAGEMENT SYSTEMS

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## SUBMERSIBLE PUMPS



**SS6**

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**SS8**

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**SS7**

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**SS10**

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## SUBMERSIBLE MOTORS



**6GF - 6GX**

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**TR10**

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**TR6**

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**TR12**

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**TR8**

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## HYDRAULIC EFFICIENCY

## CONTROL PANELS

## TECHNICAL APPENDIX

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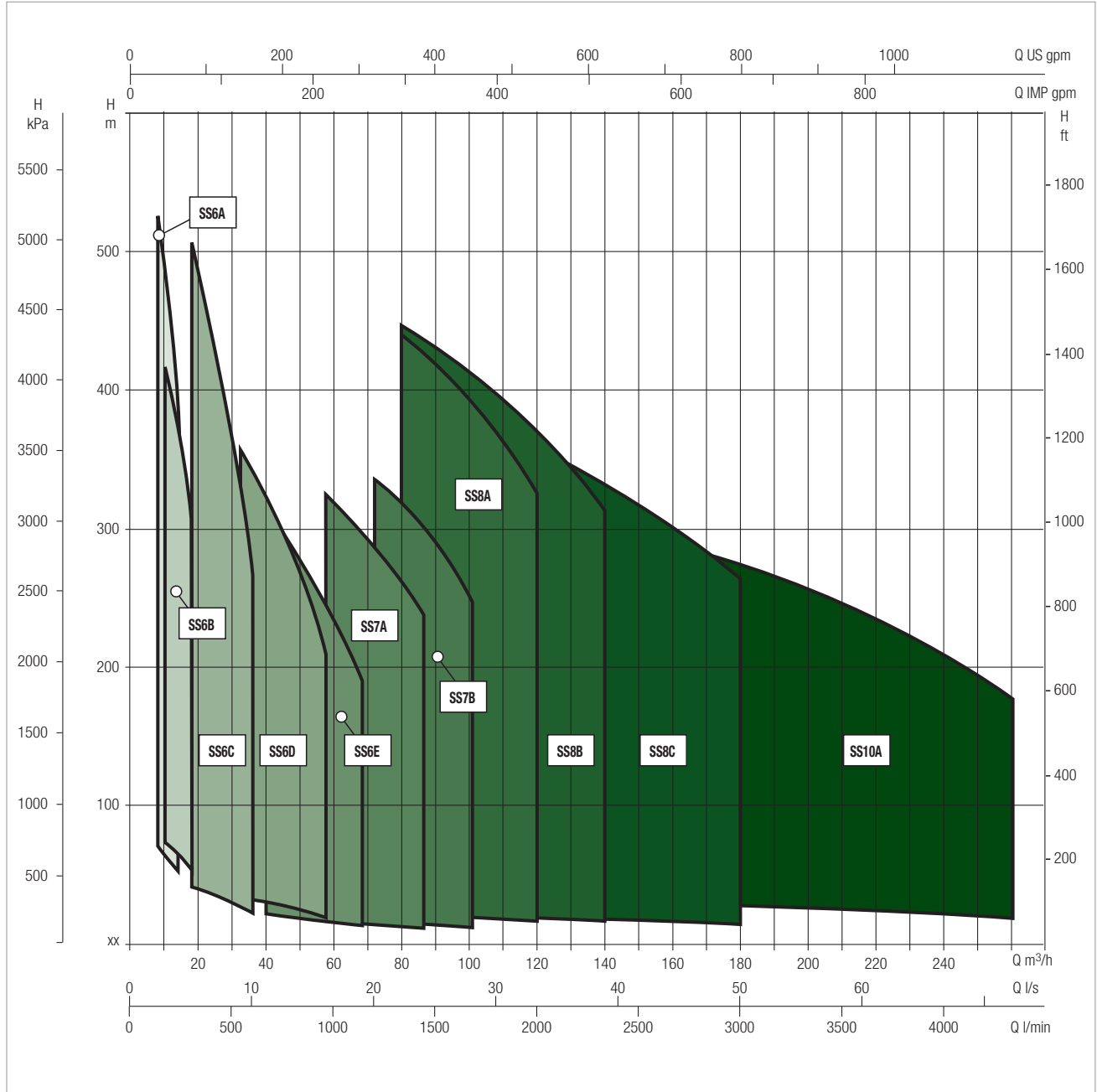


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### PERFORMANCE RANGE

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.





## 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

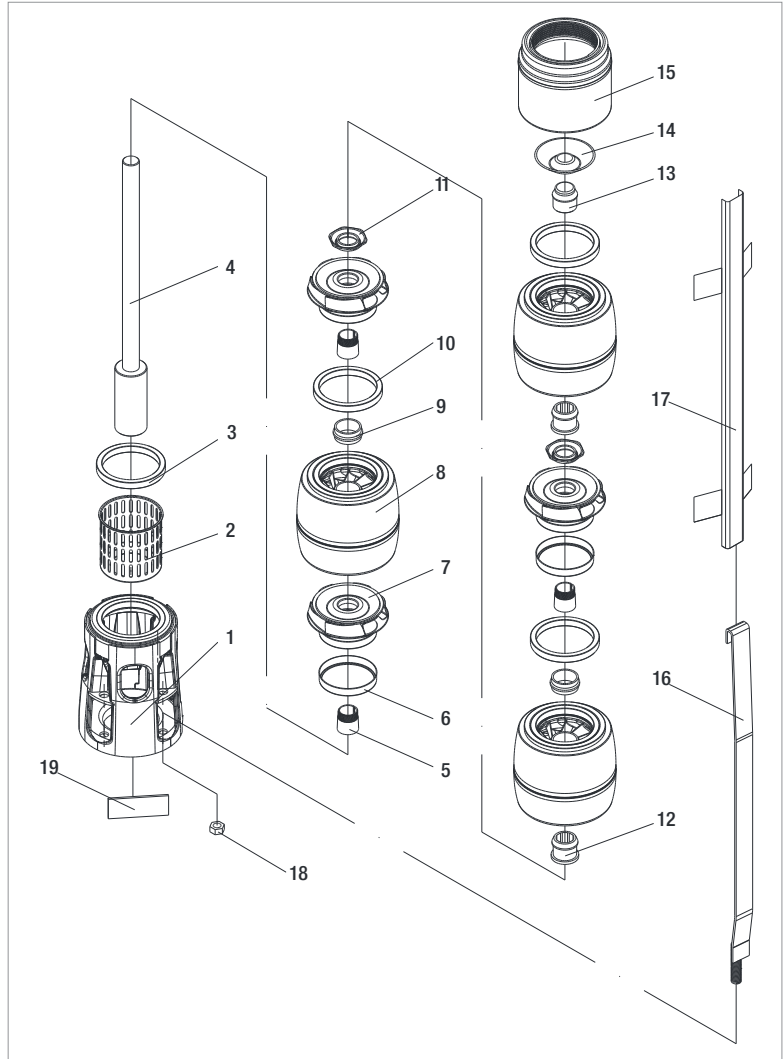
For inverter application refer to the detailed motor specification.

## ON REQUEST:

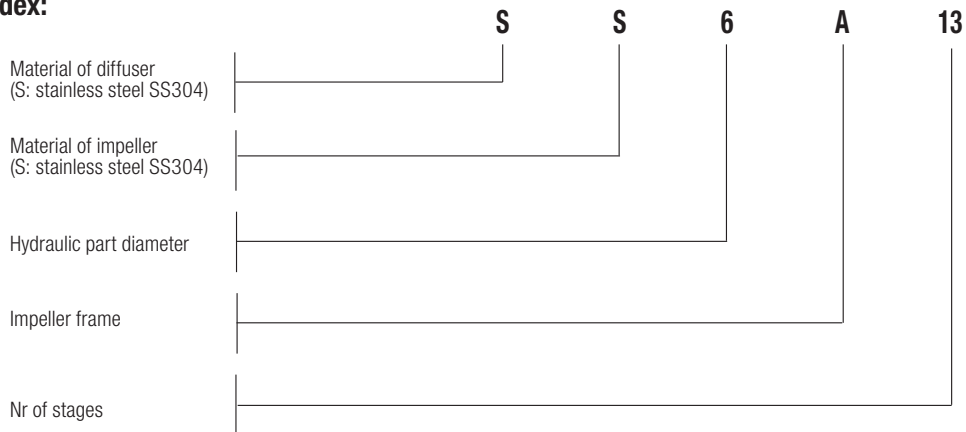
- Pump body stainless steel AISI 316 for aggressive water application
- Impellers stainless steel AISI 316
- Motors in full stainless steel AISI 316 for aggressive water application
- Star/Delta starting version
- Special version of the motor for high temperature application
- Non-standard power coupling

### 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)



**- Designation 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	40	45	50	55	60	65	70	75	
	kW	HP		0	333,3	666,6	750	833,3	916,6	1000	1083,3	1166,6	1250	
SS6E 02	4	5,5	H (m)	30	26	21	20	19	18	17	15	14	11	6"
SS6E 03	5,5	7,5		45	38	31	30	28	27	25	23	20	17	6"
SS6E 04	7,5	10		60	51	42	40	38	36	33	31	27	23	6"
SS6E 05	9,2	12,5		75	64	52	50	47	45	42	38	34	28	6"
SS6E 06	11	15		90	77	62	59	57	54	50	46	41	34	6"
SS6E 07	13	17,5		105	90	73	69	66	63	59	54	48	40	6"
SS6E 08	15	20		120	103	83	79	75	71	67	61	54	45	6"
SS6E 09	18,5	25		135	115	94	89	85	80	75	69	61	51	6"
SS6E 10	18,5	25		150	128	104	99	94	89	84	77	68	56	6"
SS6E 11	22	30		165	141	115	109	104	98	92	85	75	62	6"
SS6E 12	22	30		180	154	125	119	113	107	100	92	82	68	6"
SS6E 13	26	35		195	167	135	129	123	116	109	100	88	73	6"
SS6E 14	26	35		210	180	146	139	132	125	117	108	95	79	6"
SS6E 15	30	40		225	192	156	149	141	134	126	115	102	85	6"
SS6E 16	30	40		240	205	167	159	151	143	134	123	109	90	6"
SS6E 17	30	40		255	218	177	169	160	152	142	131	116	96	6"

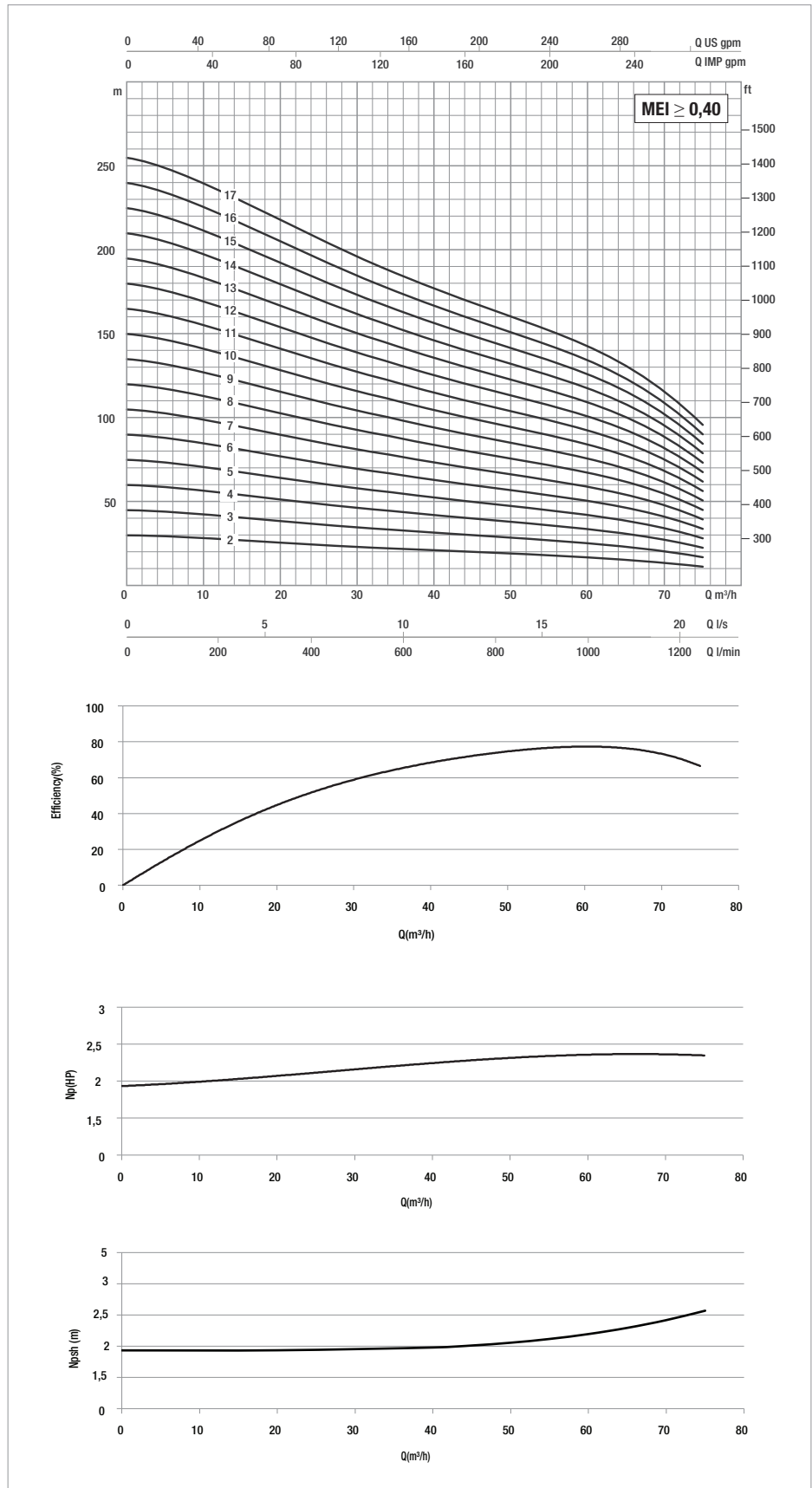
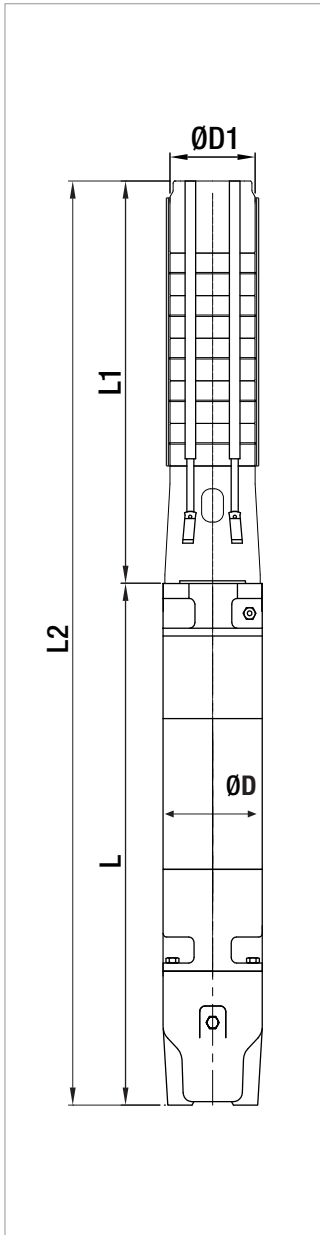
### ELECTRICAL DATA AND DIMENSIONS

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									
SS6E 02	6GF	4	5,5	10,6	●	●	1094	600	494	141	144	49,4
SS6E 03	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
SS6E 04	6GF	7,5	10	18	●	●	1378	660	718	141	144	60,2
	TR6	7,5	10	18	○	●	1555	837	718	144	144	68
SS6E 05	6GF	9,2	12,5	22	●	●	1515	685	830	141	144	66,6
	TR6	9,2	12,5	21	○	●	1697	867	830	144	144	73
SS6E 06	6GF	11	15	25,5	●	●	1672	730	942	141	144	73
	TR6	11	15	25	○	●	1839	897	942	144	144	80
SS6E 07	6GF	15	20	33,4	●	●	1839	785	1054	141	144	82
	TR6	13	17,5	29	○	●	1981	927	1054	144	144	88
SS6E 08	6GF	15	20	33,4	●	●	1951	785	1166	141	144	85
	TR6	15	20	32	○	●	2163	997	1166	144	144	103
SS6E 09	6GF	18,5	25	41	●	●	2138	860	1278	141	144	95
	TR6	18,5	25	39	○	●	2335	1057	1278	144	144	111
SS6E 10	6GF	18,5	25	41	●	●	2250	860	1390	141	144	98
	TR6	18,5	25	39	○	●	2447	1057	1390	144	144	114
SS6E 11	6GF	22	30	47	●	●	2422	920	1502	141	144	104,6
	TR6	22	30	49	○	●	2589	1087	1502	144	144	129
SS6E 12	6GF	22	30	47	●	●	2534	920	1614	141	144	106,6
	TR6	22	30	49	○	●	2701	1087	1614	144	144	131
SS6E 13	6GF	30	35	61,5	●	●	2776	1050	1726	141	144	125,8
	TR6	26	35	58	○	●	2883	1157	1726	144	144	144
SS6E 14	6GF	30	35	61,5	●	●	2888	1050	1838	141	144	128,8
	TR6	26	35	58	○	●	2995	1157	1838	144	144	147
SS6E 15	6GF	30	40	61,5	●	●	3000	1050	1950	141	144	130,8
	TR6	30	40	65	○	●	3162	1212	1950	144	144	154
SS6E 16	6GF	30	40	61,5	●	●	3112	1050	2062	141	144	133,8
	TR6	30	40	65	○	●	3274	1212	2062	144	144	157
SS6E 17	6GF	30	40	61,5	●	●	3224	1050	2174	141	144	136,8
	TR6	30	40	65	○	●	3386	1212	2174	144	144	160

\* Motor 6GF: 6" canned submersible motors  
 Motor TR:6" 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. 89

### PERFORMANCE 50 Hz - 2 POLES

MODEL	ELECTRICAL DATA		HYDRAULIC DATA											STANDARD MOTOR COUPLING
	P2 NOMINAL		Q=m³h	0	20	40	45	50	55	60	65	70	75	
	kW	HP	Q=l/min	0	333,3	666,6	750	833,3	916,6	1000	1083,3	1166,6	1250	
SS6E 18	37	50	H (m)	270	231	187	178	170	161	151	138	122	102	6"
SS6E 19	37	50		285	244	198	188	179	170	159	146	129	107	6"
SS6E 20	37	50		300	257	208	198	189	179	167	154	136	113	6"
SS6E 21	37	50		315	269	219	208	198	188	176	161	143	119	6"
SS6E 22	45	60		330	282	229	218	207	197	184	169	150	124	8"
SS6E 23	45	60		345	295	239	228	217	205	193	177	157	130	8"
SS6E 24	45	60		360	308	250	238	226	214	201	184	163	135	8"
SS6E 25	55	75		375	321	260	248	236	223	209	192	170	141	8"
SS6E 26	55	75		390	334	271	258	245	232	218	200	177	147	8"
SS6E 27	55	75		405	346	281	268	255	241	226	208	184	152	8"
SS6E 28	55	75		420	359	292	278	264	250	234	215	191	158	8"
SS6E 29	55	75		435	372	302	287	273	259	243	223	197	164	8"
SS6E 30	55	75		450	385	312	297	283	268	251	231	204	169	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									
SS6E 18	6GF	37	50	79,3	●	●	3466	1180	2286	141	144	150,8
	TR6	37	50	80	○	●	3598	1312	2286	144	144	172
SS6E 19	6GF	37	50	79,3	●	●	3578	1180	2398	141	144	153,8
	TR6	37	50	80	○	●	3710	1312	2398	144	144	175
SS6E 20	6GF	37	50	79,3	●	●	3690	1180	2510	141	144	156,8
	TR6	37	50	80	○	●	3822	1312	2510	144	144	178
SS6E 21	6GF	37	50	79,3	●	●	3802	1180	2622	141	144	158,8
	TR6	37	50	80	○	●	3934	1312	2622	144	144	180
SS6E 22	TR8	45	60	92	○	●	4004	1270	2734	192	144	240
SS6E 23	TR8	45	60	92	○	●	4116	1270	2846	192	144	242
SS6E 24	TR8	45	60	92	○	●	4228	1270	2958	192	144	245
SS6E 25	TR8	55	75	109	○	●	4420	1350	3070	192	144	263
SS6E 26	TR8	55	75	109	○	●	4532	1350	3182	192	144	265
SS6E 27	TR8	55	75	109	○	●	4644	1350	3294	192	144	268
SS6E 28	TR8	55	75	109	○	●	4756	1350	3406	192	144	271
SS6E 29	TR8	55	75	109	○	●	4868	1350	3518	192	144	273
SS6E 30	TR8	55	75	109	○	●	4980	1350	3630	192	144	276

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

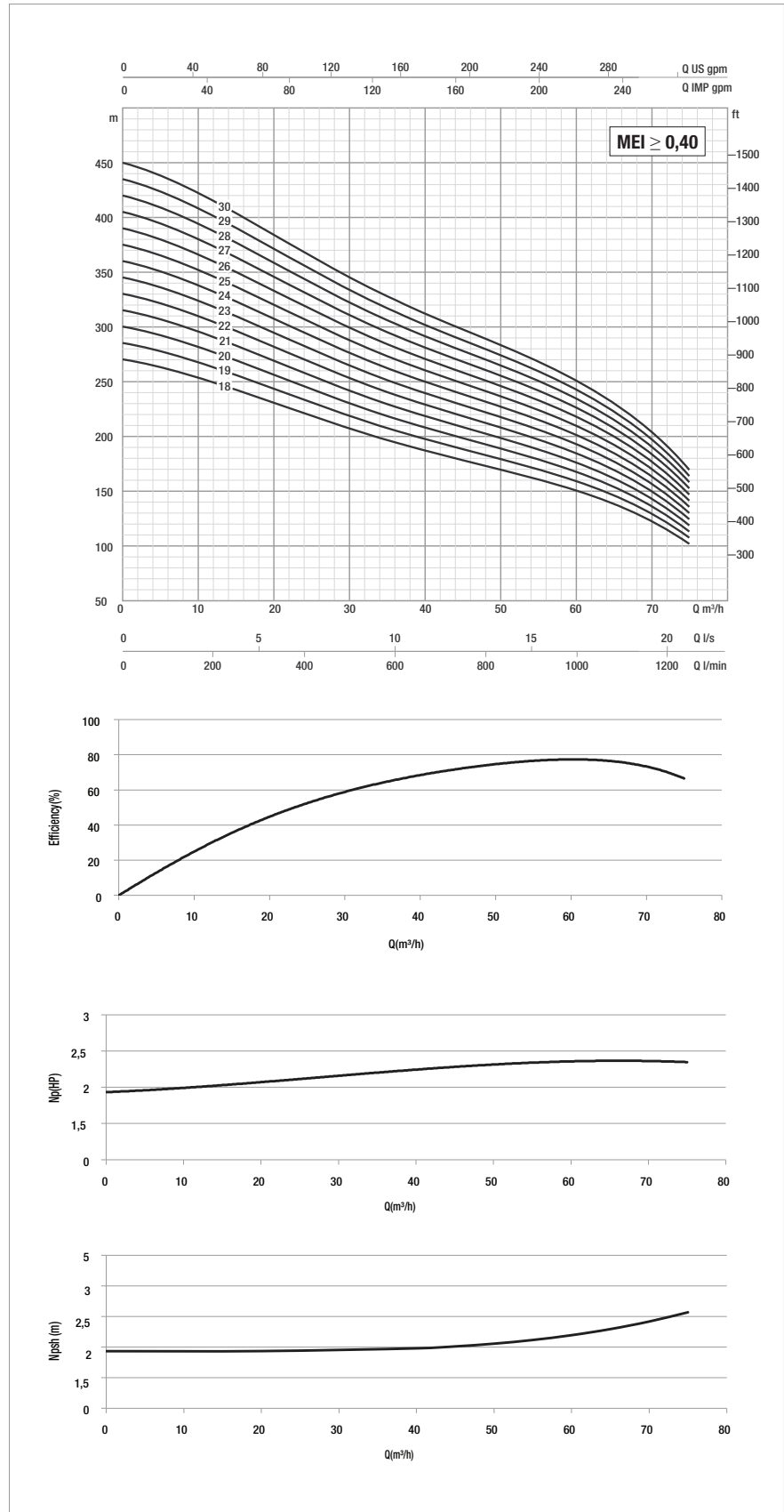
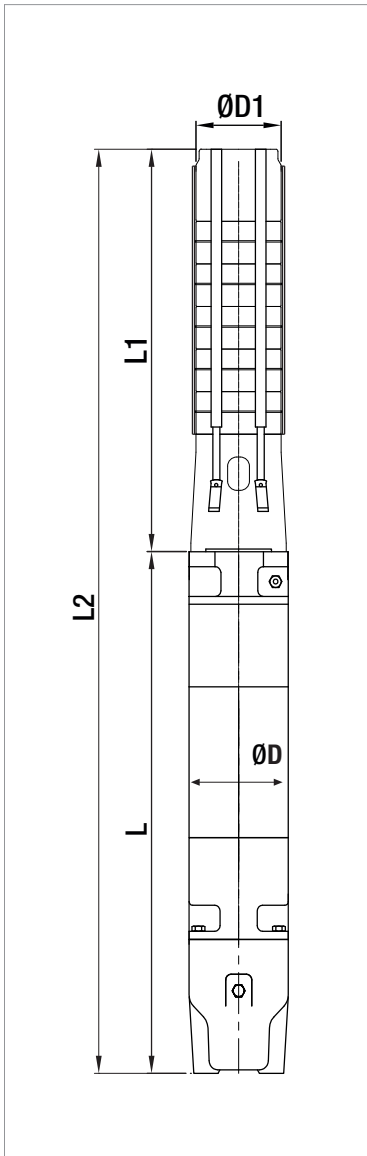
Motor TR: 6" 8" rewindable submersible motors.

●	Allowed
○	Only PE2 + PA version

# SS6E

## SUBMERSIBLE 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. 89