

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

(QF PUMP - S4RM PREMIUM MOTOR 50 Hz)



SHAKTI

THE POWER OF INNOVATION, EFFICIENCY & TECHNOLOGY.

Best Suitable Application





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.

APPLICATIONS

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

FEATURES

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

PERFORMANCE TABLE

QF/NGP 2

Stage	RATING		M ³ /Hr LPM	0.0	1.1	1.5	1.9	2.1	2.5	3.0
	[HP]	[kW]		0	18	25	32	35	42	49
9	0.5	0.37	HEAD (m)	59	53	49	42	38	27	19
13	1	0.75		85	78	71	61	55	39	29
18	1.0	0.75		119	108	99	85	76	54	40
23	1.5	1.1		152	137	126	110	100	71	52
33	3.0	2.2		217	197	181	157	142	100	73
48	4.0	3.0		324	290	266	229	206	143	103
65	5.5	4.0		432	397	360	310	288	202	155
90	7.5	5.5		599	549	499	429	399	279	215

QF/NGP 5

STAGE	RATING		M ³ /Hr LPM	0.0	1	2	2.5	3.0	3.6	4.6
	[HP]	[kW]		0	18	35	42	49	60	77
6	0.5	0.37	Head (m)	42	39	34	33	30	24	13
9	1	0.75		63	60	52	50	45	37	21
12	1	0.75		84	78	71	67	61	50	29
18	2.0	1.5		125	116	105	99	91	74	42
25	3.0	2.2		174	161	145	137	125	102	58
33	4.0	3.0		232	215	195	184	169	139	80
45	5.5	4.0		314	293	268	254	237	201	131
60	7.5	5.5		418	388	358	340	317	268	175

QF 8

Stage	RATING		M ³ /Hr LPM	0	6.3	9.5	13	15	16	19	23
	[HP]	[kW]		0	105	158	211	242	263	316	383
1		0.55	HEAD (m)	10	9	9	8	7	6	4	1
6	4.0	3.0		62	55	52	46	40	35	23	4
8	5.5	4.0		83	74	70	61	53	47	31	6
11	7.5	5.5		113	101	96	83	73	64	42	8
15	10	7.5		155	138	130	114	99	87	57	10
17	10	7.5		175	157	148	129	112	99	65	12
20	12.5	9.3		206	184	174	152	132	117	76	14
25	15	11.0		258	230	217	190	165	146	95	17
30	17.5	13.0		310	276	261	228	198	175	115	21
40	25.0	18.5		413	368	348	303	264	233	153	28
50	30.0	22.0		516	461	435	379	331	292	191	35

QF/NGP 6

Stage	RATING		M ³ /Hr LPM	0	1	2.5	4.2	4.6	5.3	6.3	7
	[HP]	[kW]		0	18	42	70	77	88	105	117
4	0.75	0.55	Head (m)	29	27	24	21	20	18	12	10
6	1	0.75		42	40	37	31	29	27	19	12
8	1	0.75		57	53	49	42	40	35	25	17
12	1.5	1.1		85	80	72	62	60	52	39	25
17	1.5	1.5		121	111	102	89	83	74	54	35
25	4	3		177	166	150	131	124	110	80	53
33	5.5	4		234	216	198	172	164	144	105	69
44	7.5	5.5		312	288	266	229	216	193	141	93
60	7.5	7.5		426	399	360	314	298	264	194	144
85	12.5	9		603	565	509	443	424	377	266	205



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

PERFORMANCE TABLE

QF 10

Stage	RATING		M ³ /Hr LPM	0	4.2	8.4	10.5	12.6	14.7	16.8	18.9
	[HP]	[kW]		0	70	140	175	211	246	281	316
1	1	0.75	Head (m)	12	11	10	9	8	7	6	4
2	1.5	1.1		23	22	20	19	17	14	12	9
3	2	1.5		35	32	30	28	25	21	18	13
5	4	3		58	54	50	46	42	35	30	22
7	5.5	4		81	76	71	65	59	49	41	31
9	7.5	5.5		104	97	91	83	76	63	53	40
13	10	7.5		150	141	131	120	109	91	77	58
18	12.5	9.3		208	195	182	167	151	127	107	80
22	15	11		254	238	222	204	185	155	130	98
26	17.5	13		300	282	263	241	218	183	154	115
31	20	15		357	336	313	287	260	218	184	137
36	25	18.5		415	390	364	334	302	253	213	160
44	30	22		507	477	444	408	369	309	260	195

NGP 12

STAGE	RATING		M ³ /h l/min.	0	3	6	8	9	11	13
	KW	HP		0	53	105	137	158	189	211
1	0.18		HEAD (m)	7.2	6.7	6.2	5.4	4.8	4	3
4	0.75	1		29	27	25	22	19	14	10
6	1.1	1.5		43	40	37	32	29	21	16
9	2.2	3		65	60	55	49	43	32	24
11	2.2	3		80	73	68	60	52	39	29
13	3	4		94	86	80	70	62	46	34
15	3	4		109	100	92	81	71	54	39
16	3	4		116	106	98	87	76	57	42
19	4	5.5		138	126	117	103	90	68	50
22	4	5.5		159	146	135	119	105	79	57
26	5.5	7.5		188	173	160	141	124	93	68
28	5.5	7.5		203	186	172	152	133	100	73
31	7.5	10		225	206	191	168	147	111	81
36	7.5	10		256	244	233	208	192	137	86
41	9.3	11		292	278	265	237	218	156	98
47	9.3	11		335	319	304	272	250	178	112
54	11	15		384	366	349	312	288	205	129
60	11	15		427	407	388	347	319	228	143
67	13	17.5		477	455	433	387	357	254	160
74	15	20		527	502	479	428	394	281	176
81	15	20		577	550	524	468	431	308	193
89	18.5	25		634	604	576	515	474	338	212

QF 15

Stage	RATING		M ³ /Hr LPM	0	4	8	11	13	15	17	19
	[HP]	[kW]		0	70	140	175	211	246	281	316
1	1	0.75	Head (m)	12	11	11	10	10	9	8	7
2	2	1.5		23	22	21	20	19	17	14	13
3	2	1.5		35	33	32	30	29	25	22	20
5	4	3		59	55	53	50	48	42	37	33
7	5.5	4		82	78	74	70	67	59	51	47
9	7.5	5.5		105	100	95	90	85	75	65	60
12	10	7.5		140	133	126	120	113	100	88	80
16	12.5	9.3		186	177	169	160	151	133	116	106
20	15	11		233	222	211	200	188	166	145	133
24	17.5	13		279	266	253	239	226	200	174	160
28	17.5	15		326	310	295	279	264	233	203	186
33	25	18.5		385	366	348	329	312	275	239	220
40	30	22		466	443	421	399	377	333	290	266
44	35	26		512	488	463	439	415	366	319	293

QF 20

Stage	RATING		M ³ /Hr LPM	0	2	4	6	8	11	13
	[HP]	[kW]		0	35	70	105	141	176	211
4	1	0.75	Head (m)	30	29	28	27	24	22	20
5	1.5	1.1		38	37	34	33	31	28	25
7	2	1.5		52	51	49	47	43	39	35
10	4	3		75	72	70	67	61	55	50
13	5.5	4		98	94	90	86	80	72	65
17	7.5	5.5		127	123	118	113	104	94	85
23	10	7.5		172	166	160	153	141	127	115
31	12.5	9.3		232	224	215	206	190	172	155

QF 25

STAGE	RATING		M ³ /Hr LPM	0	6.3	9.5	11.6	12.7	14.8	19.0
	[HP]	[kW]		0	105	158	193	211	246	316
6	3	2.2	Head (m)	43	40	35	32	31	27	16
8	4	3		58	53	47	43	41	35	21
11	5.5	4		79	73	65	60	57	49	29
15	7.5	5.5		108	100	88	81	78	67	40
20	10	7.5		144	133	118	109	104	89	53
28	12.5	9.3		202	186	165	152	145	124	75

QF 30

STAGE	RATING		M ³ /Hr LPM	0	8.4	13	15	17	19	21	23
	[HP]	[kW]		0	140	211	246	281	316	351	386
1	1	0.75	Head (m)	13	11	10	9	8	7	6	4
2	1.5	1.1		25	23	21	19	18	16	13	10
4	4	3		50	48	43	40	37	32	27	21
5	5.5	4		62	60	54	50	45	41	34	28
7	7.5	5.5		86	83	75	71	64	58	49	39
10	10	7.5		124	119	109	101	92	82	70	55
14	12.5	9.3		161	155	142	132	121	108	92	73
17	15	11		210	202	184	172	156	140	119	95
20	17.5	13		247	237	217	203	185	164	140	112
24	20	15		296	286	262	244	223	197	169	135
27	25	18.5		334	322	295	276	252	224	192	154
33	30	22		408	395	363	338	309	276	236	191
40	35	26		494	477	437	408	373	330	283	227
48	40	30		593	572	524	489	447	397	339	273
53	50	37		654	631	579	539	493	438	375	300
60	60	45		742	715	655	611	559	496	424	340



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

PERFORMANCE TABLE

QF 50

STAGE	RATING		M ³ /Hr LPM	0	8	17	21	25	29	34	41
	[HP]	[kW]		0	140	281	351	421	491	561	684
1	1.5	1.1	Head (m)	12	11.6	11	10	9	8	7	3
2	4	3		25	24	22	21	19	18	14	9
3	5.5	4		39	37	33	31	29	27	22	13
4	7.5	5.5		51	50	44	42	39	35	30	18
6	10	7.5		76	74	67	63	59	53	45	28
8	12.5	9.3		101	99	89	84	79	71	61	38
11	15	11		139	135	122	114	106	96	83	51
13	17.5	13		164	160	144	135	126	114	99	61
15	20	15		190	185	166	157	146	133	115	71
17	25	18.5		215	210	190	178	167	152	131	82
21	30	22		266	259	235	222	207	188	163	102
26	35	26		328	319	288	272	254	231	198	123
31	40	30		391	381	344	325	304	276	238	147
35	50	37		442	432	390	368	344	314	271	169
43	60	45		542	530	480	453	425	388	336	211
49	75	55		626	614	559	530	499	458	400	258
54	85	63		690	677	616	584	550	505	441	285

QF 60

Stage	RATING		M ³ /Hr LPM	0	19	32	35	38	41	44	54
	[HP]	[kW]		0	316	526	579	632	684	737	895
3	5.5	4.0	Head (m)	47	40	33	31	28	26	22	9
5	10	7.5		78	66	55	52	47	44	36	14
7	12.5	9.3		109	93	77	72	66	62	51	20
8	15	11.0		124	106	88	83	76	71	58	23
10	17.5	13.0		155	132	110	103	95	88	73	29
12	20	15.0		186	159	132	124	114	106	87	35
13	25	18.5		202	172	143	135	123	115	94	37
17	30	22.0		264	225	187	176	161	150	123	49
20	35	26.0		310	264	220	207	189	176	145	58
23	40	30.0		357	304	253	238	218	203	167	66
25	50	37.0		388	330	275	259	237	220	182	72

QF 75

Stage	RATING		M ³ /Hr LPM	0	11	21	37	42	47	53	63
	[HP]	[kW]		0	175	351	614	702	789	877	1049
2-BB	4	3	Head (m)	21	20	19	16	13	11	9	1
2	5.5	4		30	28	25	22	20	18	16	10
3-C	7.5	5.5		40	38	34	29	27	23	20	11
4-C	10	7.5		54	52	48	41	38	33	29	17
5	12.5	9.3		74	71	67	57	52	48	41	27
6	15	11		90	85	80	68	63	57	50	33
8-C	17.5	13		114	109	101	85	79	71	62	40
9-C	20	15		130	124	115	98	91	82	72	47
10	25	18.5		150	143	133	114	105	96	85	57
12	30	22		180	172	161	137	127	116	103	70
15	35	26		224	214	200	171	159	144	127	85
17	40	30		254	244	227	194	181	165	146	99
20	50	37		299	287	267	228	213	194	172	116
24	60	45		359	344	320	276	257	235	208	142
30	75	55		455	436	408	354	330	303	271	187
37	85	63		562	541	506	440	411	377	337	235

QF 100

MODEL	RATING		m ³ /h l/min.	0	38	44	51	63	76	88
	[HP]	[kW]		0	632	737	842	1053	1263	1474
QF100-1	3.0	2.2	HEAD (M)	15	12	11	11	9	7	4
QF100-2	5.5	4.0		31	25	23	21	19	14	9
QF100-3	10.0	7.5		46	37	34	32	28	22	13
QF100-4	12.5	9.3		61	49	45	43	38	29	17
QF100-5	15.0	11.0		76	61	57	54	47	36	22
QF100-6	17.5	13.0		92	74	68	64	56	43	26
QF100-7	20.0	15.0		107	86	79	75	66	50	30
QF100-8	25.0	18.5		122	98	90	86	75	58	35
QF100-9	25.0	18.5		138	110	102	96	85	65	39
QF100-10	30.0	22.0		153	123	113	107	94	72	44
QF100-11	30.0	22.0		168	135	124	118	103	79	48
QF100-12	35.0	26.0		184	147	136	129	113	87	52
QF100-13	40.0	30.0		199	159	147	139	122	94	57
QF100-14	40.0	30.0		214	172	158	150	132	101	61
QF100-15	40.0	30.0		229	184	170	161	141	108	65
QF100-16	40.0	30.0		245	196	181	171	151	115	70
QF100-17	50.0	37.0		260	208	192	182	160	123	74
QF100-18	60.0	45.0		275	221	204	193	169	130	78
QF100-19	60.0	45.0		291	233	215	204	179	137	83
QF100-20	60.0	45.0		306	245	226	214	188	144	87
QF100-21	60.0	45.0		321	257	237	225	198	151	91
QF100-22	75.0	55.0		337	270	249	236	207	159	96
QF100-24	75.0	55.0		367	294	271	257	226	173	105
QF100-26	85.0	63.0		398	319	294	279	245	188	113
QF100-28	85.0	63.0		428	343	317	300	263	202	122
QF100-30	85.0	63.0		459	368	339	322	282	216	131

QF 125

STAGE	RATING		M ³ /Hr LPM	0	11	32	53	63	74	84	105
	[HP]	[kW]		0	175	526	877	1053	1228	1403	1754
2-B	7.5	5.5	Head (m)	37	35	32	28	24	22	18	8
2	12.5	9.3		45	44	40	34	31	29	25	14
3-B	15	11		59	58	53	44	41	37	31	16
3	17.5	13		68	67	61	51	47	43	38	22
4-B	20	15		81	80	73	62	57	51	44	23
4	25	18.5		90	89	81	69	63	58	51	30
5	30	22		111	111	102	86	80	73	64	38
6	35	26		133	133	122	104	95	86	76	45
8-B	40	30		169	167	154	131	120	109	94	53
9	50	37		198	198	182	155	143	130	114	68
11	60	45		242	242	223	191	175	160	141	82
12	75	55		268	269	249	214	197	181	161	98
15	85	63		336	336	312	268	247	226	201	122
18	100	75		402	402	374	322	296	271	241	146
21	125	93		468	470	437	375	346	316	280	170
22	150	110		490	492	458	392	363	330	294	178



PERFORMANCE TABLE

QF 150

STAGE	Rating		M ³ /Hr	0	51	63	76	88	101	114	126	139	152
	(HP)	(kW)	LPM	0	842	1053	1263	1474	1684	1895	2105	2319	2526
1	5.5	4.0	HEAD (m)	19	18	14	13	12	11	11	10	8	5
2	12.5	9.3		37	36	27	25	24	24	22	19	16	10
3	17.5	13.0		56	54	41	38	36	36	33	29	23	15
4	25	18.5		74	72	54	50	48	47	44	39	31	20
5	30	22.0		93	89	68	63	60	59	55	49	39	25
6	35	26.0		111	107	81	75	72	71	67	58	47	30
7	40	30.0		130	125	95	88	83	83	78	68	54	35
8	50	37.0		149	143	109	100	95	95	89	78	62	40
9	60	45.0		167	161	122	113	107	107	100	87	70	45
10	60	45.0		186	179	136	126	119	119	111	97	78	50
11	75	55.0		204	197	149	138	131	130	122	107	85	55
12	75	55.0		223	215	163	151	143	142	133	116	93	60
13	85	63.0		241	232	177	163	155	154	144	126	101	65
14	85	63.0		260	250	190	176	167	166	155	136	109	70
15	85	63.0		279	268	204	188	179	178	166	146	116	75
16	100	75.0		297	286	217	201	191	190	177	155	124	80

QF 160

Stage	RATING		M ³ /Hr	0	21	42	63	84	95	105	116	128
	[HP]	[kW]	LPM	0	351	702	1053	1403	1579	1755	1929	2140
2-BB	10	7.5	head (m)	30	29	25	23	19	16	11	6	-
2-A	12.5	9.3		43	40	35	30	27	23	20	16	9
3-BB	15	11		54	51	44	39	32	28	22	16	8
3-B	17.5	13		62	59	52	45	39	34	29	22	13
3	20	15		72	69	61	52	47	42	37	30	21
4-B	25	18.5		85	81	72	62	54	49	41	32	20
5-AB	30	22		104	99	88	76	67	60	50	39	24
5	35	26		118	112	100	86	76	70	61	49	33
6	40	30		143	136	122	106	93	85	75	61	42
7	50	37		164	157	140	122	106	98	85	69	48
9	60	45		210	202	180	156	137	126	110	89	61
10	75	55		237	228	205	180	159	146	129	105	73
13	85	63		308	296	266	233	205	188	166	136	95
14	100	75		333	320	287	252	223	205	181	149	103
17	125	93		401	387	347	305	268	247	217	177	124
20	150	110		469	451	405	355	312	286	251	204	142

QF 210

Stage	RATING		M ³ /Hr	0	74	95	116	126	137	147	158	170
	[HP]	[kW]	LPM	0	1228.4	1578.9	1929.5	2105.3	2281.1	2455.8	2631.6	2842.1
1-A	12.5	9.3	Head (m)	23	20	19	17	16	13	11	9	6
1	17.5	13		33	28	25	23	22	21	19	17	13
2-AA	20	15		44	40	37	32	30	27	22	18	11
2-A	30	22		55	49	44	41	38	34	31	25	20
3-AA	35	26		76	68	62	55	52	47	40	33	23
3-A	40	30		86	76	71	64	60	55	50	42	33
3	50	37		98	85	80	73	69	64	59	52	43
4	60	45		129	113	105	96	92	85	79	70	58
5-A	75	55		151	136	127	116	111	103	93	82	67
6-A	85	63		183	166	154	142	134	125	114	101	82
7-A	100	75		215	195	182	167	159	147	135	119	98
8	125	93		257	232	216	200	190	177	163	145	121
10	150	110		318	286	266	245	233	217	198	176	146
11	177	132		350	315	293	269	256	239	218	194	161
13	204	150		418	379	355	327	310	290	268	238	205
15	230	170		482	437	409	377	358	335	310	275	237
17	252	190		547	496	464	428	406	380	351	312	268



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

PERFORMANCE TABLE

QF 270

Stage	RATING		M ³ /Hr	0	95	116	137	158	168	179	189	219
	[HP]	[kW]	LPM	0	1579	1929	2281	2632	2807	2982	3158	3649
1-A	15	11	Head (m)	27	20	19	17	16	14	12	10	3
1	20	15		38	29	27	24	23	22	21	20	14
2-AA	30	22		51	41	39	35	32	29	25	22	10
2-A	35	26		61	50	45	42	39	37	34	31	19
2	40	30		72	58	53	50	47	44	42	39	28
3-AA	50	37		85	71	65	61	54	51	47	42	25
3	60	45		106	86	80	75	70	67	63	59	42
4-A	75	55		132	110	102	95	89	84	79	72	50
5-A	85	63		167	140	130	121	112	106	100	92	64
6-AA	100	75		192	161	150	140	129	122	114	104	71
7-AA	125	93		226	190	176	165	152	144	135	124	84
8	150	110		279	231	215	202	187	178	169	155	112
10-AA	177	132		328	275	255	239	221	210	196	180	125
11	204	150		386	319	297	279	259	247	233	217	157
12	230	170		426	355	333	310	290	279	263	244	180
14	260	190		459	382	358	334	313	300	283	263	193
15	300	220		492	410	384	358	335	322	303	282	207

PUMP OD & NRV

MODEL	PUMP OUTER DIA. (mm)	DEL. SIZE (mm)
QF/NGP 2	97	32
QF/NGP 5	97	32
QF/NGP 6	97	40
NGP 12	97	50
QF 8	143	50
QF 10	143	50
QF 15	143	50
QF 20	97	50
QF 25	97	50
QF 30	143	50
QF 50	143	65
QF 60	140	75
QF 75	143	75
QF 100	143	75
QF 125	182	100
QF 150	154	100
QF 160	182	100
QF 210	220	150
QF 270	220	150
QF 360	240	150

QF 360

Stage	RATING		M ³ /Hr	0	116	179	21	221	232	242	253	274	295
	[HP]	[kW]	LPM	0	1929	2982	351	3684	3860	4035	4211	4561	4913
1-A	25	18.5	Head (m)	30	25	20	17	16	14	12	11	7	3
1	30	22		42	34	29	27	25	24	23	21	18	12
2-AA	50	37		61	53	45	39	37	34	31	28	20	12
2-A	60	45		73	63	54	49	47	44	42	39	31	20
2	75	55		88	73	62	58	55	54	51	49	41	21
3-A	85	63		119	102	88	80	78	74	70	65	54	41
3	100	75		132	111	95	88	85	82	79	74	64	51
4	125	93		175	147	126	116	113	109	103	98	84	69
5	150	110		216	182	155	143	139	133	126	120	103	84
6	177	132		259	220	187	173	167	161	153	144	124	102
7	204	150		307	261	224	206	200	193	184	174	152	125
8	230	170		353	299	257	238	231	222	213	202	175	145
9	260	190		397	338	290	268	259	251	239	227	198	164
10	300	220		441	376	324	299	289	279	267	254	222	184
11	335	250		485	413	356	329	318	307	294	279	244	202



SAP : 2000019962

VC : 000000

Mar. 2022-23/L1/000

20 Mar. 2022/R2

India : Toll Free No. 1800 103 5555

Other Countries : +91-7292 410500

SHAKTI PUMPS (INDIA) LIMITED

Plot No. 401, 402, & 413, Industrial Area, Sector - 3, Pithampur - 454774,
Dist. - Dhar, (M.P.) - INDIA, E-mail: info@shaktipumps.com,
Visit us at : www.shaktipumps.com

Authorised Dealer / Distributor :

