

■ Product Features

Type AH(R),HH,M(R) pumps are cantilevered, horizontal, centrifugal slurry pumps. They are designed for handling abrasive or corrosive slurry in the metallurgical, mining, coal, power, building material and other industrial departments etc.

AH(R),HH are also called heavy duty slurry pumps, are used to transport the strong abrasive high density or low density high head slurry. Under the allowable pressure, the pumps of this type also can be installed in multis series.

HH type pump is mainly used for transport low density high head or high density low abrasive high head slurry.

M(R)is a kind of middle duty slurry pump, used to transport the fine particle size and middle density slurry.

The liner and impeller of AH and M model can be changeable and material can be either anti-abrasive metal or rubber.

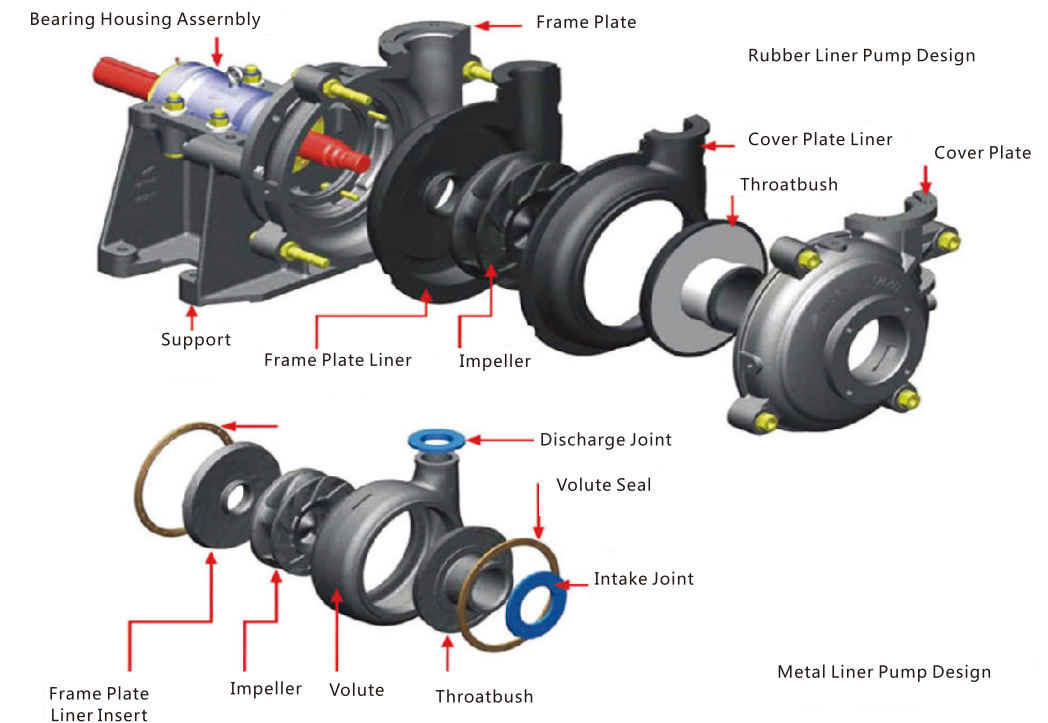
But material of liner and impeller of HH model only can be metal version. Rubber material wet parts are mainly used for transport the slurry which contains fine, non-sharp particle size.

The shaft seals for type AH(R),M(R),and HH pumps can be adoptable of gland seal, expeller seal and mechanical seal.

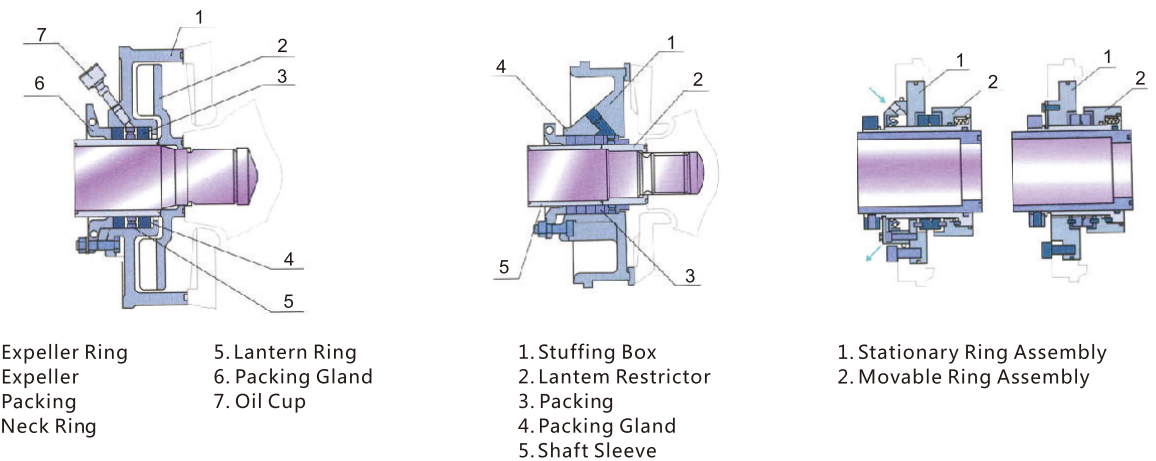
The discharge can be positioned at intervals of 45 degrees by request and oriented to any eight positions to suit installations and applications.



■ Construction Design



■ Shaft Seal Module Design

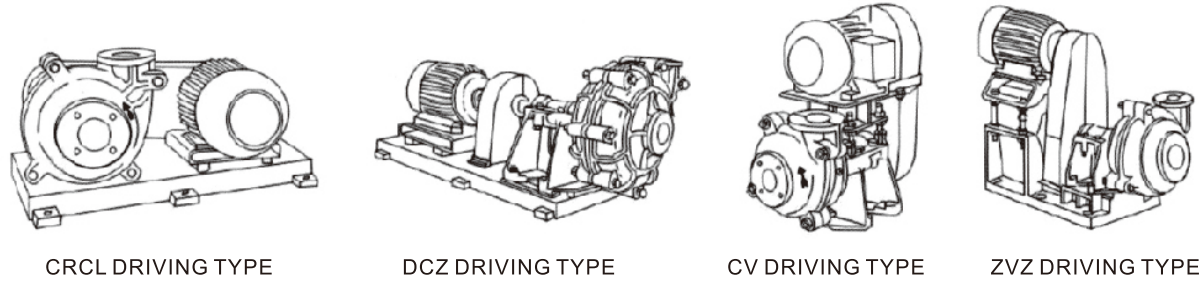


■ Support Type Description

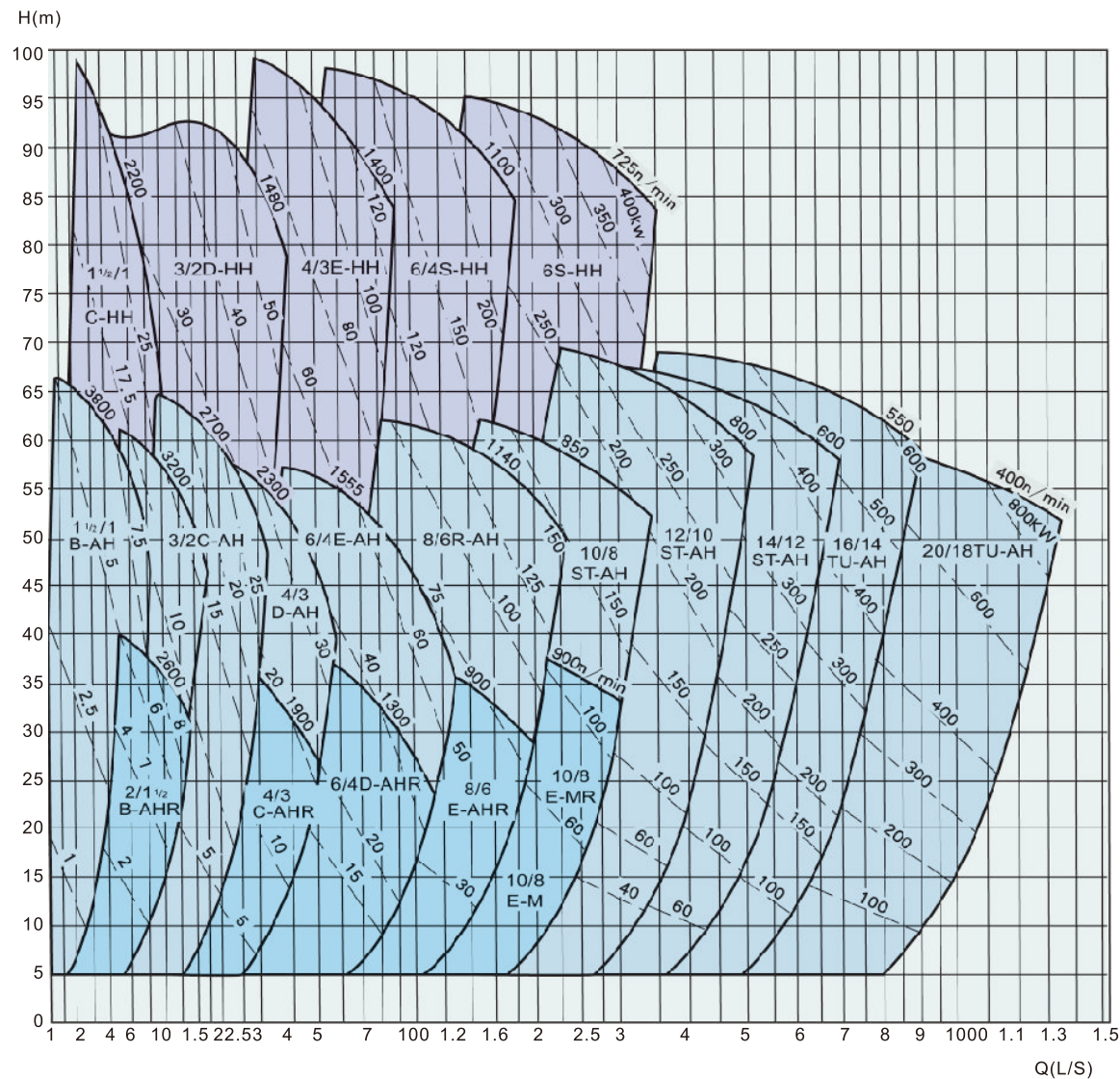
Support Type	A	B	C	D	E	R	F	G	S	T
Allowable Max Power (kw)	7.5	15	30	60	120	300	260	600	560	1200
Support Weight(kg)	17	24	45	77.5	154	228	555	1006	546	1156
Shaft seal water volume (l/s)	0.15	0.25	0.35	0.55	0.70	0.70	0.70	1.20	1.20	1.60



■ Transmission Type



■ AH HH M Selection & Performance Chart



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

■ AH(R)/HH/M(R) Slurry Pump Performance Chart

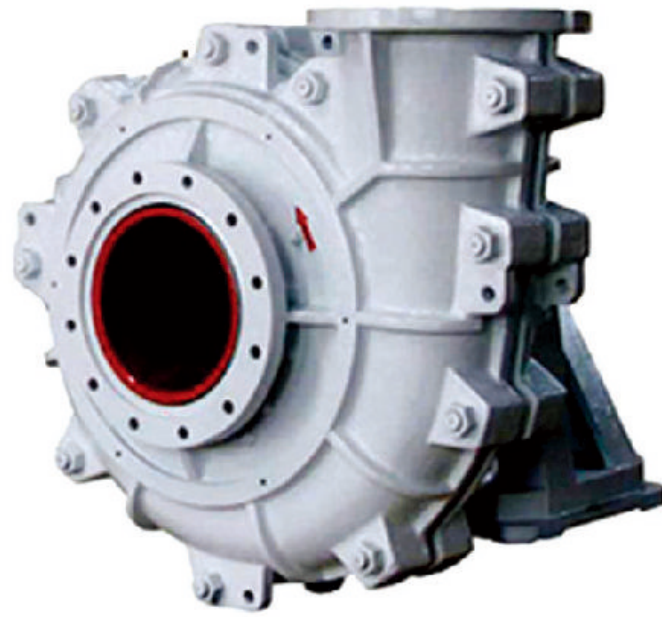
Pump model	Allowable Max. Power (kw)	清水性能 Clear water performance						
		Capacity Q		Head H (m)	Speed n (r/min)	Max.EFF. (%)	NPSH (m)	Impeller Dia(mm)
		m <sup>3</sup> /h	L/S					
1.5/1B-AH	15	12.6-28.8	3.5-8	6-68	1200-3800	40	2-4	152
2/1.5B-AH	15	32.4-72	9-20	6-58	1200-3200	45	3.5-8	184
3/2C-AH	30	39.6-86.4	11-24	12-64	1300-2700	55	4-6	214
4/3C-AH	30	86.4-198	24-55	9-52	1000-2200	71	4-6	245
4-3D-AH	60	86.4-198	24-55	9-52	1000-2200	71	4-6	245
6/4D-AH	60	162-360	45-100	12-56	800-1550	65	5-8	365
6/4E-AH	120	162-360	45-100	12-56	800-1550	65	5-8	365
8/6E-AH	120	360-828	100-230	10-61	500-1140	72	2-9	510
8/6R-AH	300	360-828	100-230	10-61	500-1140	72	2-9	510
10/8ST-AH	560	612-1368	170-380	11-61	400-850	71	4-10	686
12/10ST-AH	560	936-1980	260-550	7-68	300-800	82	6	762
14/12ST-AH	560	1260-2772	350-770	13-63	300-600	77	3-10	965
16/14TU-AH	1200	1368-3060	380-850	11-63	250-550	79	4-10	1067
20/18TU-AH	1200	2520-5400	700-1500	13-57	200-400	85	5-10	1370
1.5/1B-AH	15	10.8-25.2	3-7	7-52	1400-3400	35	2-4	152
2/1.5B-AH	15	25.2-54	7-15	5.5-41	1000-2600	50	2.5-5	178
3/2C-AH	30	36-75.6	10-21	13-39	1300-2100	55	2-4	213
4/3C-AH	30	79.2-180	22-50	5-34.5	800-1800	59	3-5	245
4-3D-AH	60	79.2-180	22-50	5-34.5	800-1800	59	3-5	245
6/4D-AH	60	144-324	40-90	12-45	800-1350	65	3-5	365
6/4E-AH	120	144-324	40-90	12-45	800-1350	65	3-5	365
8/6E-AH	120	324-720	90-200	7-49	400-1000	65	5-10	510
8/6R-AH	300	324-720	90-200	7-49	400-1000	65	5-10	510
10/8ST-AH	560	540-1188	150-330	12-50	400-750	75	4-12	686
12/10ST-AH	560	720-1620	200-450	7-45	300-650	80	2.5-7.5	762
14/12ST-AH	560	1152-2520	320-700	13-44	300-500	79	3-8	965
16/14TU-AH	1200	1224-2754	340-765	9-43	250-450	82	3-8	1067
20/18TU-AH	1200	2268-4860	630-1350	11-46	200-350	82	2-8	1372
10/8E-M	120	540-1440	150-400	14-60	600-1000	73	4-10	549
10/8R-M	300	540-1440	150-400	14-60	600-1000	73	4-10	549
1.5/1C-HH	30	16.2-34.2	4.5-9.5	25-92	1400-2200	20	2-5.5	330
3/2D-HH	60	68.4-136.8	19-38	25-87	850-1400	47	3-7.5	457
4/3E-HH	120	126-252	35-70	12-97	600-1400	50	2-5	508
6/4F-HH	260	324-720	90-200	30-118	600-1000	64	3-8	711
8/6S-HH	560	468-1008	130-280	20-94	500-1000	65	4-12	711

Remark:

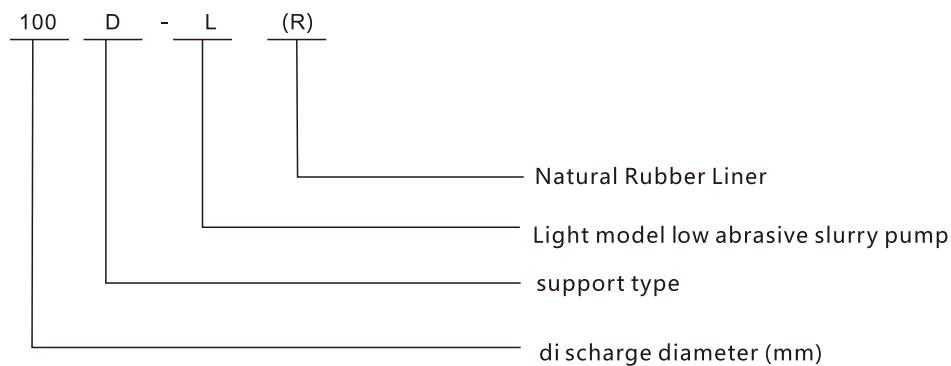
1. Capacity range recommended:  $50\%Q \leq Q \leq 110\%Q$  (Q Appropriate to capacity at highest efficiency point).
2. NPSH: appropriate to point Q recommended at highest speed.

■ L Slurry Pump

Type L(R) pumps are cantilevered, horizontal, centrifugal slurry pumps, which are also called light duty slurry pump. They are suitable for delivering low abrasive low density slurry for metallurgical, mining, coal and building material departments. The shaft seal can adopt gland seal, expeller seal or mechanical seal. Type L(R) pumps operate in high speed with small volumes and light weight to save floor area. It is mainly used to transport the slurry which contains fine particle size and weight concentration not more than 30%. The liner and impeller of this pump can be changeable, either with anti-abrasive metal or rubber material.



■ Type Notation



■ L(R) Slurry Pump Performance Chart

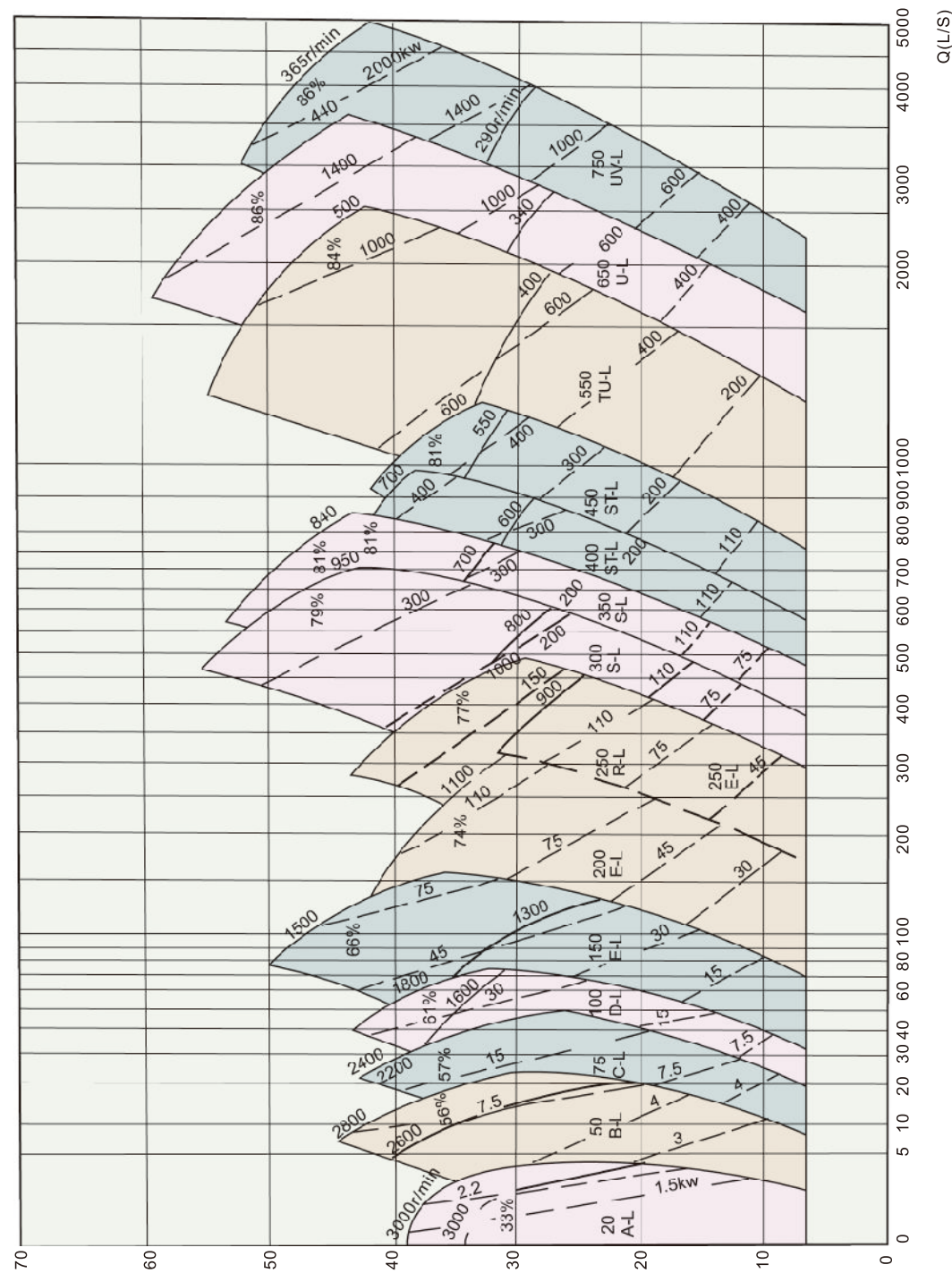
Pump model	Allowable Max.Power (kw)	Clear water performance						
		Capacity Q		Head H (m)	Speed n (r/min)	Max.EFF. (%)	NPSH (m)	Impeller Dia(mm)
		m <sup>3</sup> /h	L/S					
20A-L	7.5	2.34-10.8	0.65-3	6-37	1400-3000	40	2.5-3	152.4
50B-L	15	11.5-76	3.2-21.1	8.5-46	1400-2800	62	2.5-5.5	190
75C-L	30	18-151	5-42	4-46.4	900-2400	57	3-6	229
100D-L	60	46.8-324	13-90	7-48.3	800-1800	64	2-6	305
150E-L	120	115-568.8	32-158	10.5-51.8	800-1500	60	2.5-6	381
200E-L	120	234-910	65-235	9.5-40	600-1100	64	3-6	457
250E-L	120	396-1425	110-396	8-30	500-800	77	2-10	550
300S-L	560	468-2538	130-708	8-60	400-950	79	2-10	653
350S-L	560	650-2800	180-780	10-59	400-840	81	3-10	736
400ST-L	560	756-3312	210-920	7-37.5	300-600	85	2-8	825
450ST-L	560	1080-4356	300-1200	9-40	300-550	87	3-10	933
550TU-L	1200	1980-7920	560-2200	10-50	250-475	86	4-10	1213
650TU-L	1200	2520-9108	700-2530	10-55	200-350	86	2-8	1425
50B-L(R)	15	9-61	2.5-17	3-32.4	1200-2600	48	2.75-4.5	190
75C-L(R)	30	28.8-154.8	8-43	9-43	1100-2300	60	3-5	229
100D-L(R)	60	54-288	15-80	12-38	800-1600	65	2.5-5.5	305
150E(R)	120	72-576	20-160	4-38	800-1300	65	2.5-5.5	381
250E(R)	120	396-1425	110-396	8-30	500-800	77	2-10	550
300S(R)	560	432-1900	120-528	7-41	400-800	81	3-8	653
350S(R)	560	720-2844	200-528	10-41	400-700	86	3-7	736
400ST(R)	560	720-3312	200-920	7-51	300-700	80	2-10	835
450ST(R)	560	1008-4356	280-1210	9-48	300-600	80	2-9	933
550TU(R)	1200	1980-7920	560-2200	10-50	250-475	86	4-10	1213
650TU(R)	1200	2520-9108	700-2530	10-39	200-350	86	2-8	1425

Remark:

1. Capacity range recommended:  $50\%Q \leq Q \leq 110Q^3$  (Q Appropriate to capacity at highest efficiency point).
2. NPSH: appropriate to point Q recommended at highest speed.



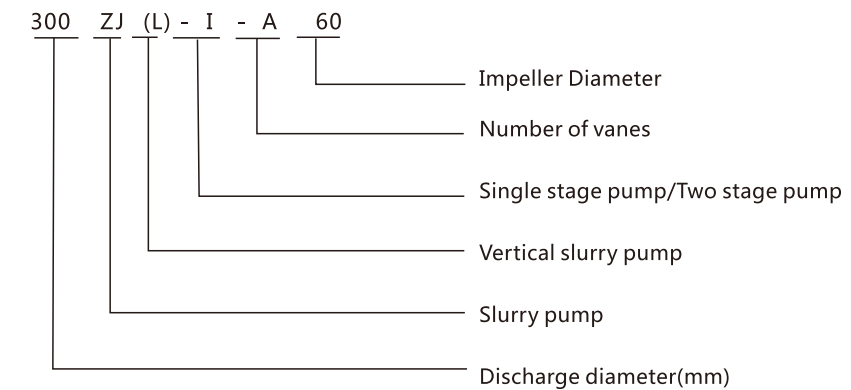
## ■ Selection & Performance Chart



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

## ■ Features and Application:

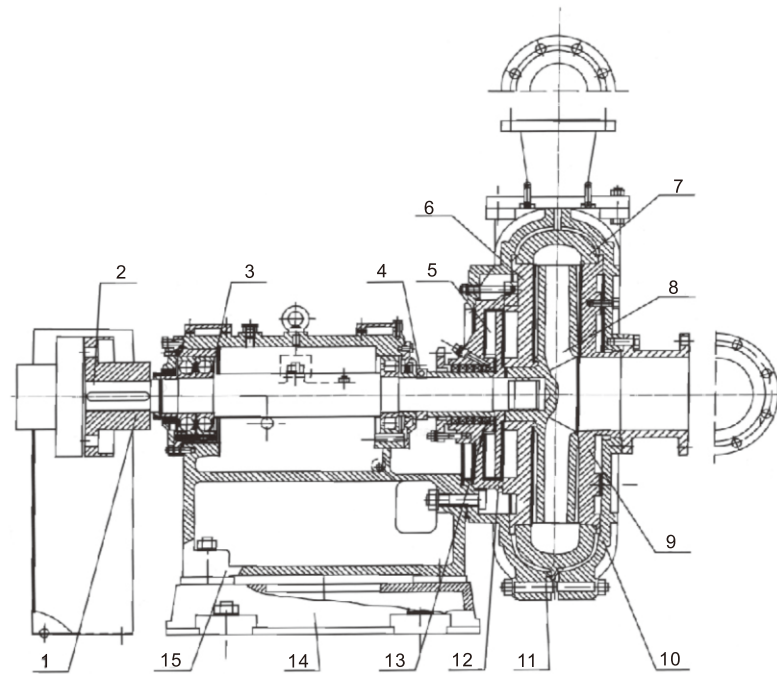
ZJ series slurry pump is designed by our plant, which is a kind of single stage, end suction, centrifugal type pump. The wet part is made of high chrome white iron and has high performance in anti-abrasive, anti-corrosive, anti-shock aspect. This can give pump longer life and economic cost performance. This kind of pump can be divided into two kinds by structure: horizontal(ZJ series) and Vertical(ZJL series). For the horizontal version, the discharge diameter can range from 350mm, 300mm, 250mm, 200mm, 150mm, 100mm, 80mm, 65mm, 50mm, 40mm, etc. For different head, we can choose different impeller to suit or satisfy the head by cutting the impeller. This kind of pump now is widely used in power plant, metallurgy industry, coal washing industry, building industry and chemical industry. Mainly used to transport the abrasive slurry, for example: the concentrate and tail slurry in ore dressing plant, slag handling in power plant, coal mud transportation and heavy medium coal separation, sand transportation in the shore work etc. The max weight concentration of slurry which can process is: 45% mortar slurry, 60% mining slurry. For transmission type, we can use DC, V belt, hydraulic coupling, frequency speed adjusting etc. This kind of pump also can be used in series or in parallel working together.



(symbol)	A	B	C	D	E	F	G	...
(Number of Vanes)	5	4	3	2	1	6	7	...



■ Structural Drawing of ZJ Slurry Pump



1. Coupling	2. Shaft
3. Bearing Housing	4. Disassembly Ring
5. Expeller	6. Frame Plate Liner Insert
7. Volute Liner	8. Impeller
9. T Roatbushing	10. Cover Plate
11. Frame Plate	12. Stuffing Box
13. Lantern Ring	14. Base
15. Support	

■ Seal type :

This kind of ZJ pump can be assembled with two kinds of seal type:

- (1) Expeller and stuffing box combined seal: Expeller seal make use of the pressure which is caused by the impeller and expeller working together to seal. Packing and lip seal do as the parking sealing. We can use this kind of seal in the single stage pump of which the positive pressure in the suction is not bigger with 10% than that in the discharge, or used in the first stage pump in series condition. It can work without the seal water, will not dilution the slurry and sealing performance good. But this can lead to more power consumption (usually need increase 5% of the shaft power).
- (2) Stuffing box packing seal is a kind of popular shaft seal type and used in all kinds of applications, seal material can be PTFE and graphite which can be used in corrosive and high temperature conditions. This seal type has advantages of simple structure and easy maintenance.
- (3) Mechanical seal: this kind of seal adopts the international advanced sealing technology and has good sealing performance. Different structure types can suit different working condition. Friction auxiliary materia is made of high hardness ceramic and alloy material. The design and cooperation between mechanical seal and seal box conform to the flow status of medium which makes seal performance higher capability in anti-resistant and anti-shock, which can make customer satisfied in all kinds of working conditions.

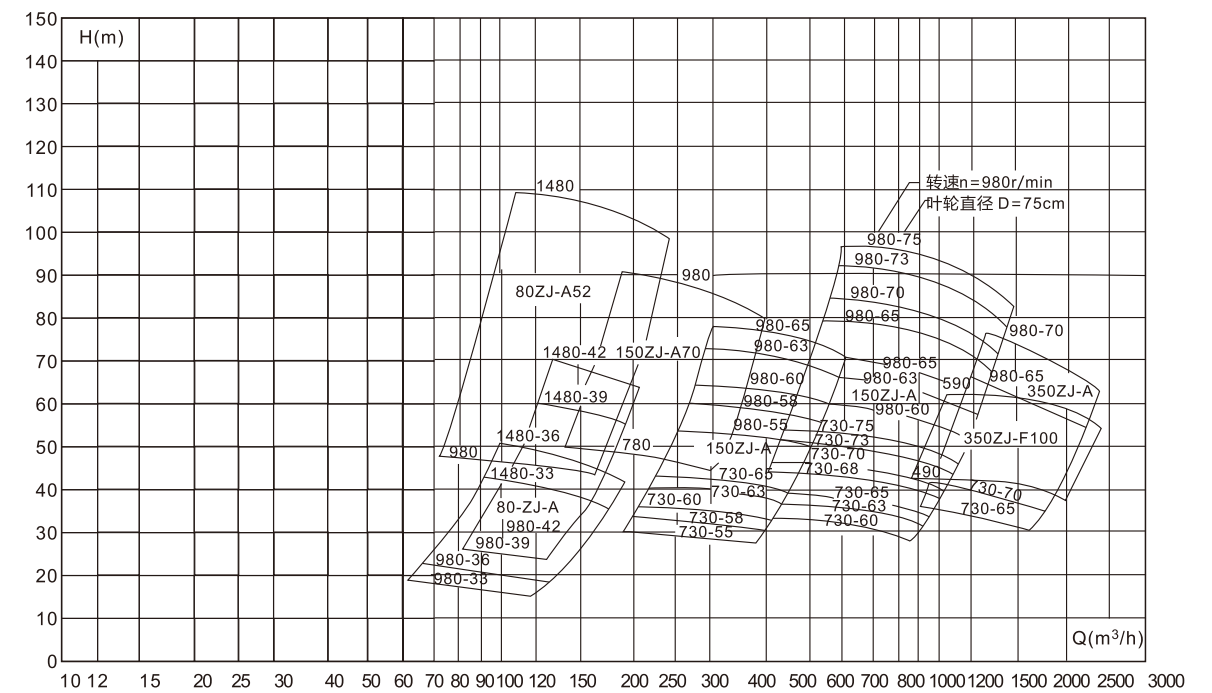
■ Pump Design Features:

Use of inner and outer double layer metal structure.  
 Casing middle split vertically.  
 Discharge port can be positioned at 8 different positions at an interval of 45°  
 Depending on design of bearing housing, Bearing Lubrication can be:  
 Thin Oil lubrication for box .  
 Grease lubrication for cylinder type.  
 Thin Oil or grease lubrication for bearing housing with inserted cover.

■ Impeller

Closed type Impeller: high abrasive resistance, and high efficiency.  
 Open type Impeller: the ability of pass is high. When deliver the dirty material, the pump need clear often, this type makes the clear work easily.

■ Selection Chart



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





**■ Slurry Pump Performance Chart**

Pump model	Allowable Max.Power (kw)	Clear water performance					Particle Max.Size Handled Qccasionally (mm)	Pump Weight (kg)
		Capacity Q m <sup>3</sup> /h	Head H (m)	Speed n (r/min)	Max.EFF. (%)	NPSH (m)		
150ZJ-A55	110	124-504	12.3-53.4	490-980	72.9	2.3	48	2019
150ZJ-C58	160	134-596	12.8-61	490-980	69.1	7	75	2063
150ZJ-A57	110	95-427	13.2-56.3	490-980	67.8	1.8	32	2023
150ZJ-A50	75	115-460	9.5-43.1	490-980	76.8	2.5	48	1735
150ZJ-A48	75	111-442	8.7-39.7	490-980	75.8	2.5	48	1728
150ZJ-C42	132	142-550	12.1-62.8	700-1480	77.1	2.2	69	1605
100ZJ-A50	160	85-360	20.5-100.2	700-1480	69.6	2.5	34	1475
100ZJ-A46	132	79-331	17.3-84.8	700-1480	67.6	2.3	34	1461
100ZJ-A42	90	66-275	14.7-70.8	700-1480	71	2.5	35	1075
100ZJ-A39	75	61-255	12.6-61	700-1480	69	2.4	35	1064
100ZJ-B42	90	83-365	12.7-66.8	700-1480	71.6	2.5	40	1085
100ZJ-A36	55	61-245	9.7-49.5	700-1480	71.6	2	32	1010
100ZJ-A33	45	56-225	8.2-41.6	700-1480	69.6	1.8	32	1003
80ZJ-A52	160	51-242	22.1-109.8	700-1480	56.3	2.1	21	1465
80ZJ-A42	75	61-204	14.4-70.4	700-1480	66.7	2.5	24	1053
80ZJ-A39	55	57-189	12.4-60.7	700-1480	64.7	2.4	24	1042
80ZJ-A36	45	46-190	9.6-51.4	700-1480	67.7	2.5	24	980
80ZJ-A33	37	43-174	8-43.2	700-1480	65.7	2.3	24	973
65ZJ-A30	15	23-79	7.4-34.8	700-1480	63.5	2	19	504
65ZJ-A27	11	20-71	6-28.2	700-1480	61.5	1.8	19	500
50ZJ-A50	90	27-111	22.3-110.7	700-1480	45.1	3	13	1378
50ZJ-A46	55	23-94	17.9-85.8	700-1480	44.7	1.4	14	1082
50ZJ-A33	18.5	12-54	7.7-42.5	700-1480	42.1	2.9	13	537
40ZJ-A17	7.5	4-23	9-44.6	700-1480	52.4	2.5	11	121

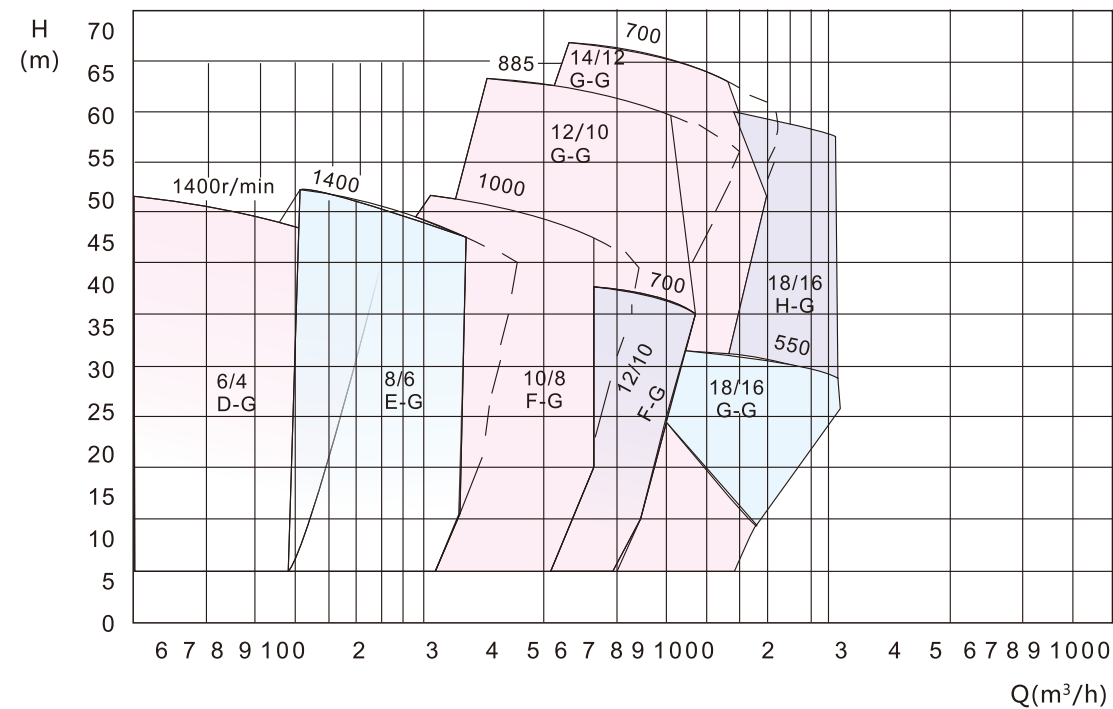
- Note: 1. (NPSH)r refers to the value at the specified point at the second speed in the sample book.  
 2. The normal size of particle handled is 56% of the max size that can be handled occasionally.  
 3. There are two weight data on common bases. They are the weight data of the high speed pumps without brackets, the slow speed pumps in bracket.

**■ G/GH Gravel Pumps**
**■ Product Features**

Type G(or GH) gravel pumps are designed for continuously handling the most difficult high abrasive slurries which contain too big solids to be pumped by a common pump. They are suitable for delivering slurries in mining, explosive sludge in metal melting, dredging in dredger and river course, and other fields, Type GH are high head pumps. Construction of this pump is of single casing connected by means of clamp bands and wide wet-passage. The wet-parts are made of Ni-hard and high chromium abrasion-resistance alloys. The discharge direction of pump can be oriented in any direction of 360. This type of pump possesses the advantages of easy installation and operation, good performance of NPSH and abrasion-resistance.



■ Selection & Performance Chart



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

■ Slurry Pump Performance Chart

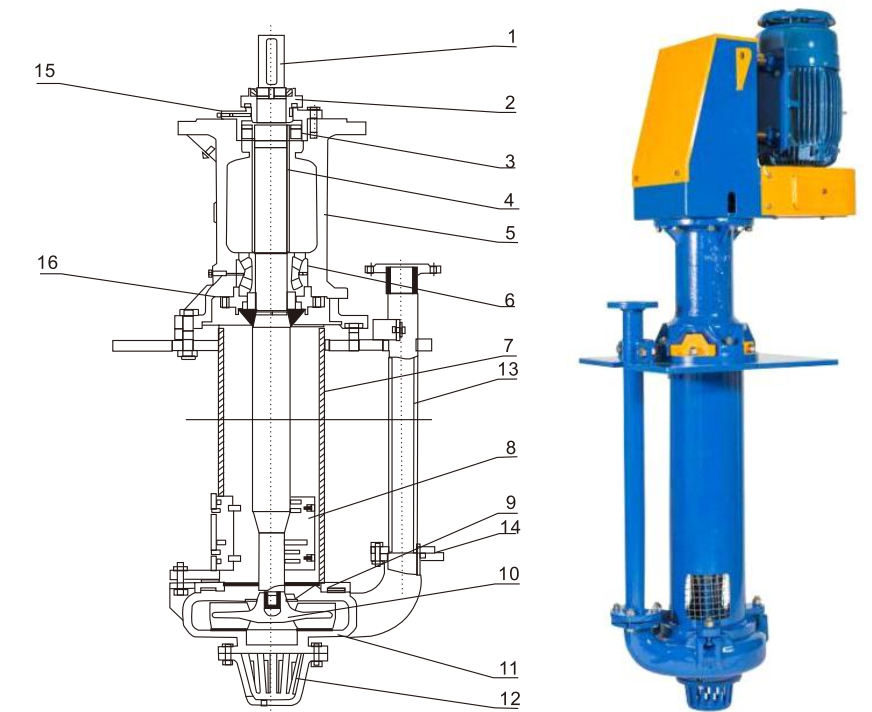
Pump model	Allowable Max. Power (kw)	Clear water performance						
		Capacity Q		Head H (m)	Speed n (r/min)	Max.EFF. (%)	NPSH (m)	Impeller Dia(mm)
		m³/h	L/S					
6/4D-G	60	36-250	10-70	5-52	600-1400	58	2.5-3.5	378
8/6E-G	120	126-576	35-160	6-45	800-1400	60	3-4.5	378
10/8S-G	560	216-936	60-260	8-52	500-1000	65	3-7.5	533
10/8F-G	260	216-936	60-260	8-52	500-1000	65	3-7.5	533
10/8S-GH	560	180-1440	50-400	24-80	500-950	77	2.5-5	711
12/10F-G	260	360-1440	100-400	10-60	400-850	65	1.5-4.5	667
12/10G-G	600	360-1440	100-400	10-60	400-850	65	1.5-4.5	667
12/10G-GH	600	288-2808	80-780	16-80	350-700	73	2.0-10.0	950
14/12G-G	600	576-3024	160-840	8-70	300-700	68	2.0-8.0	864
16/14G-G	600	720-3600	200-1000	18-44	300-500	70	3.0-9.0	1016
16/14TU-G	1200	324-3600	90-1000	26-40	300-500	72	3.0-6.0	1270
18/16G-G	600	420-4320	200-1200	12-48	250-500	72	3.0-6.0	1067
18/16TU-G	1200	720-4320	200-1200	12-48	250-500	72	3.0-6.0	1067

■ Application and Features

Type SP/SPR pumps are vertical, centrifugal slurry pumps which are submerged in sump to work. They are designed for delivering abrasive, large particle and high density slurries. These pumps do not need any shaft seal and sealing water. They can also be operated normally for insufficient suction duties. Wet parts of type SP pumps are made of abrasion-resistant metal. All parts of type SPR pump immersed in liquid are lined with rubber. They are suited to transport the slurry which contains non-edge and abrasive particle. The type with "L" is series of sump pump with extended shaft, which is suited for the working condition of deeper lever. The guide bearing construction is added to the pump on the basis of the standard pump, so the pump is with both more steady operation and wider application range, but flushing water should be attached to the guide bearing.

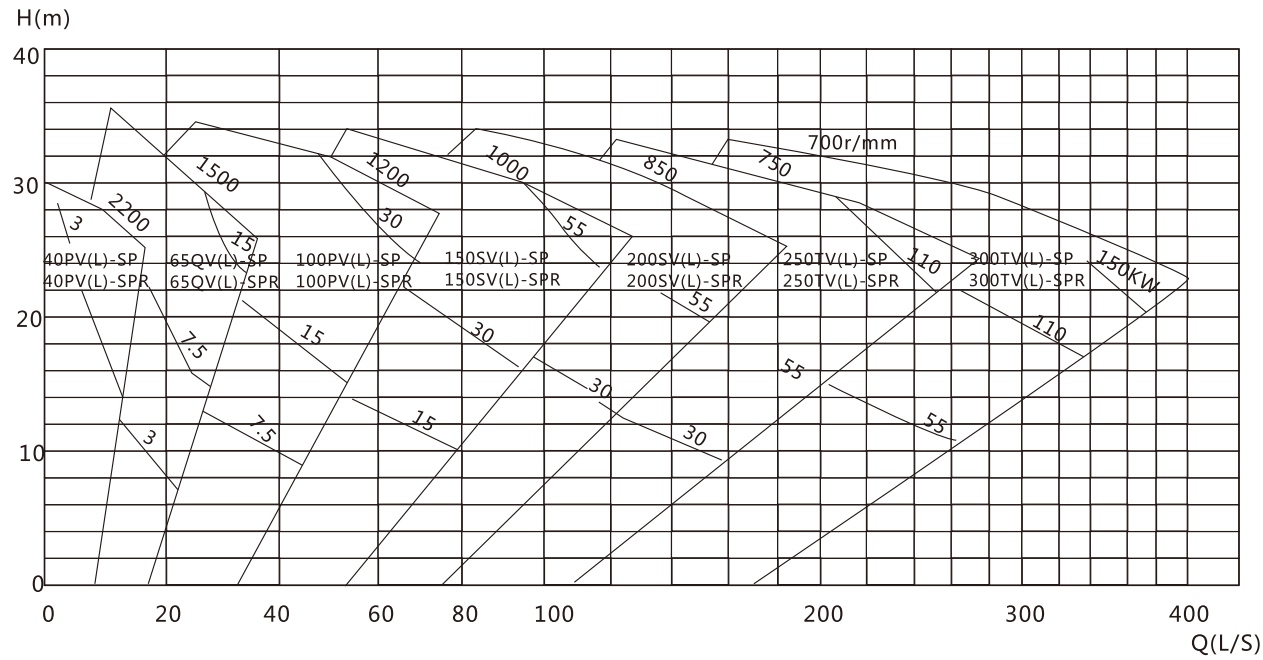
■ SP(R) Submerged Centrifugal Slurry Pump Construction Drawing

- 1、 Shaft
- 2、 Labyrinth gland
- 3、 Bearing
- 4、 Bearing guard
- 5、 Bearing body
- 6、 Bearing
- 7、 Bracket
- 8、 Strainer
- 9、 Rear guard plate
- 10、 Impeller
- 11、 Pump body
- 12、 Low strainer
- 13、 Disgorge tube
- 14、 Folio disgorge flange
- 15、 End cap
- 16、 Low end cap





■ SP/SPR系列液下泵型谱图 SP/SPR Sump Pump Selection Chart



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

■ Performance Chart

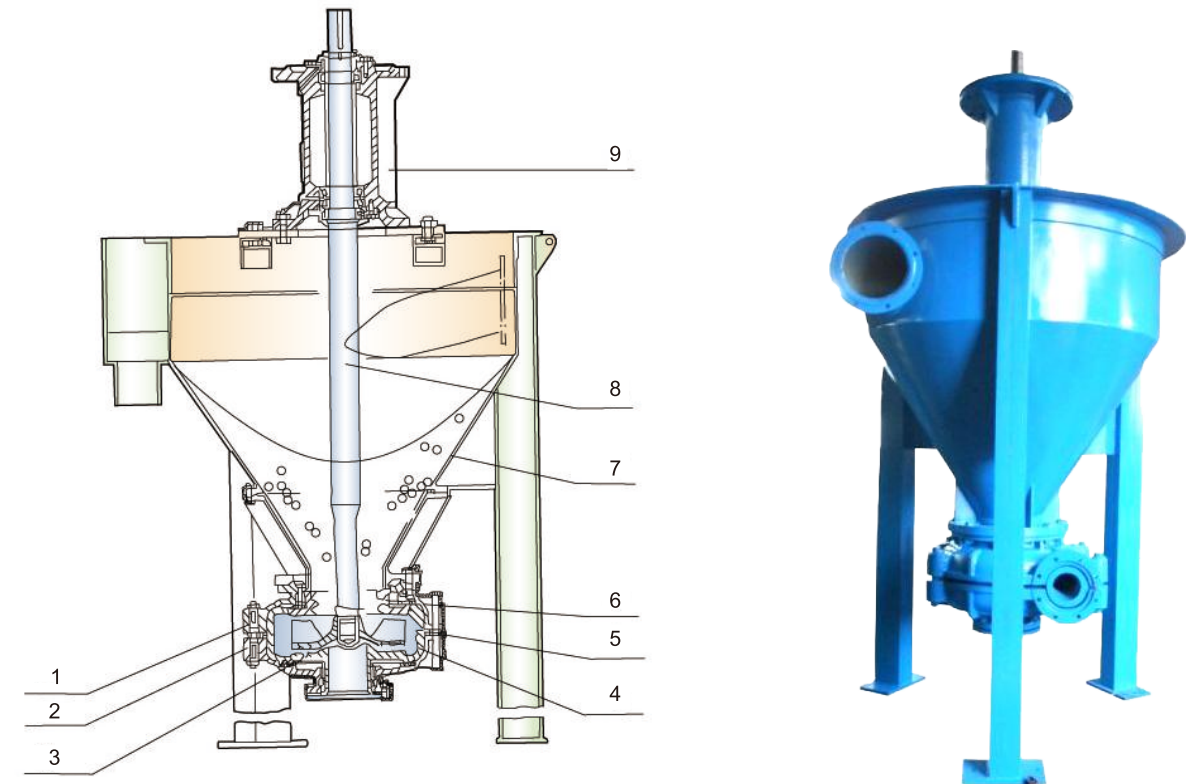
Pump model	Allowable Max. Power (kw)	Clear water performance					
		Capacity Q		Head H (m)	Speed n (r/min)	Max. EFF. (%)	Impeller Dia (mm)
		m <sup>3</sup> /h	L/S				
40PV-SP	15	19.44-43.2	5.4-1.2	4.5-28.5	1000-2200	40	188
40PV-SPR		17.28-39.6	4.8-11	4-26	1000-2200	40	188
65QV-SP	30	23.4-111	6.5-30.8	5-29.5	700-1500	50	280
65QV-SPR		22.5-105	6.25-29.15	5.5-30.5	700-1500	51	280
100RV-SP	75	54-289	15-80.3	5-35	500-1200	56	370
100RV-SPR		64.8-285	18-79.2	7.5-36	600-1200	62	370
150SV-SP	110	108-479.16	30-133.1	8.5-40	500-1000	52	450
200SV-SP	110	189-891	152.5-247.5	6.5-37	400-850	64	520
250TV-SP	200	261-1089	72.5-302.5	7.5-33.5	400-750	60	575
300TV-SP	200	288-1267	80-352	6.5-33	350-700	50	610

■ Froth Pump

■ Product Feature

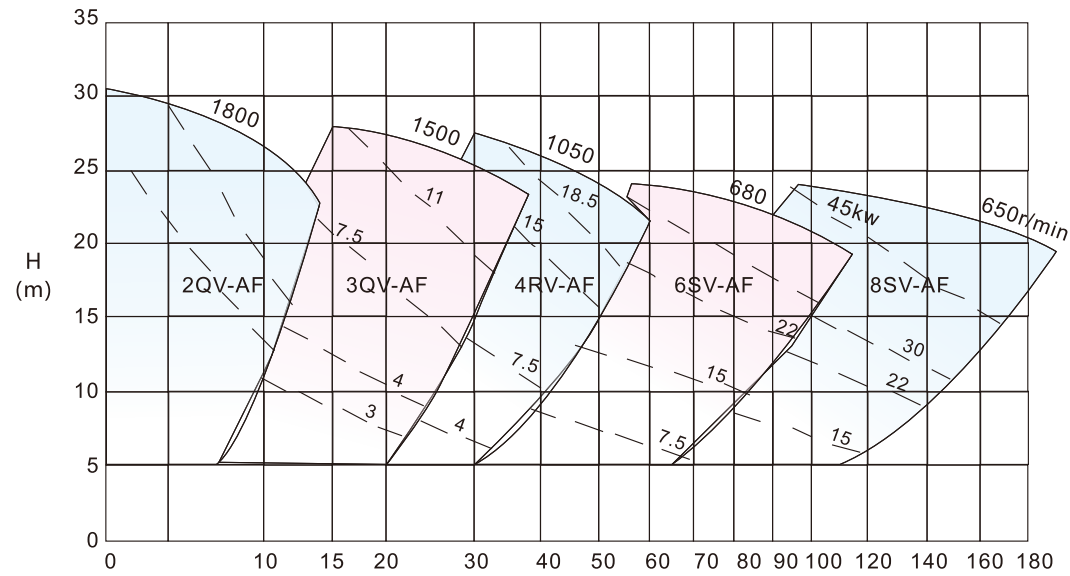
AF series froth pumps are our company newly designed & developed products based on the advanced technology from home and abroad. Being popularized and promoted; now they are widely used in metallurgical industry, mining sector, coal one and chemical engineering to handle abrasive and corrosive slurries with foam and froth. When operated, AF pumps can effectively eliminate foam and froth in slurry and will also function properly even with inadequate feeding slurry, thus making them the ideal choice for delivering foam slurries, esp, in flotation process.

■ Construction Drawing



- 1. Frame Plate
- 2. Cover Plate
- 3. Cover Plate Liner Insert
- 4. Volute Liner
- 5. Impeller
- 6. Frame Plate Liner Insert
- 7. Tank
- 8. Shaft
- 9. Bearing Housing

■ 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.

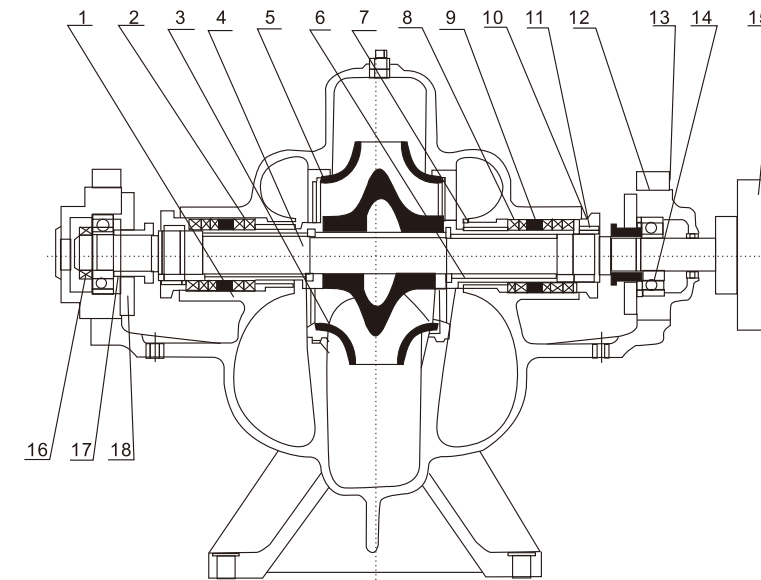
■ Performance Chart

Pump model	Capacity Q m <sup>3</sup> /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.

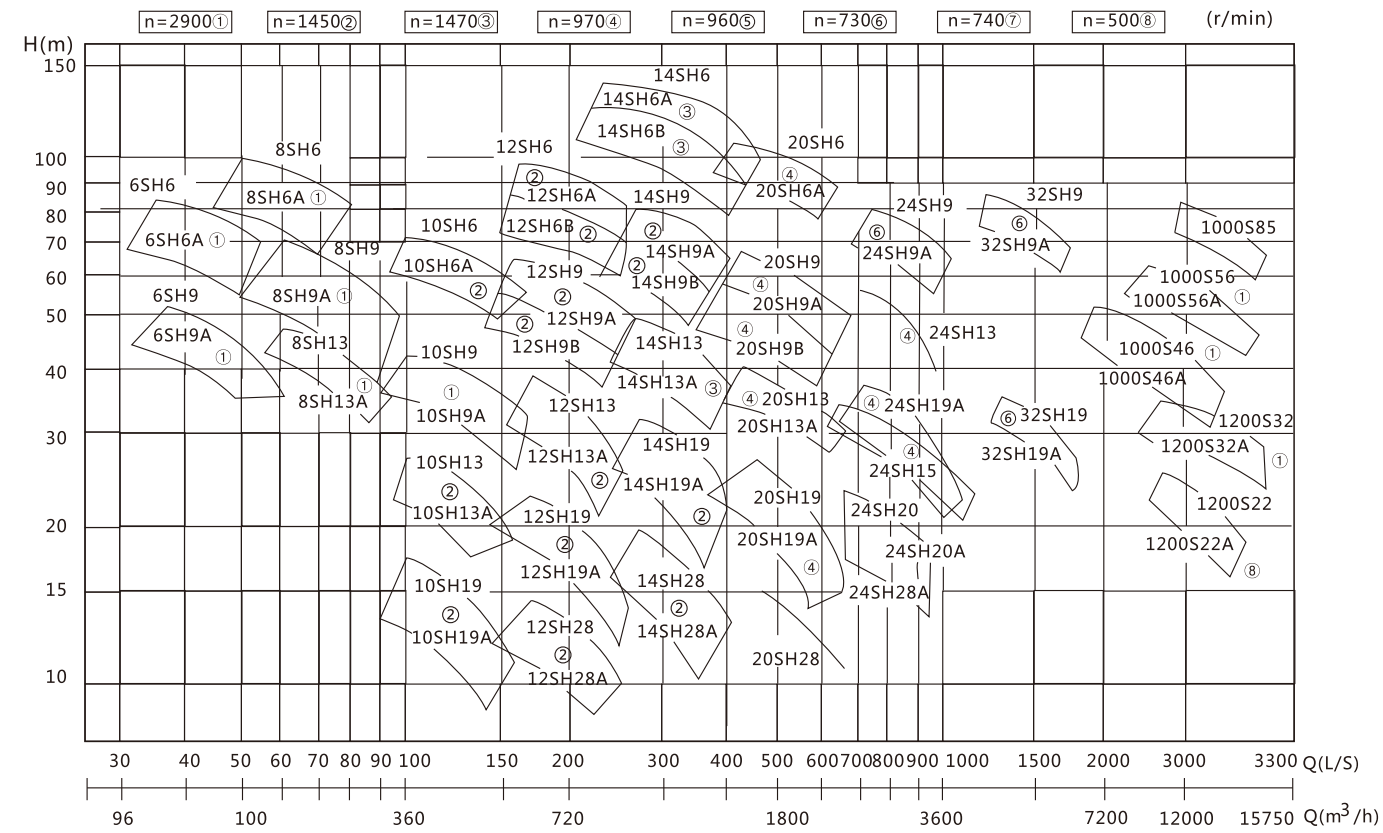
■ S, Structure Diagram of Split Case Pump



- 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 <sup>3</sup> /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 <sup>3</sup> /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 <sup>3</sup> /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 <sup>3</sup> /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 <sup>3</sup> /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			

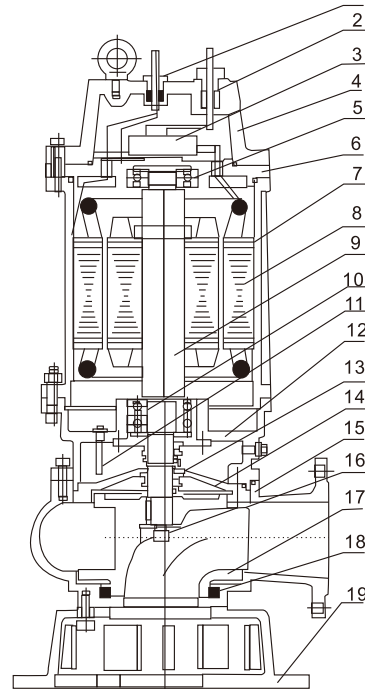
■ Performance table of single stage and double suction centrifugal pump of S and SH series 8

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



■ **Product Features**

Adopt large-channel anti-clogging impeller structure, the particle passed can be 50% of the pump diameter. Mechanical seal adopts the new-type hard quality and be able to bear the rotten carbonization tungsten material, featuring a durable and wearable. The pump could run more than 8000 hours without stop. There is high-accuracy anti-interference to test the lead in the sealed oil room to protect the pump. It can be collocated with the switch board of full-automatic safe protection if needed to protect the pump when leak water, leak electricity, overload definitely, improve security and dependability of the products. It could connect with the automatic coupling of double guide rails which is convenient to install and maintain. The floater switch can control the pump when the water depth changes, it does not need special person to control. The motor may adopt water jacket outside cycle cooling system, ensure the pump work without water (dry style) safely. There are two kinds of different installation ways, fixed style auto coupling installing system, removing style free installing system.

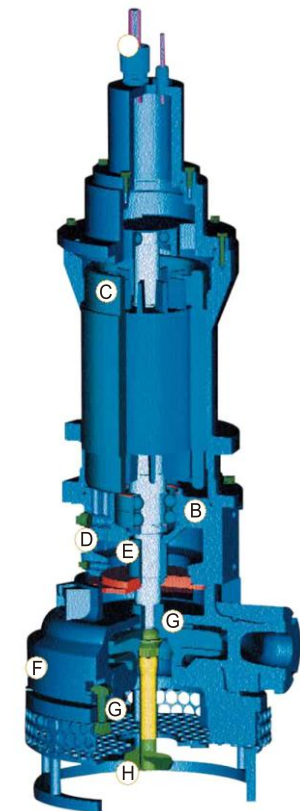


- |                          |                     |                     |
|--------------------------|---------------------|---------------------|
| 1. Signal Line           | 7. Motor Casing     | 13. Mechanical Seal |
| 2. Motor Connection Line | 8. Stator           | 14. Frame Plate     |
| 3. Connection Box        | 9. Shaft (Rotor)    | 15. Pump Body       |
| 4. Motor Cover           | 10. Bearing         | 16. Impeller Bolt   |
| 5. Bearing               | 11. Oil Water Probe | 17. Impeller        |
| 6. Upper Shaft Base      | 12. Oil House       | 18. Seal Ring       |
|                          |                     | 19. Chassis         |

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■ **SSP Series Submersible Slurry Pump**

According to our customer's requirement, we design new type submersible slurry pump. This pump are renowned for innovative designs for heavy duty submersible slurry pump used in aggressive abrasive applications. Combined with the user of an A05 28% high Chrome alloy wet end mounted on a heavy duty iron motor housing. The SSP pump represents the most dependable, long lasting, submersible pump available.



**A - Advanced Cable Entry**

The advanced cable entry offers double protection against moisture. The power and control cables enter through individual cable glands that act as strain relief while sealing the cable jacket. Both cable cores are also sealed using barrier connector embedded in epoxy sealant.

**B - Heavy-Duty Thrust Bearings**

High-capacity, angular contact duplex bearings are generously sized to handle thrust loads associated with high specific gravity slurries.

**C - Temperature Sensor**

Over-temperature sensors protect the motor by sounding an alarm or shutting down the unit if internal temperatures exceed safe operating limits.

**D - Moisture Detector**

A twin electrode system provides double protection by detecting moisture intrusion in either the motor housing or the mechanical seal chamber.

**E - Mechanical Seals**

The SSP incorporates proven balanced double-seal arrangement in which both sets of seal springs are enclosed in the oil reservoir. Silicon Carbide Seal faces are subject to submergence pressure only for greatly extended wear life.

**F - Heavy-Duty Water End**

Standard 28% chrome construction coupled with heavy section thickness provides the ultimate in protection against abrasive wear in heavy slurries.

**G - Easy Maintenance Access**

T-bolt construction allows rapid disassemble of the pump end for maintenance access. The heavy-duty impeller is not screwed on, but keyed to the shaft for easy removal and protection against movement during reverse rotation.

**H - Optional Robust Agitator**

A robust agitator can be fitted to the suction eye allowing the pump to handle high concentrations of solids.

■ Submersible Sewaged Pump Performance

No.	Type	Diameter of outlet	Flux Q(m³/h)	Head H (m)	Speed n (r/min)	Power Pa (kw)	EFF. (%)	Automatic coupler
1	25WQ7-8-0.55	25	7	8	2900	0.55	45	GAK-50
2	25WQ8-22-1.1	25	8	22	2900	1.1	45	
3	32WQ8-12-0.75	32	8	12	2900	0.75	48	
4	40WQ12-15-1.5	40	12	15	2900	1.5	48	
5	50WQ20-7-0.75	50	20	7	2900	0.75	62	
6	50WQ10-10-0.75	50	10	10	2900	0.75	54	
7	50WQ20-15-1.5	50	20	15	2900	1.5	51	
8	50WQ15-30-2.2	50	15	30	2900	2.2	51	
9	50WQ42-9-2.2	50	42	9	2900	2.2	52	
10	50WQ17-25-3	50	17	25	2900	3	53	
11	50WQ40-15-4	50	40	15	2900	4	54	
12	50WQ25-32-5.5	50	25	32	2900	5.5	49	
13	50WQ20-40-7.5	50	20	40	2900	7.5	50	
14	65WQ25-15-2.2	65	25	15	2900	2.2	52	
15	65WQ37-13-3	65	37	13	2900	3	60	
16	65WQ25-30-4	65	25	30	2900	4	58	
17	65WQ25-30-4	65	35	50	2900	11	59	
18	65WQ35-60-15	65	35	60	2900	15	58	
19	80WQ40-7-2.2	80	40	7	2900	2.2	50	
20	80WQ43-13-3	80	43	13	2900	3	61	
21	80WQ40-15-4	80	40	15	2900	4	57	
22	80WQ50-20-5.5	80	50	20	2900	5.5	60	
23	80WQ65-25-7.5	80	65	25	2900	7.5	56	
24	80WQ80-15-7.5	80	80	15	2900	7.5	45	
25	100WQ85-10-4	100	85	10	1450	4	62	
26	100WQ65-15-5.5	100	65	15	1450	5.5	59	
27	100WQ100-15-7.5	100	100	15	1450	7.5	70	
28	100WQ85-20-7.5	100	85	20	1450	7.5	71	
29	100WQ100-25-11	100	100	25	1450	11	61	
30	100WQ100-35-18.5	100	100	35	1450	18.5	67	
31	150WQ145-9-7.5	150	145	9	1450	7.5	63	
32	150WQ200-10-15	150	200	10	1450	15	64	
33	150WQ180-15-15	150	180	15	1450	15	67	
34	150WQ180-20-18.5	150	180	20	1450	18.5	74	
35	150WQ150-26-18.5	150	150	26	1450	18.5	72	
36	150WQ180-35-22	150	180	35	1450	22	69	
37	150WQ200-30-37	150	200	30	1450	37	65	
38	150WQ150-35-37	150	150	35	1450	37	63	
39	200WQ300-7-11	200	300	7	980	15	75	
40	200WQ250-11-15	200	250	11	1450	15	72	
41	200WQ250-15-18.5	200	250	15	1450	18.5	72	
42	200WQ400-10-22	200	400	10	1450	22	75	
43	200WQ300-15-22	200	300	15	1450	22	71	
44	200WQ400-13-30	200	400	13	1450	30	76	
45	200WQ250-22-30	200	250	22	1450	30	71	
								GAK-65
								GAK-80
								GAK-100
								GAK-150
								GAK-200

■ Submersible Sewaged Pump Performance

No.	Type	Diameter of outlet	Flux Q(m³/h)	Head H (m)	Speed n (r/min)	Power Pa (kw)	EFF. (%)	Automatic coupler
46	200WQ300-25-37	200	300	25	1450	37	73	GAK-200
47	200WQ250-35-45	200	250	35	1450	45	69	
48	200WQ400-30-55	200	400	30	1450	55	72	
49	200WQ200-60-75	200	200	60	1450	75	52	
50	250WQ600-9-30	250	600	9	980	30	78	
51	250WQ600-12-37	250	600	12	1450	37	76	GAK-250
52	250WQ600-15-45	250	600	15	1450	45	73	
53	250WQ600-20-55	250	600	20	1450	55	73	
54	250WQ600-25-75	250	600	25	1450	75	71	
55	300WQ800-12-45	300	800	12	980	45	74	
56	300WQ480-15-45	300	480	15	1450	45	66	GAK-300
57	300WQ400-20-45	300	400	20	1450	45	64	
58	300WQ600-20-55	300	600	20	1450	55	73	
59	300WQ800-20-75	300	800	20	1450	75	75	
60	300WQ950-20-90	300	950	20	1450	90	76	
61	300WQ950-24-110	300	950	24	1450	110	76	GAK-350
62	350WQ1100-10-55	350	1100	10	980	45	85	
63	350WQ1180-13-75	350	1180	13	980	75	84	
64	350WQ1200-15-90	350	1200	15	980	90	84	
65	350WQ1130-18-90	350	1130	18	980	90	83	
66	350WQ1250-20-110	350	1250	20	740	110	83	GAK-400
67	350WQ1500-20-132	350	1500	20	740	132	82	
68	350WQ1500-26-160	350	1500	26	740	160	83	
69	400WQ1800-10-75	400	1800	10	740	75	85	
70	400WQ1690-12-90	400	1690	12	980	90	85	
71	400WQ2000-13.5-110	400	2000	13.5	980	110	85	GAK-450
72	400WQ1700-22-160	400	1700	22	740	160	83.5	
73	400WQ2000-18-160	400	2000	18	980	160	85	
74	400WQ1950-23-185	400	1950	23	980	185	85	
75	400WQ1980-26-220	400	1980	26	980	220	83	
76	400WQ1800-32-250	400	1800	32	740	250	82	GAK-500
77	450WQ2300-10-90	450	2300	10	740	90	85	
78	450WQ2250-11-110	450	2250	11	740	110	85	
79	450WQ2260-14-132	450	2260	14	740	132	85	
80	450WQ2280-20-185	450	2280	20	740	185	83	
81	450WQ2300-25-250	450	2300	25	740	250	83	GAK-500
82	450WQ2300-29-280	450	2300	29	740	280	83	
83	450WQ2100-36-315	450	2100	36	740	315	83	
84	500WQ2490-10-110	500	2490	10	740	110	85	
85	500WQ2500-16-160	500	2500	16	740	160	85	
86	500WQ2490-18-185	500	2490	18	740	185	85	GAK-500
87	500WQ2500-12-132	500	2500	12	740	132	85	
88	500WQ2400-22-220	500	2400	22	740	220	85	
89	500WQ2650-24-250	500	2650	24	740	250	85	
90	500WQ2400-28-280	500	2400	28	740	280	85	