

SHAKTI SUBMERSIBLE PUMP WITH SLIP START SYNCHRONOUS (S4) RUN MOTOR

(QF PUMP - S4RM PREMIUM MOTOR 60Hz)



Shakti Submersible Pump with Slip Start Synchronous (S4) Run Motor

INTRODUCTION

Shakti submersible pumps with Shakti Slip Start Synchronous Run Motor (S4RM) are a newly launched technology for high-efficient Pumpsets. The motor with this technology starts asynchronously and runs at synchronous speed in steady state, thereby leading to combined advantages of induction (self-start) and synchronous motor (high efficiency). and this make Pumpsets premium product for wire to water efficiency.

FEATURES

- Maintenance Free Operation.
- Energy Efficient Pumpset.
- High performance.
- IP68 Protection Motors.

APPLICATIONS

- Community water supply
- Civil & industrial
- Irrigation
- Hospital & schools

PERFORMANCE TABLE

SUBMERSIBLE PUMP QF 2

Stage	RATING		M ³ /Hr LPM	0.0	1.3	1.8	2.3	2.5	3.0	3.5
	[HP]	[kW]		0	21	30	38	42	51	59
6	0.55	0.37	HEAD (m)	56	51	47	40	36	26	18
9	1	0.75		85	77	70	61	54	38	27
12	1.5	1.1		114	103	94	81	74	52	38
15	2	1.5		142	129	118	103	92	65	48
21	3	1.5		200	181	166	144	131	93	69
27	5.5	4		256	233	213	186	167	118	86
34	5.5	4		323	293	268	234	211	148	109
48	7.5	5.5		466	419	383	331	297	206	149
58	7.5	5.5		564	506	463	400	359	249	180

SUBMERSIBLE PUMP QF 6

Stage	RATING		M ³ /Hr LPM	0	1	5	5.5	6	7.5	8.5
	[HP]	[kW]		0	21	84	93	106	127	141
3	1	0.75	HEAD (m)	31	29	23	22	19	13	11
5	1.5	1.1		51	48	37	35	32	23	15
7	2	1.5		71	67	53	50	45	32	21
9	2	1.5		92	86	67	65	56	42	28
11	2	1.5		113	105	82	79	69	51	34
15	3	2.2		154	141	113	106	94	69	45
21	5.5	4		215	201	158	150	133	97	64
26	7.5	5.5		266	245	195	186	164	120	78
39	12.5	9.3		398	368	293	276	246	180	119
52	15	11		532	498	392	372	330	242	180

SUBMERSIBLE PUMP QF 5

STAGE	RATING		M ³ /Hr LPM	0.0	1.3	2.5	3.0	3.5	4.3	5.6
	[HP]	[kW]		0	21	42	51	59	72	93
5	0.75	0.55	Head (m)	51	47	41	40	36	29	16
8	2.0	1.1		81	77	67	64	58	47	27
10	2.0	1.5		76	72	63	60	55	44	25
14	3.0	2.2		140	130	118	111	102	83	47
18	4.0	3.0		181	168	152	142	131	107	61
24	5.5	4.0		241	222	201	190	173	141	80
32	5.5	5.5		324	301	273	257	235	194	112
38	7.5	5.5		382	356	326	309	289	244	159
56	12.5	9.3		562	522	482	458	426	361	236
75	15.0	11.0		753	699	645	613	571	483	316

SUBMERSIBLE PUMP QF 10

Stage	RATING		M ³ /Hr LPM	0	5	10	13	15	18	20	23
	[HP]	[kW]		0	84	168	211	253	295	337	379
1	2	1.5	Head (m)	17	16	15	13	12	10	9	6
2	3	2.2		33	31	29	27	24	20	17	13
3	4	3		50	47	44	40	36	30	26	19
5	7.5	5.5		83	78	73	67	60	51	43	32
7	10	7.5		116	109	102	93	85	71	60	45
9	12.5	9.3		150	140	131	120	109	91	77	58
13	17.5	13		216	203	189	174	157	132	111	83
18	20	15		299	281	262	240	218	182	154	115
22	25	18.5		366	343	320	294	266	223	188	141
26	30	22	Head (m)	432	406	378	347	314	263	222	166
31	35	26		515	484	451	414	375	314	264	198
36	40	30		598	562	524	481	435	365	307	230
44	50	37		731	687	640	588	532	446	375	281

Shakti Submersible Pump with Slip Start Synchronous (S4) Run Motor

PERFORMANCE TABLE

SUBMERSIBLE PUMP NGP 12

STAGE	RATING		M3/h l/min.	0	3.79	7.6	9.85	11.4	13.6	15.2
	KW	HP		0	63.2	127	164	190	227	253
1	0.37			10.4	9.58	8.86	7.8	6.85	5.14	3.76
4	1.5	2		41.7	38.3	35.5	31.2	27.4	20.6	15.1
6	2.2	3		62.6	57.5	53.2	46.8	41.1	30.9	22.6
9	4	5.5		93.9	86.3	79.8	70.2	61.6	46.3	33.9
11	4	5.5		115	105	97.5	85.8	75.3	56.6	41.4
13	5.5	7.5		136	125	115	101	89	66.9	48.9
15	5.5	7.5		157	144	133	117	103	77.2	56.5
16	5.5	7.5		167	153	142	125	110	82.3	60.2
19	7.5	10		198	182	168	148	130	97.8	71.5
22	7.5	10		230	211	195	172	151	113	82.8
26	9.3	12.5	HEAD (m)	271	249	230	203	178	134	97.9
28	9.3	12.5		292	268	248	218	192	144	105
31	13	17.5		324	297	275	242	212	159	117
36	13	17.5		369	352	336	300	276	197	124
41	15	20		421	401	382	342	315	224	141
47	15	20		482	460	438	392	361	257	161
54	18.5	25		554	528	503	450	414	295	185
60	18.5	25		615	587	559	500	460	328	206
67	22	30		687	655	625	558	514	367	230
74	26	35		759	724	690	617	568	405	254
81	26	35		831	792	755	675	621	443	278
89	30	40		913	870	830	742	683	487	306

SUBMERSIBLE PUMP QF 20

Stage	RATING		M³/Hr LPM	0	3	5	8	10	13	15
	[HP]	[kW]		0	42	84	126	169	211	253
4	2	1.5	Head (m)	43	42	40	38	35	32	29
5	3	2.2		54	53	50	48	45	40	37
7	4	3		75	73	70	67	62	56	51
9	7.5	5.5		98	93	91	86	79	72	65
13	10	7.5		141	136	129	125	115	104	94
18	15	11		195	188	179	173	159	144	130

SUBMERSIBLE PUMP QF 25

STAGE	RATING		M³/Hr LPM	0	8	11	14	15	18	23
	[HP]	[kW]		0	127	190	232	253	295	380
3	3	2.2	Head (m)	31	29	26	23	22	19	11
5	4	3		52	48	43	39	37	32	19
8	7.5	5.5		83	77	68	63	60	51	31
12	10	7.5		125	115	102	94	90	77	46
16	15	11		166	153	135	125	119	102	61

SUBMERSIBLE PUMP QF 15

Stage	RATING		M³/Hr LPM	0	5	10	13	15	18	20	23
	[HP]	[kW]		0	84	168	211	253	295	337	379
1	2	1.5	Head (m)	18	16	16	14	14	13	11	10
2	4	3		34	32	30	29	27	24	21	19
3	4	3		51	48	46	43	42	37	32	29
5	7.5	5.5		85	80	77	72	69	61	53	48
7	10	7.5		118	112	107	101	96	85	73	67
9	12.5	9.3		152	144	137	129	123	109	94	86
12	17.5	13		201	192	182	173	163	144	126	115
16	20	15		268	256	243	230	217	192	168	153
20	25	18.5		335	319	304	288	272	240	209	192
24	30	22		403	383	364	345	326	288	251	230
28	35	26		470	447	425	403	380	335	292	268
33	40	30		554	527	502	474	449	396	345	316
40	50	37		671	639	607	575	543	479	419	383
44	60	45		738	703	668	633	597	527	460	422

SUBMERSIBLE PUMP QF 30

STAGE	RATING		M³/Hr LPM	0	10	15	18	20	23	25	28
	[HP]	[kW]		0	168	253	295	337	379	421	463
1	2	1.5	Head (m)	19	16	14	13	11	10	8	6
2	3	2.2		37	34	30	27	26	22	19	14
4	7.5	5.5		72	69	62	58	53	46	38	30
5	10	7.5		89	86	78	72	65	59	50	40
7	12.5	9.3		125	120	109	102	93	83	70	56
10	17.5	13		179	171	157	145	133	118	101	80
14	20	15		232	224	204	190	174	155	133	105
17	25	18.5		302	291	265	248	225	201	171	137
20	30	22		356	342	313	292	267	236	201	161
24	35	26		427	412	377	351	321	284	243	195
27	40	30		481	463	425	398	363	323	276	222
33	50	37		588	569	522	487	446	398	340	275
40	60	45		712	687	629	588	537	476	407	327
48	75	55		855	824	756	704	644	572	489	393
50	75	55		890	859	787	734	671	596	509	409

Shakti Submersible Pump with Slip Start Synchronous (S4) Run Motor

PERFORMANCE TABLE

SUBMERSIBLE PUMP QF 50

STAGE	RATING		M³/Hr LPM	0	10	20	25	30	35	40	49
	[HP]	[kW]		0	168	337	421	505	590	674	821
1	3	2.2	Head (m)	18	17	16	14	13	11	10	5
2	7.5	5.5		37	35	32	30	27	26	21	13
3	10	7.5		56	53	48	45	42	38	32	19
4	12.5	9.3		73	72	64	61	56	51	43	26
6	17.5	13		110	107	96	91	85	77	65	40
8	20	15		145	142	128	121	113	102	88	54
11	25	18.5		200	195	176	165	153	139	120	73
13	30	22		236	230	208	195	182	165	142	88
15	35	26		273	267	240	227	211	192	166	102
17	40	30		310	302	273	257	241	219	189	118
21	50	37		383	374	339	319	299	272	235	147
26	60	45		473	460	415	391	366	332	286	177
31	75	55		564	550	495	468	438	398	343	212
39	100	75		710	694	627	591	552	504	434	271

SUBMERSIBLE PUMP QF 100

Stage	RATING		M³/Hr LPM	0	13	25	44	51	57	63	76
	[HP]	[kW]		0	211	421	737	842	948	1053	1259
1	5.5	4	Head (m)	22	20	18	16	14	13	11	7
2	10	7.5		43	40	37	32	29	26	22	14
4	17.5	13		86	80	73	64	58	51	45	29
5	20	15		107	102	96	81	75	69	59	38
6	25	18.5		129	123	115	97	91	81	72	48
8	40	30		173	160	147	128	115	102	89	58
9	40	30		194	180	165	144	129	115	101	65
10	40	30		216	206	192	165	152	139	123	81
12	50	37		259	248	232	198	184	168	149	101
15	60	45		323	308	288	246	228	208	184	123
17	75	55		366	351	327	280	260	238	211	142
20	85	63		431	414	385	329	307	280	248	168
24	100	75		518	495	462	398	371	339	300	204

SUBMERSIBLE PUMP QF 60

Stage	RATING		M³/Hr LPM	0	23	38	42	45	49	53	64
	[HP]	[kW]		0	379	632	695	758	821	885	1074
3	10	7.5	Head (m)	67	57	48	45	41	38	31	12
5	17.5	13		112	95	79	75	68	64	52	21
7	20	15		157	133	111	104	96	89	73	29
8	25	18.5		179	152	127	119	109	102	84	33
10	30	22		224	190	159	149	137	127	105	42
12	35	26		268	229	190	179	164	152	126	50
13	40	30		291	248	206	194	177	165	136	54
17	50	37		380	324	270	253	232	216	178	71
20	60	45		447	381	317	298	273	254	209	83
23	75	55		514	438	365	343	314	292	241	96
25	75	55		559	476	396	373	341	318	262	104

SUBMERSIBLE PUMP QF 125

STAGE	RATING		M³/Hr LPM	0	13	38	63	76	88	101	126
	[HP]	[kW]		0	211	632	1053	1264	1474	1685	2106
1	10	7.5	Head (m)	33	32	29	25	22	21	18	10
2	20	15		65	64	58	50	45	42	37	21
3	30	22		97	96	88	73	67	62	54	32
4	40	30		129	128	117	99	91	83	73	43
5	50	37		160	160	147	125	115	105	93	54
6	60	45		192	192	176	150	137	125	110	65
9	85	63		286	286	262	224	206	187	165	97
11	100	75		348	348	321	275	252	230	203	118
12	125	93		387	388	359	308	284	260	232	141
15	150	110		484	484	449	387	356	326	289	176

SUBMERSIBLE PUMP QF 75

Stage	RATING		M³/Hr LPM	0	13	25	44	51	57	63	76
	[HP]	[kW]		0	211	421	737	842	948	1053	1259
1	5.5	4	Head (m)	22	20	18	16	14	13	11	7
2	10	7.5		43	40	37	32	29	26	22	14
4	17.5	13		86	80	73	64	58	51	45	29
5	20	15		107	102	96	81	75	69	59	38
6	25	18.5		129	123	115	97	91	81	72	48
8	40	30		173	160	147	128	115	102	89	58
9	40	30		194	180	165	144	129	115	101	65
10	40	30		216	206	192	165	152	139	123	81
12	50	37		259	248	232	198	184	168	149	101
15	60	45		323	308	288	246	228	208	184	123
17	75	55		366	351	327	280	260	238	211	142
20	85	63		431	414	385	329	307	280	248	168
24	100	75		518	495	462	398	371	339	300	204

SUBMERSIBLE PUMP QF 160

Stage	RATING		M³/Hr LPM	0	25	76	101	114	126	139	154
	[HP]	[kW]		0	421	1264	1684	1895	2107	2316	2569
1	12.5	9.3	head (m)	35	33	25	22	20	18	14	10
2	25	18.5		69	66	50	45	40	35	29	20
3	35	26		104	99	75	67	61	53	43	30
5	60	45		169	161	125	110	101	88	70	48
6	75	55		206	196	153	134	123	109	88	61
7	85	63		236	227	176	153	141	123	99	69
9	100	75		302	291	225	198	182	158	128	88
10	125	93		342	329	259	228	211	185	152	105
13	150	110		444	427	335	296	272	240	196	137

Shakti Submersible Pump with Slip Start Synchronous (S4) Run Motor

PERFORMANCE TABLE

SUBMERSIBLE PUMP QF 210

Stage	RATING		M³/Hr LPM	0	88	114	139	152	164	177	190	205
	[HP]	[kW]		0	1475	1895	2316	2527	2738	2948	3159	3412
1-A	20	15	Head (m)	34	29	27	24	22	19	16	13	8
1	30	22		48	40	37	34	32	30	27	24	19
2-AA	35	26		64	58	53	46	43	38	32	26	16
2-A	50	37		80	70	64	59	54	50	45	37	29
3-AA	60	45		110	97	89	80	75	67	58	48	34
3-A	75	55		125	110	102	93	86	80	72	61	48
3	85	63		141	123	115	105	99	93	85	75	62
4	100	75		185	163	152	139	133	123	113	101	83
5-A	125	93		217	196	184	168	160	149	134	118	96
6-A	150	110		264	240	222	204	193	181	165	145	118
7-A	177	132		310	281	262	241	228	212	195	171	141
8	204	150		371	334	312	288	273	256	235	209	174
10	252	190		458	412	383	353	335	313	286	254	211
11	300	220		505	454	422	388	369	345	315	280	232

SUBMERSIBLE PUMP QF 270

Stage	RATING		M³/Hr LPM	0	114	164	190	202	215	227	263
	[HP]	[kW]		0	1895	2738	3159	3370	3580	3791	4381
1	35	26	Head (m)	54	42	35	34	32	30	29	21
2	75	55		104	83	72	67	64	61	56	40
3	100	75		153	125	109	101	96	91	85	61
4	125	110		217	166	141	134	128	121	115	83
5	150	132		272	208	176	168	160	152	144	104
6	177	150		326	249	211	201	192	182	173	125
7	230	170		380	291	246	235	224	212	201	145
8	260	190		403	332	291	270	257	243	224	161
10	300	220		473	396	345	318	302	283	259	181

SUBMERSIBLE PUMP QF 360

Stage	RATING		M³/Hr LPM	0	139	215	25	265	278	291	303	328	354
	[HP]	[kW]		0	2316	3580	421	4423	4634	4844	5055	5475	5898
1-A	40	30	Head (m)	43	37	29	24	22	21	18	16	10	5
1	50	37		61	50	42	38	37	35	34	30	26	18
2-AA	85	63		88	77	65	56	53	50	45	40	29	18
2-A	100	75		105	91	78	70	67	64	61	56	45	29
2	125	93		126	105	89	83	80	78	73	70	59	30
3-A	150	110		171	147	126	115	112	107	101	94	78	59
3	177	132		190	160	137	126	123	118	113	107	93	73
4	204	150		252	212	182	168	163	157	149	141	121	99
5	260	190		312	262	224	206	200	192	182	173	149	121
6	300	220		374	316	270	249	241	232	220	208	179	147



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