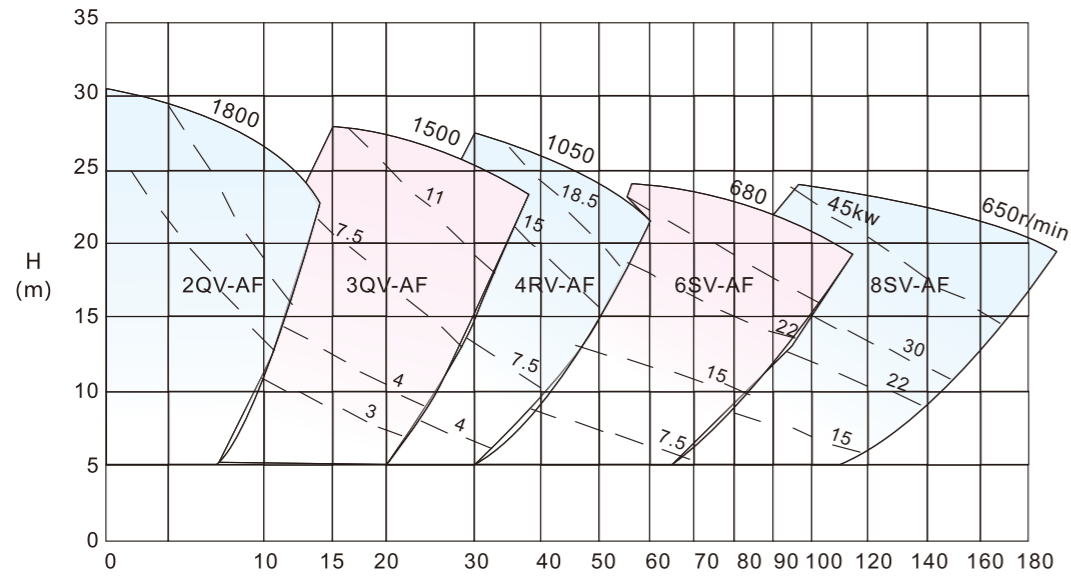


■ SP/SPR Sump Pump Selection Chart



Note: Approximate performance for clear water, only for primary selection.

1. Bearing assembly of AF series is the same with that of SP, SPR series. Bearing housing is installed with motor frame base or supporting plate, i.e. pump and motor are connected either directly with coupling or through pulley and belts. Pulleys can be exchanged conveniently to adjust the pump rotating speed to satisfy the varying operating conditions.
2. Feeding tank can be steel, stainless steel or coated with rubber with overflow box and tangential inlet. The former can transmit the excessive incoming slurry back to its pit, while the latter will allow the slurry quickly get into the pump body and make part of the foams disappear.
3. Double casings structure the pump head. wetted parts are metal lined, rubber lined or of other non-metallic material according to the different slurries.

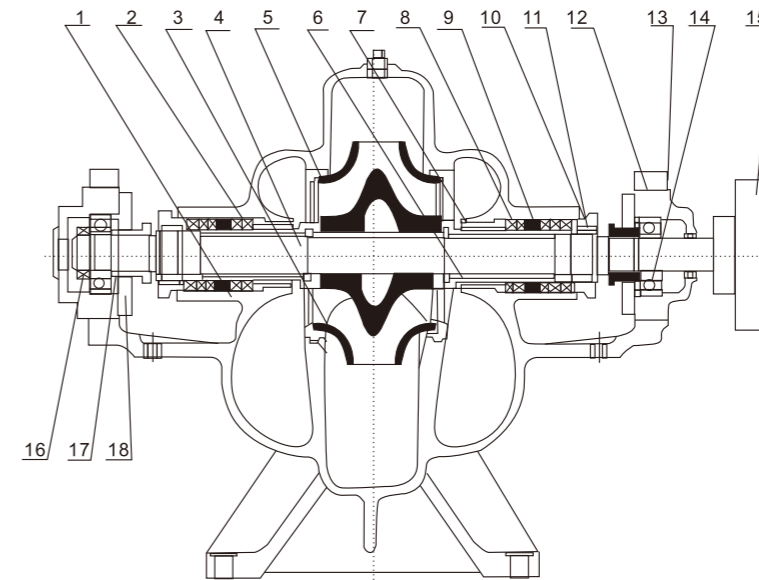
■ Performance Chart

Pump model	Capacity Q m ³ /h	Head H (m)	Speed n (r/min)	EFF. (%)	Installed with power (kw)	Diameter	
						Inlet (mm)	Outlet (mm)
2QV-AF	7.6-42.8	6-29.5	800-1800	45	15	100	50
3QV-AF	23-77.4	5-28	700-1500	55	18.5	150	75
4RV-AR	33-188.2	5-28	500-1050	55	37	150	100
6SV-AF	80-393	5-25	250-680	55	75	200	150
8SV-AF	126-575	5.8-25.5	350-650	55	110	250	200

■ S, SH Series Split Case Pumps

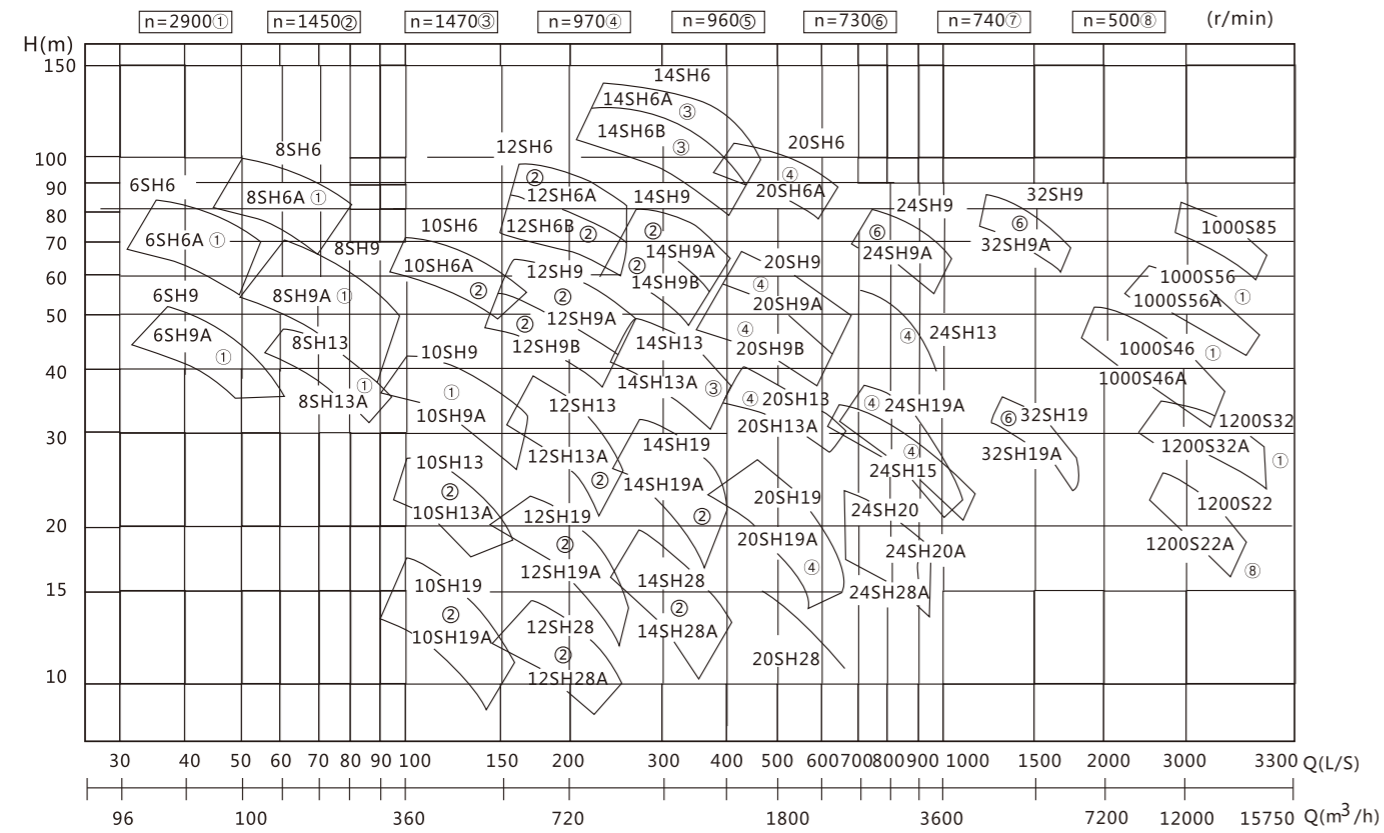
The S and SH pump is a single stage double suction horizontal mid-opening centrifugal pump for transportation clean water or other liquid with physical and chemical characters like clean water. Max. temperature of liquid should be under 80°C. It is fit for power plant, mine, city and coal water feeding and discharging, farmland irrigation and drainage and all hydraulic engineerings.

■ S, Structure Diagram of Split Case Pump



- 1, Pump body
- 2, Pump cover
- 3, Impeller
- 4, Shaft
- 5, Double suction seal ring
- 6, Axle box
- 7, Packing sleeve
- 8, Stuffing
- 9, Packing ring
- 10, Gland
- 11, Axle box nut
- 12, Bearing body
- 13, Bearing body gland
- 14, Bearing
- 15, Coupling parts
- 16, Bearing nut
- 17, Guard sleeve
- 18, Bearing end cap

■ Spectrum diagram of single stage and double suction centrifugal pump of S and SH series



■ Performance table of single stage and double suction centrifugal pump of S and SH series 1

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m³/h	L/s			shaft power (kw)	matched (kw)				
6SH-6 150S78	126	35	84	2900	40	55	72	5	248	150
	162	45	78		75					
	198	55	70		74					
6SH-6A 150S78A	112	31	67	2900	30	45	68	5	220	150
	144	40	62		72					
	180	50	55		70					
6SH-9 150S50	130	36.2	52	2900	25.3	37	74	5	200	145
	170	47.2	47.6		80					
	220	61.2	35		67					
6SH-9A 150S50A	120	31	43.8	2900	18.5	30	72	5	186	145
	144	40	40		75					
	180	50	35		70					

■ Performance table of single stage and double suction centrifugal pump of S and SH series 2

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m³/h	L/s			shaft power (kw)	matched (kw)				
8SH-6 200S95	180	50	100	2900	79.1	110	62	5.5	284	245
	234	65	93.5		71					
	288	80	82.5		73					
8SH-6 200S95A	160	44.5	85.1	2900	60.8	90	61	5.5	262	45
	215	59.7	75.8		69					
	265	73.6	70.2		71					
8SH-9 200S63	213	60	69	2900	55	75	74	5.5	236	265
	288	80	62.5		80					
	351	97.5	50		70.5					
8SH-9A 200S63A	180	50	54.5	2900	41	55	65	5.0	220	265
	270	70	46		70					
	324	90	37.5		65					
8SH-13 200S42	216	60	48	2900	34.9	45	81	6.4	201	19
	288	80	41.3		85					
	342	95	35		81					
8SH-13A 200S42A	198	55	43	2900	30.5	37	76	5.8	139	219
	270	75	36		80					
	310	86	31		76					
10SH-6 250S65	360	100	71	1450	91.5	132	76	4	460	565
	486	135	85.1		79					
	612	170	56		72					
10SH-6A 250S65A	342	95	61	1450	76.7	110	74	4	436	565
	468	135	54		89.4					
	540	150	50		95					
10SH-9 250S39	360	100	42.5	1450	55.5	75	75	4	367	428
	486	135	38.5		83					
	612	170	32.5		80					
10SH-9A 250S39A	324	90	35.5	1450	40.2	55	78	4	338	428
	468	130	30.5		85					
	576	160	25		82					
10SH-13 250S24	360	100	27	1450	33.1	45	80	4	296	420
	486	135	23.5		86					
	576	160	19		82					
10SH-13A 250S24A	342	95	22.2	1450	25.8	37	80	4	270	420
	414	115	20.3		83					
	482	134	17.4		80					

■ Performance table of single stage and double suction centrifugal pump of S and SH series 3

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)	
	m ³ /h	L/s			shaft power (kw)	matched (kw)					
10SH-19 250S14	360	100	17.5	1450	21.4	30	80	4	240	405	
	486	135	14		21.8		85				
	576	160	11		22.1		78				
10SH-19A 250S14A	320	59	13.7	1450	15.4	22	78	4	224	405	
	432	120	11		15.8		82				
	504	140	8.6		15.8		75				
12SH-6 300S90	590	164	98	1450	213	300	74	4.6	540	847	
	792	220	90		245		80				5.5
	936	260	82		279		75				6.5
12SH-6A 300S90A	576	160	86	1450	190	260	71	4.5	510	847	
	755	210	78		217		74				5.3
	918	255	70		246		71				6.4
12SH-6B 300S90B	540	150	72	1450	151	250	70	4.4	475	847	
	720	200	67		180		73				5.1
	900	250	57		200		70				6.2
12SH-9 300S58	576	160	65	1450	128	150	80	4.5	435	572	
	792	220	58		149		84				
	972	270	50		168		79				
12SH-9A 300S58A	530	147	55	1450	99.2	155	80	4.5	402	572	
	720	200	49		116		83				
	893	248	42		131		78				
12SH-9B 300S58B	504	140	47.2	1450	82.5	135	78	4.5	378	572	
	684	190	43		97.7		82				
	835	232	37		108		78				
12SH-13 300S32	612	170	38	1450	76.2	90	83	4.5	352	809	
	792	220	32.2		79.8		87				
	900	250	25.5		78.1		80				
12SH-13A 300S32A	550	153	31	1450	58.1	75	80	4.5	322	809	
	720	200	26		60.7		84				
	810	225	20.5		58		78				
12SH-19 300S19	612	170	23	1450	47.3	55	81	4.5	290	660	
	792	220	19.4		49.8		84				
	935	260	14		47.8		75				
12SH-19A 300S19A	504	140	20	1450	34.8	45	79	4.5	262	660	
	720	200	16		38.3		82				
	500	250	11.5		37.6		75				

■ Performance table of single stage and double suction centrifugal pump of S and SH series 4

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m ³ /h	L/s			shaft power (kw)	matched (kw)				
12SH-28 300S12	611	170	14.5	1450	30.3	37	80	4.5	248	660
	792	220	12		31.2		83			
	900	285	10		33.1		74			
12SH-28A 300S12A	522	145	11.8	1450	22.4	30	75	4.5	225	660
	685	190	10		23.3		80			
	792	220	8.7		24.4		77			
14SH-6 300S125	850	236	140	1450	450	680	72	3.5	655	1580
	1250	347	125		525		81			
	1663	461	100		620		73			
14SH-6A 300S125A	800	223	125	1450	391	630	70	3.5	620	1580
	1180	328	112		462		78			
	1570	436	90		550		70			
14SH-6B 300S125B	745	207	108	1450	313	500	70	6.5	575	1200
	1100	305	96		373		77			
	1460	405	77		422		72.5			
14SH-9 350S75	972	270	80	1450	268	400	79	6.5	500	1200
	1260	350	75		306		84			
	1440	400	65		319		80			
14SH-9A 350S75A	900	250	70	1450	220	300	78	6.5	465	1200
	1170	325	65		247		84			
	1330	370	56		257		79			
14SH-9AB 350S75AB	900	250	60	1450	175	250	78	6.5	445	1200
	1080	300	58		196		84			
	1260	350	54		213		79			
14SH-9B 350S75B	826	230	59	1450	178	260	75	6.5	428	1200
	1080	300	55		198		82			
	1225	340	47.5		206		77			
14SH-13 350S44	972	270	50	1470	164	220	81	6.5	410	1105
	1260	350	43.8		179		84			
	1480	410	37		188		79			
14SH-13A 350S44A	864	240	41	1470	121	180	80	6.5	350	1105
	1120	310	36		130		84			
	1330	370	30		136		80			
14SH-19 350S26	971	270	32	1450	99.7	132	85	6.5	350	880
	1260	350	26		102		88			
	1440	400	22		95.7		82			

■ Performance table of single stage and double suction centrifugal pump of S and SH series 5

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m ³ /h	L/s			shaft power (kw)	matched (kw)				
14SH-19A 350S26A	864	240	26	1450	76.5	110	80	6.5	326	880
	1120	310	21.5		77		85			
	1296	360	16.5		80		73			
14SH-28 350S16	971	270	20	1450	64.4	75	82	6.5	290	760
	1260	350	16.2		65.3		85			
	1440	400	13.4		70		75			
14SH-28A 350S16A	864	240	16	1450	50.2	55	75	6.5	270	760
	1044	290	13.4		47.6		80			
	1260	350	10		48.3		71			
400S96	1080	300	98	1480	400	500	71.5	5.5	535	1910
	1260	350	96		428		77			
	1620	450	90		473		84			
400S96A	1080	250	85.5	1480	346	440	73	6	510	1910
	1260	300	85		370		79			
	1620	350	78		410		84			
400S96B	1080	300	78	1480	29.8	440	77	6	480	1910
	1260	350	76		318		82			
	1620	450	68		349		80			
400S96J	900	250	40	980	124	185	79	3	535	1910
	1080	300	40		140		84			
	1260	350	38		155.3		84			
400S96JA	900	250	37	980	112	155	81	5	510	1910
	1080	300	35		123		84			
	1260	350	32		131		84			
20SH-6 500S98	1450	403	108	970	585	800	72.5	6	860	4330
	2016	560	98.4		680		79.5			
	2300	640	89		735		76			
20SH-6A 500S98A	1349	375	93	970	490	630	70	6.4	800	4330
	1870	520	85		564		77			
	2140	595	77		607		74			
20SH-9 500S59	1150	430	66	970	340	500	82	6	682	2750
	2016	560	59		390		83			
	2450	680	50		433		77			
20SH-9A 500S59A	1405	390	58	970	300	400	74	6	640	2750
	1910	530	50		347		75			
	2270	630	42		360		72			

■ Performance table of single stage and double suction centrifugal pump of S and SH series 6

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m ³ /h	L/s			shaft power (kw)	matched (kw)				
20SH-9B 500S59B	1763	490	42	970	273	355	74	6	600	2750
20SH-13 500S35	1550	430	40	970	206	280	82	6	550	2340
	2016	560	35.1		219		88			
	2410	670	30		247		80			
20SH-13A 500S35A	1870	520	31	970	186	240	85	6	510	2340
20SH-19 500S22	1620	450	27	970	148	180	80	6	465	2010
	2016	560	22		147		82			
	2340	650	15		137		70			
20SH-19A 500S22A	1296	360	23	970	111	130	73	6	427	2010
	1870	520	17		108		80			
	2016	560	14		101		78			
20SH-28 500S13	1620	450	15.2	970	78.9	110	85	6	390	2000
	2016	560	12.8		79		89			
	2325	646	10.6		78		86			
24SH-9 600S75	2750	764	80	960	699	900	87	8.7	765	4300
	3420	950	71		727		91			
	3930	1092	60		730		98			
24SH-9A 600S75A	250	708	64	960	516	710	86	7.5	710	4300
	3168	880	61		585		90			
	3640	1010	53		610		86			
24SH-9B 600S75B	2300	630	60	960	442	550	85	7.5	690	4300
	2800	778	56		514		88			
	3200	889	49		502		85			
24SH-9J 600S39	2600	750	39	730	319	380	90	5.8	765	4300
24SH-13 600S47	250	695	56	970	460	550	83	7.5	674	3120
	3168	880	47.4		465		88			
	3499	972	38		426		80			
24SH-15	2500	694	33.5	740	316.7	420	70	5 5.5 5.8	674	3120
	3600	1000	30		345.9		85			
	4000	1111	28.5		365		83			

■ Performance table of single stage and double suction centrifugal pump of S and SH series 7

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m ³ /h	L/s			shaft power (kw)	matched (kw)				
24SA-18 24SH-13A 600S47A	2700	750	48.5	970	434	450	83	7.5	515	4000
	3150	875	44		438		88			
	3600	1000	32		392		80			
24SH-19 600S32	2480	700	37	970	295	380	86	7.5	540	2550
	3170	880	32		310		89			
	3960	1100	22		279		85			
24SH-19A 600S32A	2304	640	31.5	970	235	280	84	7.5	500	2550
	2880	800	27		238		89			
	3600	1000	20		231		85			
24SH-20 600S21	2500	694.4	24.5	740	238.4	340	70	5	805	3030
	3600	1000	21		248		83			
	3800	1055	20.4		256		82.5			
24SH-20A 600S21A	2500	694.4	22	740	218.3	280	70	5	584	3030
	3600	1000	17.2		215		80			
	3800	1055	16		216.3		78			
24SH-28 600S22	2340	650	23.5	970	187	280	80	7.5	500	2500
	2880	800	21		195		84.5			
	3420	950	18		207		81			
24SH-28A 600S22A	3430	650	17.5	970	145	185	77	7.5	450	2500
	2880	800	15.5		148		82			
	3420	950	13		154		78.5			
28SH-10 700S90	3715	1032	99.5	980	1157	1250	87	9.5	415	5800
	4700	1306	90		1252		92			
	4896	1360	87		1018		89.5			
28SH-10A 700S90A	3420	952	84.5	980	929	1250	85	8	940	5800
	4336	1204	76.5		1005		90			
	4517	1255	74		1018		89.5			
28SH-10JA 700S90JA	2111	586.4	57.5	742	501	710	52	5	775	5800
	3600	1000	52		555		72			
	4248	1180	43.5		595		79			
28SH-10JB 700S90JB	2400	667	51	742	397	560	84	5	850	5800
	3000	833	47		431		89			
	3744	1040	39.5		474		88.5			
32SH-9 800S76	4400	1222	82	740	1128	1500	87	6	780	8000
	5500	1528	76		1250		91			
	6600	1722	68		1384		88			

■ Performance table of single stage and double suction centrifugal pump of S and SH series 8

Pump model	Capacity		Head H (m)	Speed n (r/min)	power		EFF. (%)	(NPSH)r (m)	Impeller diameter (mm)	weight (kg)
	m ³ /h	L/s			shaft power (kw)	matched (kw)				
32SH-9A 800S76A	4160	1156	75	740	976	1400	86	7.5	900	8000
	5200	1464	69		1085		86			
	6200	1722	63		1222		87			
	4680	1300	84		1216		88			
32SH-10 800S48	6330	1758	75	712	1405	1600	92	8.5	880	8300
	7200	2000	67.5		1478		90			
	4470	1242	76.5		1060		88			
32SH-10A 800S48A	5760	1600	70	742	1194	1400	92	7.5	990	8300
	6878	1910	61.5		1296		89			
	3960	1100	50		702		77			
32SH-10J 800S48J	5070	1408	47.5	600	785	1000	84	6.5	950	8300
	6210	1725	44		862		87			
	4700	1305	35		575		78			
32SH-19 800S32	5500	1530	32.5	730	580	630	84	6.5	990	5100
	6010	1670	28.9		567		83.5			
	6460	1795	25.4		567		80.5			
	4550	1260	31		492		78			
32SH-19A 800S32A	5310	1475	29	730	500	560	84	6.5	740	5100
	5800	1600	26.5		496		83.5			
	6250	1735	23		487		80.5			
	4170	1050	29		391		79			
32SH-19B 800S32B	5000	1388	26	750	393	450	84	6.5	715	5100
	5450	1518	23.5		415		81			
	8640	2400	60.5		1763		82			
1200S56 48SH-13	10800	3000	56	600	1871	2240	88	2.5	1160	16000
	12960	3600	47.5		1960		86			
	7776	2160	54.5		1425		81			
1200S56A 48SH-13A	9720	2700	50	600	1513	2000	88	2.5	1100	15500
	11664	3240	42		1597		84			
	7200	2000	42.5		1017		82			
1200S39	9000	2500	39	500	1051	1600	91	5 5.5 6.2	1160	16000
	10800	3000	33		1079		90			
	8640	2400	35		922		83			
1200S32	10800	3000	32	500	1082	1400	87	7.5	620	13000
	12960	3600	26		1073		85.5			
	7776	2160	32.5		834		83			
1200S32A	9720	2700	29	600	882	1250	87	7.5	600	13000
	11664	3240	23		880		83			
	7920	2240	26		644		86			
1200S22	9612	2670	22	500	662	800	87	5.5	585	12500
	10800	3000	18		638		83			
	7200	2000	23		534		85			
1200S22A	9000	2722	20.5	500	573	710	86.5	5.5	560	12500
	10080	2800	17.5		585		82.5			