

## PC pump system

### Progressive cavity pump system (PC pump system)

#### Product Explanation:

Compared with the other artificial lifting system, the PC pump system features low one-time investment, small footprint and easy maintenance, so it has more and more applications.



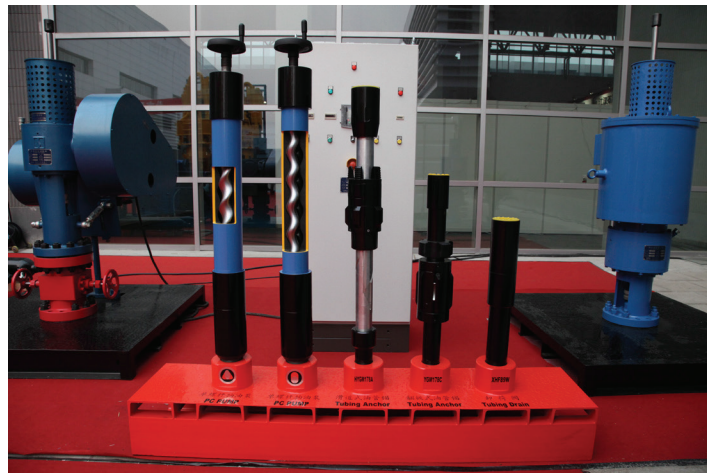
#### Product Features:

The surface drive PC pump system included the surface equipments, down hole equipments and electric equipments. Many series with various specifications of PCP applicable for casing from 4 1/2 " to 9-5/8 ", discharge capacity from 2.5 m3/d to 400 m3/d, operating temperature up to 150℃, and lift head up to 1800m.

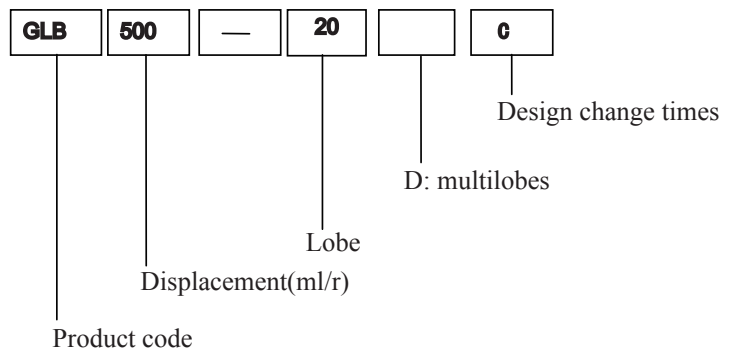
Surface equipments include the surface drive head, BOP and flow line etc. The surface drive head can input the power for pump and adjust the rotation of pump. Beside the usual horizontal driving drive head and vertical driving drive head, we have also designed the direct driven drive head and apply the patent, patent No. is ZL200920105661.5.

Down hole equipments include the PC pump and other down hole tools such as tubing anchor. PC pump is composed of stator and rotor, owing to fewer moving parts, without sand block and gas lock; it is suitable to high viscosity oil, sandy crude and field trail of gas and water disposal etc. The PC pump has a complete series model. Besides the single lobe pc pump, we have open out the multi-lobes PC pump and high temperature PC pump.

Electric equipments mainly point the electrical cabinet for PC pump. For satisfied the customer's requirements, we can provide the soft start cabinet and VSD cabinet. The product has the good figure, expediently using, perfect function and advanced technique.



#### PC pump Model illustration





## Product Specifications:

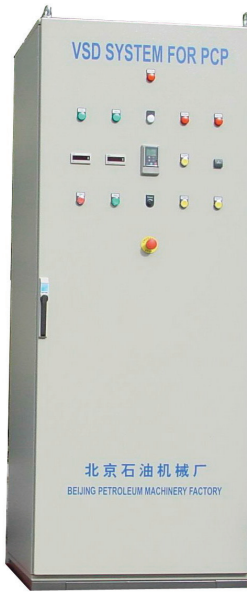
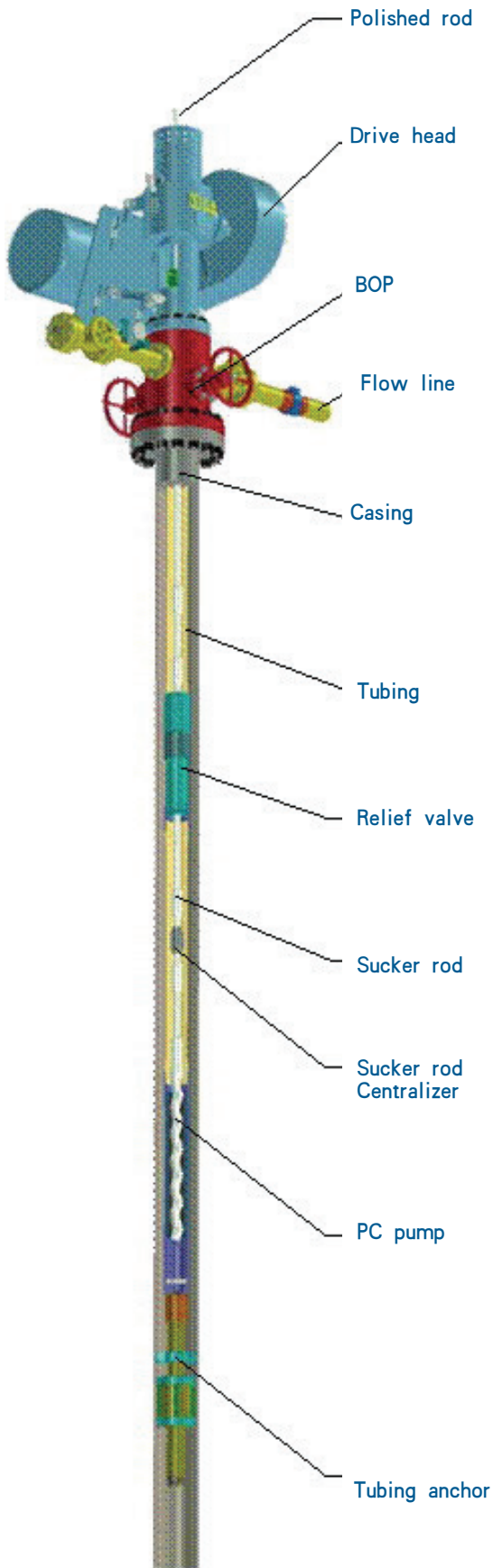
OD series (mm)	type	Object volume capacity (ml/r)	stage	Sucker rod specification mm(in)	Stator connection Thread (in)	Rotor connection Thread (in)	Adaptive Tubing Specification (in)	Speed Range (r/min)	Actually volume capacity (m/d)	Head Capacity (m)	
89	GLB40-24	40	24	22.2 (7/8)	2-3/8 TBG	1-3/16	2-3/8	60~200	2.5~8	400~1000	
	GLB40-24		32							800~1400	
	GLB40-24		40							1000~1800	
	GLB40-24	70	18	22.2 (7/8)	2-3/8 TBG	1-3/16	2-3/8	60~200	4~14	400~900	
GLB40-24	26		600~1300								
GLB40-24	30		800~1500								
108	GLB40-24	120	18	25.4 (1)	3-1/2 TBG	1-3/8	2-3/8 3-1/2	60~200	7~24	400~900	
	GLB40-24		27							600~1300	
	GLB40-24		34							1000~1700	
114	GLB40-24	200	20	25.4 (1)	3-1/2 TBG	1-3/8	2-3/8 3-1/2	60~200	12~40	600~1000	
	GLB40-24		24							800~1200	
	GLB40-24		27							800~1400	
	GLB40-24	280	12	25.4 (1)	4TBG	1-3/8	2-3/8 3-1/2	60~200	17~60	400~700	
	GLB40-24		16							500~900	
	GLB40-24		20							600~1000	
	114	GLB40-24	375	12	28.6 (1 1/8)	4TBG	1-3/8	3-1/2 4	60~200	23~82 24~86	400~700
		GLB40-24		17							600~1000
		GLB40-24		12							400~700
		GLB40-24	16	600~1000							
	114	GLB40-24	500	14	28.6 (1 1/8) Φ 35x5.5 (3)	4TBG	1-3/16	3-1/2 4	70~250	35~126	500~800
		GLB40-24		16							600~900
GLB40-24		20		600~1100							
GLB40-24		24		800~1300							
114 132	GLB800-14(K)	800	14	Φ 38×6	4TBG	1-3/16	3-1/2 4	70~250	55~196	400~800	
	GLB800-16(K)		16							600~1000	
	GLB800-20-2(K)		20							600~1200	
127 140	GLB1200-12/2	1200	12	Φ 38X6	4TBG	1-3/16	3-1/2 4	70~200	85~260	500~900	
	GLB1400-11/2	1400	11	Φ 386	4TBG	1-7/8		70~200	98~300	500~900	
	GLB800-15	800	15	Φ 38×6	4TBG	1-3/16	3-1/2 4	70~200	55~180	500~900	
127 140	GLB1200-15/2	1200	15	Φ 38×6	4TBG	1-3/16	3-1/2 4	70~200	85~260	500~1000	
	GLB1200-17/2		17							700~1200	
	GLB1400-15/2	1400	15	Φ 38X6	4TBG	1-7/8	3-1/2 4	70~200	98~300	700~1000	
	GLB1600-16/3	1600	16	Φ 42X6	4 1/2 TBG	1-7/8	3-1/2 4	70~200	112~340	700~1100	
	GLB1800-14/3	1800	14	Φ 48×6	4 1/2 TBG	2	3-1/2 4	70~200	127~400	500~900	
140 150	GLB1000-15	1000	15 20	Φ 38×6	4 1/2 TBG	2	3-1/2 4 4-1/2	70~200	70~210	500~900	
	GLB1200~20/2	1200		Φ 38×6					85~260	700~1200	
	GLB1400~17/2	1400	17	Φ 38×6					98~300	700~1200	
	GLB1600~16/2	1600	16	Φ 42×6					112~340	700~1100	
	GLB1800~14/2	1800	14	Φ 48×6					127~400	500~900	
	GLB1600~19/3	1600	19	Φ 42×6					112~340	700~1200	
	GLB1800~18/3	1800	18	Φ 48×6					127~400	700~1100	



Model	Head		Theoretical flow rate 100 r/min		Horse power	
	(m)	(ft)	(m <sup>3</sup> /day)	(bfpd)	(kW)	(HP)
GLB40-20	800	2600	5.8	36	7.5	10
GLB40-42	1600	5200	5.8	36	11	15
GLB75-16	600	2000	10.8	68	7.5	10
GLB75-27	1000	3300	10.8	68	7.5	10
GLB75-40	1500	5000	10.8	68	11	15
GLB120-14	500	1700	17	106	7.5	10
GLB120-27	1000	3300	17	106	11	15
GLB190-33	1300	4200	27	170	22	30
GLB190-33B	1300	4200	27	170	22	30
GLB300-10	400	1300	43	270	11	15
GLB300-21	800	2600	43	270	15	20
GLB300-27	1300	4200	43	270	37	50
GLB400-20	800	2600	57	362	22	30
GLB400-22	1200	3900	57	362	45	60
GLB500-14	600	2000	72	453	22	30
GLB500-20	800	2600	72	453	30	40
GLB500-20A	800	2600	72	453	30	40
GLB500-20C	1000	3300	72	453	55	75
GLB800-20D	1000	3300	115	723	55	75
GLB1200-14D	700	2200	172.5	1085	55	75

### Dimensions and connections

Model	Stator dimension			Rotor dimension		Connection thread		
	OD (mm)	Max. OD (mm)	Length (mm)	Max. OD (mm)	length (mm)	Stator up NUE (in)	Stator down NUE (in)	Rotor up API rod (in)
GLB40-20	73	89.5	2756	36.2	2702	2-7/8	2-7/8	3/4
GLB40-42	73	89.5	5186	36.2	5052	2-7/8	2-7/8	3/4
GLB75-16	88.9	107	2470	46.4	2342	2-7/8	2-7/8	3/4
GLB75-27	73	89.5	4235	40.0	4259	2-7/8	2-7/8	3/4
GLB75-40	88.9	107	5349	46.4	5224	3-1/2	2-7/8	7/8
GLB120-14	88.9	107	2326	48.0	2675	2-7/8	2-7/8	7/8
GLB120-27	88.9	107	5344	48.0	4754	2-7/8	2-7/8	7/8
GLB190-33	101.6	116	6050	55.0	6014	3-1/2	3-1/2	1
GLB190-33B	114.3	141.3	6045	57.0	6014	4-1/2 UP TBG	3-1/2 UP TBG	1
GLB300-10	101.6	116	3130	56.0	3069	3-1/2	3-1/2	7/8
GLB300-21	101.6	116	6096	56.0	6044	3-1/2	3-1/2	1
GLB300-27	114.3	141.3	6896	57.6	6690	4-1/2 UP TBG	3-1/2 UP TBG	1-1/8
GLB400-20	114.3	116	7659	58.0	6464	3-1/2	3-1/2	1-1/8
GLB400-22	114.3	141.3	7000	58.0	6640	4-1/2 UP TBG	3-1/2 UP TBG	KG38
GLB500-14	114.3	116	7277	57.0	6014	3-1/2	3-1/2	1
GLB500-20	114.3	116	9807	57.0	8714	3-1/2	3-1/2	1-1/8
GLB500-20A	114.3	116	9807	57.0	8714	3-1/2	3-1/2	KG38
GLB500-20B	114.3	141.3	9807	57.0	8714	4-1/2	3-1/2	KG38
GLB500-20C	127	141.3	6560	69	6490	4-1/2 UP TBG	3-1/2 UP TBG	KG38
GLB800-20D	127	141.3	6678	71	6650	4-1/2 UP TBG	3-1/2 UP TBG	KG38
GLB1200-14D	127	141.3	6690	71	6660	4-1/2 UP TBG	3-1/2 UP TBG	KG38



VSD cabinet

Horizontal Drive head and BOP



Direct driven drive head



PC pump system used in oil field

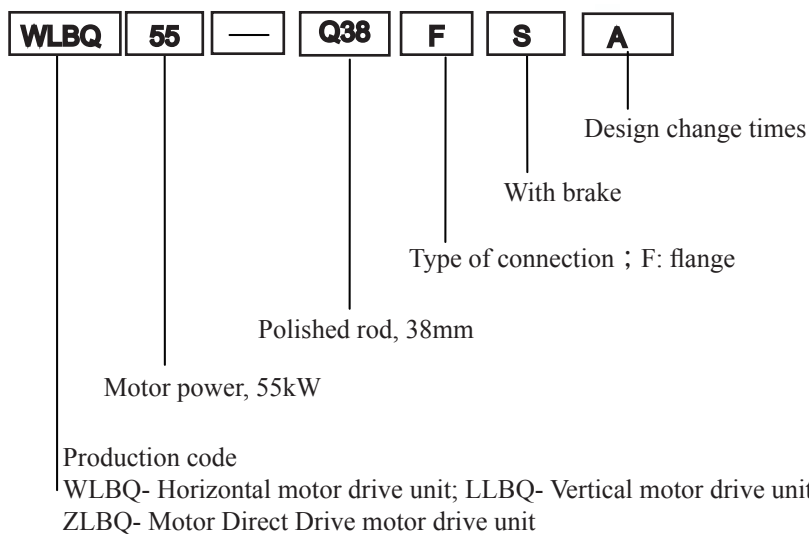
## Surface drive equipment (drive head)

### Product Explanation:

Structurally, the surface drive equipment, which powers the down-hole PCP, is sorted into two kinds :horizontal one with horizontally mount motor and great-driven by prod tooth sectors, vertical one with vertically mount motor, it is mainly composed of an explosion-proof motor, a reducer casing, a polished rod seal box, an anti-reverse control device, and support etc.



**DRIVE HEAD  
Model Illustration**



### Main performance parameters of surface drive equipment

model	WLBQ	WLBQ	WLBQ	WLBQ	WLBQ	LLBQ22	LLBQ30	LLBQ37	LLBQ45	LLBQ55
	5.5	7.5	11	15	18.5	WLBQ22	WLBQ30	WLBQ37	WLBQ45	WLBQ55
Power(kW)	5.5	7.5	11	15	18.5	22	30	37	45	55
Motor speed (r/min)	970	970	970	970	1470	1470	1470	1480	1480	1480
Output Speed Range (r/min)	VSD	40-300								
	FourFixed speed	60-300				70-300				
Polished rod diameter (mm)	28	28	28	28	38	38	38	38	38	48
Connection flange	API Spec 6A7-1/16 3000psi R45-6B specification flange									
Rated axial Load (kN)	150					200				
Rated torque (N · m)	700	950	1400	1900	2100	2400	2800	3200	3600	4000
Weight (kg)	533	588	610	678	713	1230	1474	1514	1565	1660

## Electric control panel

### Product Explanation:

Adapting brainpower digital display protector to motor. GLB-1 conventional type electric control panel bears many protection to motor, characterize by good systematic stability, low fault rate, flexible and reliable control, and convenient maintenance. Besides, it can memorize fault and display current, etc, while required, current recorder and soft starter, etc, may be add to it.

Besides those functions of conventional type one, BGLB-1 VFD type electric control panel can control motor by frequency variation to realize step-less speed change, whose frequency varies from 5 to 75HZ, the best from 15 to 60HZ.

Required power supply voltage: 380V, frequency: 50HZ, 60HZ.



## Surface PC Pump Series



### Product Explanation:

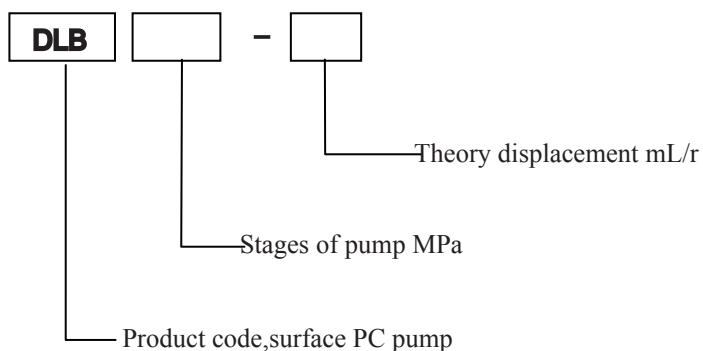
Surface PC pump consists of pump power end and water power end.

### Product Features:

With single PC pump for water power end, simple flow channel, no valve parts, no sand pipe-sticking and air-lock, continuous suction and discharge of media, no impulse, and steady flow, pump is fit for a wide range of media like high viscosity, paste-like media with short fibers and suspended particles, and will have a wide range of applications in many sectors.

A normal complete unit of Surface PC Pump includes: pedestal, motor, drive belt pulley, bearing block, drive shaft, flexible shaft, PC pump, inlet and outlet flanges. It can be controlled by VSD cabinet and all components are integrated on a heavy-duty pedestal so it has features of wide speed range, smooth running, low noise, simple construction, easy repairing, reliable working and long life etc.

### Model illustration

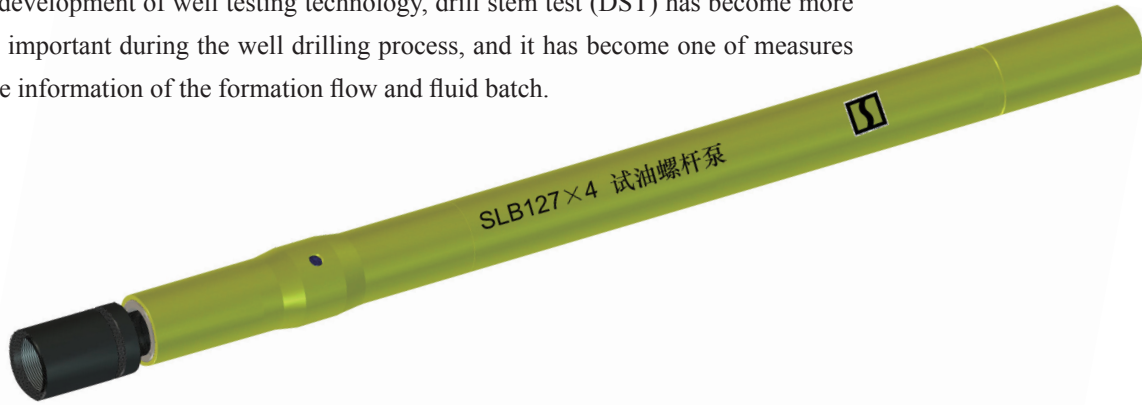


### Specifications

Model	DLB3-3000
Displacement(mL/r)	3380
Rated pressure(MPa)	3
Rated speed(r/min)	250
Theoretical flow rate(m <sup>3</sup> /h)	50
Motor power(kW)	55
Input flange	6"
Output flange	4"
Size (mm×mm×mm)	6700×1660×1070
Weight(kg)	3000

## Navi pump series

With the development of well testing technology, drill stem test (DST) has become more and more important during the well drilling process, and it has become one of measures to gain the information of the formation flow and fluid batch.

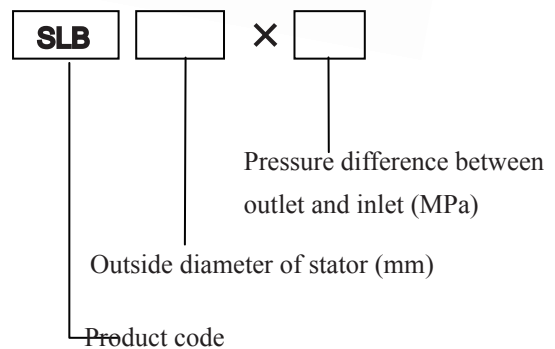


### Product Features:

The Navi Pump is originally mended on the basis of down hole motor. To fit the well testing requirement we amend the structure of this product. The Navi Pump is well matched with ordinary DST pipe, which can do the drill stem test and testing operation on the bleed well or non-flowing well. This kind of pump can be characterized with simple test string, convenient implement and visual test data.

The Navi pump mainly includes Head sub, Single progressive cavity pump, Cardan shaft and Transmission shaft assembly. The transmission shaft assembly has the special designed sealing box. It improves its load and working time without interruption.

### Model illustrations



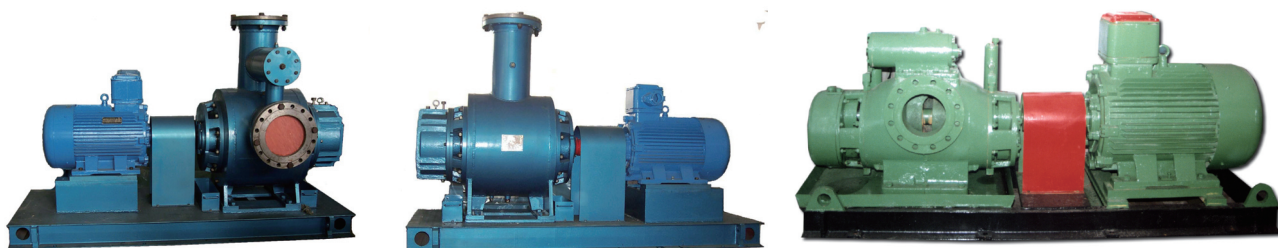
### Specifications

Model	SLB104×8	SLB127×4	SLB165×4
Length(mm)	6630	6627	7460
Outside Diameter(mm)	104	127	165
Delivery capacity/rotate(L/r)	0.31	1.35	3.39
Up connection thread(API IF)	2-7/8	3 1/2	4-1/2
Down connection thread(API IF)	2-7/8	3 1/2	4-1/2
Rated pressure difference (MPa)	8.0	4.0	4.0
Max. pressure difference (MPa)	10	5.5	5.5
Rated speed(r/min)	30~120	30~120	30~120
Working torque(N•m)	395	860	1817
Max. torque(N•m)	593	1100	3634
Sealing pressure(MPa)	10.0	10.0	10.0
applicable well temperature (°C)	<90	<90	<90



## Twin screw pump

Twin screw pump is a rotary volume pump which can be used for delivering the untreated crude oil which contain gas and water .The ratio gas to liquid may reach 90%, especially in margin oilfield and seashore oilfield. Delivering the mixture of oil and gas can save many items such as separator, transfer pump, air compressor, and two sets independent gas-oil carrying line, reducing the investment and save the expenses. The well pressure can be reduced and the production of oil and gas can be increased by using this kind pump. It has very good self-suction function and even flow. When gas content is high, the discharge can not be affected. It is featured in compact structure, reliable work, low noise, which is equipped with safety valve and system of auto-control and protection, so reliable in operation.



### Product Features:

- Flow Rate Range;  $Q=4.3\sim 1000\text{m}^3/\text{h}$
- Input Pressure Range:  $P_1=0.06\sim 1\text{Mpa}$ ;
- Discharge Pressure Range:  $P_2=0\sim 4.0\text{Mpa}$ ;
- Gas Oil Ratio of Medium:  $q=0\sim 90\%$
- Temperature of Medium:  $T\leq 120^\circ\text{C}$
- Viscidity of Medium:  $v\leq 3000\text{cSt}$

### • Specialty of Extrusive safe control:

- Over low protection of input pressure;
- Over high protection of discharge pressure;
- Over high protection of gear-casing's temperature.

### Table of Main Parts Material

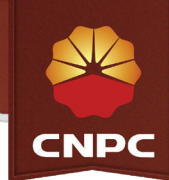
Material Sort Part Name	I	II	III
Casing	20#	1Cr18Ni9Ti	1Cr18Ni9Ti
Drive Or Driven Shaft	40Cr	2Cr13	1Cr18Ni9Ti
Screw Cover	38CrMoAL	3Cr13	1Cr18Ni9Ti
Bush	QT600 or HT250	ZG1Cr13	ZG1Cr18Ni9Ti
Apply Condition	Non-Solid grain and non-corrosive medium	Contained solid grain and corrosive medium	Non-solid grain and corrosive medium

### Selection of Mechanical Seal

Mechanical Seal	Movable /Static Ring	Spring	Assistant Seal parts	Applicable Scope
Rubber ripple tube	Nickel Foundation tungsten carbide (integer)	0Cr18Ni12Mo2	Fluorin rubber	$T\leq 100^\circ\text{C}$
Pressure reed mechanical seal	Cobalt Foundation tungsten carbide (inlay)	1Cr18Ni9Ti	Fluorin rubber	$T\leq 150^\circ\text{C}$
Metallic mechanical seal	Tungsten carbide (integer)	1Cr18Ni9Ti	Fluorin rubber	$T\leq 200^\circ\text{C}$

### Pump Model and Parameter:

S/N	Foundati on No.	Pump Model	Discharge Pressure (MPa)	Rated Flow (m <sup>3</sup> /h)	Shaft Power(kW)	Motor	
						Power(kW)	Speed (rpm)
1	J30x28	2LYQB-28/0.6	0.6	28	9.2	11	1450
2		2LYQB-27/1.0	1.0	27	13.37	15	
3		2LYQB-26/1.5	1.5	26	19.32	22	
4		2LYQB-21/2.0	2.0	21	20.80	22	
5		2LYQB-18/2.5	2.5	18	21.89	22	
6		2LYQB-14/3.0	3.0	14	20.88	22	
7	J30x28	2LYQB-19/0.6	0.6	19	6.3	7.5	980
8		2LYQB-18/1.0	1.0	18	9.8	11	
9		2LYQB-17/1.5	1.5	17	12.63	15	
10		2LYQB-14/2.0	2.0	14	13.87	15	
11		2LYQB-12/2.5	2.5	12	14.86	15	
12		2LYQB-9/3.0	3.0	9	13.37	15	
13	J30x28	2LYQB-10.5/2.0	2.0	10.5	10.40	11	750
14		2LYQB-6.5/3.0	3.0	6.5	9.66	11	
15	J30x30	2LYQB-30/0.6	0.6	30	8.9	11	1450
16		2LYQB-29/1.0	1.0	29	14.36	15	
17		2LYQB-28/1.5	1.5	28	20.80	22	
18		2LYQB-24/2.0	2.0	24	23.78	30	
19		2LYQB-20/2.5	2.5	20	24.77	30	
20	J30x30	2LYQB-20/0.6	0.6	20	5.94	7.5	980
21		2LYQB-19.5/1.0	1.0	19.5	9.66	11	
22		2LYQB-18.5/1.5	1.5	18.5	13.74	15	
23		2LYQB-16/2.0	2.0	16	15.85	18.5	
24		2LYQB-13.5/2.5	2.5	13.5	16.72	18.5	
25	J30x30	2LYQB-14/1.0.	1.0	14	6.9	7.5	750
26		2LYQB-12/2.0	2.0	12	11.89	15	
27		2LYQB-10/2.5	2.5	10	12.38	15	
28	J30x32	2LYQB-36/0.6	0.6	36	10.70	11	1450
29		2LYQB-32/1.0	1.0	32	15.85	18.5	
30		2LYQB-30/1.5	1.5	30	22.29	30	
31		2LYQB-27/2.0	2.0	27	26.75	30	
32		2LYQB-24/2.5	2.5	24	29.72	30	
33	JJ30x32	2LYQB-24/0.6	0.6	24	7.134	7.5	980
34		2LYQB-21/1.0	1.0	21	10.40	11	
35		2LYQB-20/1.5	1.5	20	14.86	15	
36		2LYQB-16.5/2.0	2.0	16.5	16.34	18.5	
37		2LYQB-14.5/2.5	2.5	14.5	17.95	18.5	
38	J30x32	2LYQB-18/0.6	0.6	18	5.9	7.5	750
39		2LYQB-13/2.5	2.5	13	16.10	18.5	
40	JJ30x36	2LYQB-38/0.6	0.6	38	11.29	15	1450
41		2LYQB-35/1.0	1.0	35	17.33	18.5	
42		2LYQB-33.5/1.5	1.5	33.5	24.89	30	
43		2LYQB-30/2.0	2.0	30	29.72	30	



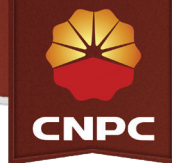
44	JJ30x36	2LYQB-25/0.6	0.6	25	8.2	11	980
45		2LYQB-23/1.0	1.0	23	11.39	15	
46		2LYQB-22/1.5	1.5	22	16.34	18.5	
47		2LYQB-20/2.0	2.0	20	19.81	22	
48	J30x36	2LYQB-17/1.0	1.0	17	9.3	11	750
49		2LYQB-15/2.0	2.0	15	14.86	15	
50	J30x40	2LYQB-40/0.6	0.6	40	11.89	15	1450
51		2LYQB-38/1.0	1.0	38	18.825	22	
52		2LYQB-37/1.5	1.5	37	27.49	30	
53		2LYQB-33/1.8	1.8	33	29.42	30	
54		2LYQB-29/2.0	2.0	29	28.73	30	
55	J30x40	2LYQB-26/0.6	0.6	26	7.72	11	980
56		2LYQB-25/1.0.	1.0	25	12.38	15	
57		2LYQB-23/1.5	1.5	23	17.09	18.5	
58		2LYQB-20/1.8	1.8	20	17.83	18.5	
59		2LYQB-18/2.0	2.0	18	17.83	18.5	
60	J30x40	2LYQB-19/0.6	0.6	19	5.64	7.5	750
61		2LYQB-17/1.5	1.5	17	12.63	15	
62		2LYQB-15/1.8	1.8	15	13.37	15	
63		2LYQB-13/2.0	2.0	13	12.88	15	
64	J30x48	2LYQB-50/0.6	0.6	50	14.86	15	1450
65		2LYQB-48/1.0	1.0	48	23.78	30	
66		2LYQB-45/1.5	1.5	45	33.44	37	
67	J30x48	2LYQB-33/0.6	0.6	33	9.80	11	980
68		2LYQB-32/1.0	1.0	32	15.85	18.5	
69		2LYQB-30/1.5	1.5	30	22.29	30	
70	J30x48	2LYQB-24/0.6	0.6	24	7.13	11	750
71		2LYQB-23/1.0	1.0	23	11.39	15	
72		2LYQB-22/1.5	1.5	22	16.34	18.5	
73		2LYQB-68/0.6	0.6	68	20.21	22	
74	J60x36	2LYQB-64/1.0	1.0	64	31.70	37	1450
75		2LYQB-59/1.2	1.2	59	35.07	37	
76		2LYQB-54/1.5	1.5	54	40.12	45	
77		2LYQB-48/2.0	2.0	48	47.56	55	
78		2LYQB-43/2.5	2.5	43	53.25	55	
79	J60x36	2LYQB-45/0.6	0.6	45	13.37	15	980
80		2LYQB-42/1.0	1.0	42	20.80	22	
81		2LYQB-39/1.2	1.2	39	23.18	30	
82		2LYQB-36/1.5	1.5	36	26.75	30	
83		2LYQB-32/2.0	2.0	32	31.70	37	
84		2LYQB-28/2.5	2.5	28	34.67	37	
85	J60x36	2LYQB-24/2.0	2.0	24	23.78	30	750
86		2LYQB-21/2.5	2.5	21	26.00	30	
87	J60x40	2LYQB-70/0.6	0.6	70	20.80	22	1450
88		2LYQB-66/1.0	1.0	66	32.69	37	
89		2LYQB-62/1.2	1.2	62	36.85	37	
90		2LYQB-60/1.5	1.5	60	44.58	45	
91		2LYQB-54/2.0	2.0	54	53.50	55	
92		2LYQB-48/2.5	2.5	48	59.45	75	



93	J60x40	2LYQB-46/0.6	0.6	46	13.67	15	980
94		2LYQB-44/1.0	1.0	44	21.79	22	
95		2LYQB-41/1.2	1.2	41	24.37	30	
96	J60x40	2LYQB-40/1.5	1.5	40	29.72	30	980
97		2LYQB-36/2.0	2.0	36	35.67	37	
98		2LYQB-32/2.5	2.5	32	39.63	45	
99	J60x40	2LYQB-30/1.5	1.5	30	22.22	30	750
100		2LYQB-27/2.0	2.0	27	26.75	30	
101		2LYQB-24/2.5	2.5	24	29.72	30	
102	J60x44	2LYQB-80/0.6	0.6	80	23.78	30	1450
103		2LYQB-75/1.0	1.0	75	37.14	45	
104		2LYQB-70/1.2	1.2	70	41.61	45	
105		2LYQB-66/1.5	1.5	66	49.04	55	
106		2LYQB-58/2.0	2.0	58	57.46	75	
101	J60x44	2LYQB-53/0.6	0.6	53	15.75	18.5	980
102		2LYQB-50/1.0	1.0	50	24.77	30	
103		2LYQB-46/1.2	1.2	46	27.34	30	
104		2LYQB-44/1.5	1.5	44	32.69	37	
105		2LYQB-38/2.0	2.0	38	37.64	45	
106		2LYQB-34/1.2	1.2	34	20.21	22	
107	J60x44	2LYQB-33/1.5	1.5	33	24.52	30	750
108		2LYQB-28/2.0	2.0	28	27.74	30	
109	J60x48	2LYQB-87/0.6	0.6	87	25.86	30	1450
110		2LYQB-81/1.0	1.0	81	40.12	45	
111		2LYQB-76/1.2	1.2	76	45.18	55	
112		2LYQB-71/1.5	1.5	71	52.76	55	
113		2LYQB-63/1.8	1.8	63	56.18	75	
114	J60x48	2LYQB-58/0.6	0.6	58	17.24	18.5	980
115		2LYQB-54/1.0	1.0	54	26.75	30	
116		2LYQB-50/1.2	1.2	50	29.72	30	
117		2LYQB-47/1.5	1.5	47	34.92	37	
118		2LYQB-42/1.8	1.8	42	37.45	45	
119	J60x48	2LYQB-40/1.0	1.0	40	19.81	22	750
120		2LYQB-37/1.2	1.2	37	21.99	22	
121		2LYQB-35/1.5	1.5	35	26.00	30	
122		2LYQB-31/1.8	1.8	31	28.18	30	
123	J60x52	2LYQB-93/0.6	0.6	93	27.64	30	1450
124		2LYQB-87/1.0	1.0	87	43.10	45	
125		2LYQB-82/1.2	1.2	82	48.74	55	
126		2LYQB-76/1.5	1.5	76	56.47	75	
127	J60x52	2LYQB-62/0.6	0.6	62	18.42	18.5	980
128		2LYQB-58/1.0	1.0	58	28.73	30	
129		2LYQB-54/1.2	1.2	54	32.10	37	
130		2LYQB-50/1.5	1.5	50	37.15	45	
131	J60x52	2LYQB-46/0.6	0.6	46	13.67	15	750
132		2LYQB-43/1.0	1.0	43	21.30	22	
133		2LYQB-40/1.2	1.2	40	23.78	30	
134		2LYQB-37/1.5	1.5	37	27.49	30	



135	J60x56	2LYQB-99/0.6	0.6	99	29.42	30	1450
136		2LYQB-93/1.0	1.0	93	46.07	55	
137		2LYQB-87/1.2	1.2	87	51.72	55	
138	J60x56	2LYQB-66/0.6	0.6	66	19.61	22	980
139		2LYQB-62/1.0	1.0	62	30.1	30	
140		2LYQB-58/1.2	1.2	58	34.48	37	
141	J60x56	2LYQB-49/0.6	0.6	49	14.56	15	750
142		2LYQB-46/1.0	1.0	46	25.1	30	
143		2LYQB-43/1.2	1.2	43	25.56	30	
144	J100x40	2LYQB-70/1.0	1.0	70	34.67	37	1450
145		2LYQB-65/1.5	1.5	65	48.30	55	
146		2LYQB-48/2.0	2.0	48	47.56	55	
147		2LYQB-44/2.5	2.5	44	54.49	55	
148		2LYQB-40/3.0	3.0	40	59.45	75	
149		2LYQB-34/3.5	3.5	34	58.96	75	
150	J100x40	2LYQB-46/1.0	1.0	46	22.78	30	980
151		2LYQB-43/1.5	1.5	43	31.95	37	
152		2LYQB-32/2.0	2.0	32	31.70	37	
153		2LYQB-28/2.5	2.5	28	34.67	37	
154		2LYQB25//3.0	3.0	25	37.15	45	
155		2LYQB-22/3.5	3.5	22	38.14	45	
156	J100x40	2LYQB-112/1.0	1.0	120	59.55	75	750
157		2LYQB-108/1.2	1.2	108	64.20	75	
158		2LYQB-100/1.5	1.5	100	74.31	75	
159		2LYQB-85/2.0	2.0	85	84.22	90	
160	JJ100x56	2LYQB-120/0.6	0.6	120	35.67	37	1450
161		2LYQB-112/1.0	1.0	120	59.45	75	
162		2LYQB-108/1.2	1.2	108	64.20	75	
163		2LYQB-100/1.5	1.5	100	74.31	75	
164		2LYQB-85/2.0	2.0	85	84.22	90	
165	J100x56	2LYQB-80/0.6	0.6	80	23.78	30	980
166		2LYQB-75/1.0	1.0	75	37.15	45	
167		2LYQB-72/1.2	1.2	72	42.80	45	
168		2LYQB-65/1.5	1.5	65	48.30	55	
169		2LYQB-56/2.0	2.0	56	61.03	75	
170	J100x56	2LYQB-60/0.6	0.6	60	19.61	22	750
171		2LYQB-54/1.2	1.2	54	32.10	37	
172		2LYQB-50/1.5	1.5	50	37.15	45	
173	J100x60	2LYQB-130/0.6	0.6	128	38.48	45	1450
174		2LYQB-125/1.0	1.0	125	61.93	75	
175		2LYQB-115/1.2	1.2	115	68.36	75	
177	J100x60	2LYQB-107/1.5	1.5	107	79.51	90	1450
178		2LYQB-96/2.0	2.0	96	95.12	110	
179	J100x60	2LYQB-87/0.6	0.6	87	25.86	30	980
180		2LYQB-83/1.0	1.0	83	41.11	45	
181		2LYQB-75/1.2	1.2	75	44.58	45	
182		2LYQB-71/1.5	1.5	71	52.76	55	
183		2LYQB-64/2.0	2.0	64	64.64	75	



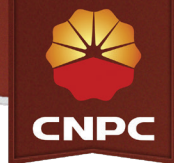
184	J100x60	2LYQB-62/1.0	1.0	62	29.89	30	750
185		2LYQB-57/1.2	1.2	57	33.88	37	
169		2LYQB-53/1.5	1.5	53	39.38	45	
170	J100x60	2LYQB-48/2.0	2.0	48	47.56	55	750
171	J100x64	2LYQB-138/0.6	0.6	138	41.02	45	1450
172		2LYQB-132/1.0	1.0	132	65.39	75	
173		2LYQB-122/1.2	1.2	122	72.52	75	
174		2LYQB-113/1.5	1.5	113	83.97	90	
175	J100x64	2LYQB-92/0.6	0.6	92	27.34	30	980
176		2LYQB-88/1.0	1.0	88	43.59	45	
177		2LYQB-81/1.2	1.2	81	48.15	55	
178		2LYQB-75/1.5	1.5	75	55.73	75	
179	J100x64	2LYQB-69/0.6	0.6	69	20.51	22	750
180		2LYQB-66/1.0	1.0	66	32.69	37	
181		2LYQB-60/1.2	1.2	60	35.67	37	
182		2LYQB-56/1.5	1.5	56	41.61	45	
183	J100x72	2LYQB-155/0.6	0.6	155	46.073	55	1450
184		2LYQB-148/1.0	1.0	148	73.32	75	
185		2LYQB-137/1.2	1.2	137	81.44	90	
186		2LYQB-120/1.5	1.5	120	89.17	90	
187	J100x72	2LYQB-103/0.6	0.6	103	30.61	37	980
188		2LYQB-99/1.0	1.0	99	49.04	55	
189		2LYQB-90/1.2	1.2	90	53.50	55	
190		2LYQB-80/1.5	1.5	80	59.45	75	
191	J100x72	2LYQB-74/1.0	1.0	74	36.66	37	750
192		2LYQB-67/1.2	1.2	67	39.83	45	
193		2LYQB-60/1.5	1.5	60	44.58	45	
194	J100x80	2LYQB-170/0.6	0.6	170	50.53	55	1450
195		2LYQB-164/1.0	1.0	164	81.24	90	
196		2LYQB-150/1.2	1.2	150	89.17	90	
197	J100x80	2LYQB-112/0.6	0.6	112	33.29	37	980
198		2LYQB-108/1.0	1.0	108	53.50	55	
199		2LYQB-100/1.2	1.2	100	59.45	75	
200	JJ100x80	2LYQB-84/0.6	0.6	84	24.96	30	750
201		2LYQB-80/1.0	1.0	80	44.14	45	
202		2LYQB-75/1.2	1.2	75	44.58	45	
203	J100x88	2LYQB-185/0.6	0.6	185	54.99	55	1450
204		2LYQB-180/0.8	0.8	180	71.34	75	
205		2LYQB-165/1.0	1.0	165	81.74	90	
206	J100x88	2LYQB-124/0.6	0.6	124	36.85	45	980
207		2LYQB-120/0.8	0.8	120	47.56	55	
208		2LYQB-110/1.0	1.0	110	54.49	55	
209	J100x88	2LYQB-92/0.6	0.6	92	27.34	30	750
210		2LYQB-90/0.8	0.8	90	35.67	37	
211		2LYQB-82/1.0	1.0	82	40.62	45	
212	J100x96	2LYQB-200/0.6	0.6	200	60.45	75	1450
213		2LYQB-190/0.8	0.8	190	75.1	75	
214		2LYQB-178/1.0	1.0	178	88.18	90	

215	J100x96	2LYQB-134/0.6	0.6	134	39.83	45	980
216		2LYQB-130/0.8	0.8	130	54.112	55	
217		2LYQB-1118/1.0	1.0	118	58.45	75	
218	J200x56	2LYQB-210/0.6	0.6	210	62.42	75	1450
219		2LYQB-200/1.0	1.0	200	99.08	110	
220		2LYQB-198/1.2	1.2	198	117.71	132	
221		2LYQB-180/1.5	1.5	180	131.98	132	
222		2LYQB-170/2.0	2.0	170	168.44	180	
223	J200x56	2LYQB-140/0.6	0.6	140	41.65	45	980
224		2LYQB-135/1.0	1.0	135	66.88	75	
225		2LYQB-132/1.2	1.2	132	78.47	90	
226		2LYQB-120/1.5	1.5	120	89.17	90	
227		2LYQB-110/2.0	2.0	110	108.99	110	
228		2LYQB-106/0.6	0.6	106	31.50	37	
229		2LYQB-100/1.0	1.0	100	49.54	55	
230	J200x56	2LYQB-98/1.2	1.2	98	58.26	75	750
231		2LYQB-90/1.5	1.5	90	66.88	75	
232		2LYQB-84/2.0	2.0	84	83.23	90	
233	J200Zx40	2LYQB-75/1.5	1.5	75	61.30	75	1450
234		2LYQB-70/2.0	2.0	70	69.35	75	
235		2LYQB-65/2.5	2.5	65	80.55	90	
236		2LYQB-60/3.0	3.0	60	98.09	110	
237		2LYQB-45/3.5	3.5	45	86.83	110	
238	J200x60	2LYQB-225/0.6	0.6	225	66.88	75	1450
239		2LYQB-215/1.0	1.0	215	106.54	110	
240		2LYQB-210/1.2	1.2	210	124.84	132	
241		2LYQB-192/1.5	1.5	192	149	150	
242		2LYQB-180/2.0	2.0	180	178.35	180	
243	J200x60	2LYQB-150/0.6	0.6	150	49.04	55	980
244		2LYQB-144/1.0	1.0	144	74.57	75	
245		2LYQB-140/1.2	1.2	140	87.4	90	
246		2LYQB-128/1.5	1.5	128	99.84	110	
247		2LYQB-120/2.0	2.0	120	126.25	132	
248	J200x60	2LYQB-112/0.6	0.6	112	36.78	45	750 jh
249		2LYQB-108/1.0	1.0	108	53.50	55	
250		2LYQB-105/1.2	1.2	105	68.66	75	
251		2LYQB-96/1.5	1.5	96	71.34	75	
252		2LYQB-90/2.0	2.0	90	89.17	90	
253	JJ200x64	2LYQB-238/0.6	0.6	238	74.35	75	1450
254		2LYQB-228/1.0	1.0	228	108.99	110	
255		2LYQB-216/1.2	1.2	216	128.41	132	
256		2LYQB-200/1.5	1.5	200	148.62	150	
257	J200x64	2LYQB-159/0.6	0.6	159	49.38	55	980
258		2LYQB-152/1.0	1.0	152	78.98	90	
259		2LYQB-144/1.2	1.2	144	85.60	90	
260		2LYQB-136/1.5	1.5	136	101.06	110	



261	J200x64	2LYQB-120/0.6	0.6	120	37.52	45	750
262		2LYQB-114/1.0	1.0	114	62.18	75	
263		2LYQB-108/1.2	1.2	108	64.20	75	
264		2LYQB-100/1.5	1.5	100	74.31	75	
265	J200x72	2LYQB-266/0.6	0.6	266	79.06	90	1450
266	J200x72	2LYQB-256/1.0	1.0	256	132.1	132	1450
267		2LYQB-242/1.2	1.2	242	149.98	150	
268		2LYQB-230/1.5	1.5	230	188.5	200	
269	J200x72	2LYQB-180/0.6	0.6	180	58.2	75	980
270		2LYQB-170/1.0	1.0	170	88.01	90	
271		2LYQB-162/1.2	1.2	162	100.64	110	
272		2LYQB-145/1.5	1.5	145	107.75	110	
273	J200x72	2LYQB-132//0.6	0.6	132	41.46	45	750
274		2LYQB-127/1.0	1.0	127	66.01	75	
275		2LYQB-120/1.2	1.2	120	75.10	75	
276		2LYQB-115/1.5	1.5	115	89.68	90	
277	J200x80	2LYQB-295//0.6	0.6	295	87.68	90	1450
278		2LYQB-285/1.0	1.0	285	147.54	150	
279		2LYQB-270/1.2	1.2	270	167.73	180	
280	J200x80	2LYQB-196//0.6	0.6	196	61.38	75	980
281		2LYQB-185/1.0	1.0	185	87.9	90	
282		2LYQB-170/1.2	1.2	170	101.65	110	
283	J200x80	2LYQB-147//0.6	0.6	147	43.65	45	750
284		2LYQB-142/1.0	1.0	142	73.99	75	
285		2LYQB-135/1.2	1.2	135	80.25	90	
286	J200x88	2LYQB-324//0.6	0.6	324	100.79	110	1450
287		2LYQB-310/1.0	1.0	310	153.57	160	
288		2LYQB-300/1.2	1.2	300	178.35	180	
289	J200x88	2LYQB-217//0.6	0.6	217	64.50	75	980
290		2LYQB-208/1.0	1.0	208	108.566	110	
291		2LYQB-200/1.2	1.2	200	118.90	132	
292	J200x88	2LYQB-162//0.6	0.6	162	53.21	75	750
293		2LYQB-156/1.0	1.0	156	80.75	90	
294		2LYQB-148/1.2	1.2	148	87.98	90	
295	J200x96	2LYQB-350/0.6	0.6	350	104.03	110	1450
296		2LYQB-340/1.0	1.0	340	177.49	180	
297	J200x96	2LYQB-237//0.6	0.6	237	70.44	75	980
298		2LYQB-210/1.0	1.0	210	104.03	110	
299	J200x96	2LYQB-177//0.6	0.6	177	52.61	55	750
300		2LYQB-170/1.0	1.0	170	84.22	90	
301	J200x112	2LYQB-400//0.6	0.6	400	118.90	132	1450
302		2LYQB-390/1.0	1.0	390	193.21	200	
303	J200x112	2LYQB-268//0.6	0.6	268	79.66	90	980
304		2LYQB-260/1.0	1.0	260	128.80	132	
305	J200x112	2LYQB-200//0.6	0.6	200	59.45	75	750
301		2LYQB-180/1.0	1.0	180	89.175	90	
306	J350x72	2LYQB-360//0.6	0.6	360	89.175	90	1450
307		2LYQB-356/1.0	1.0	356	194.01	200	
308		2LYQB-350/1.2	1.2	350	208.07	220	
309		2LYQB-315/1.5	1.5	315	234.08	250	

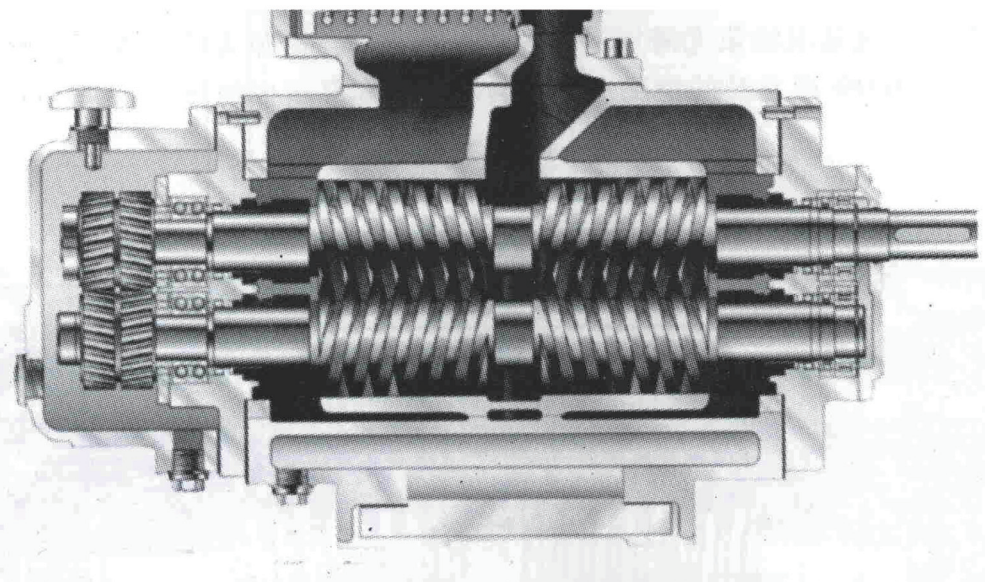
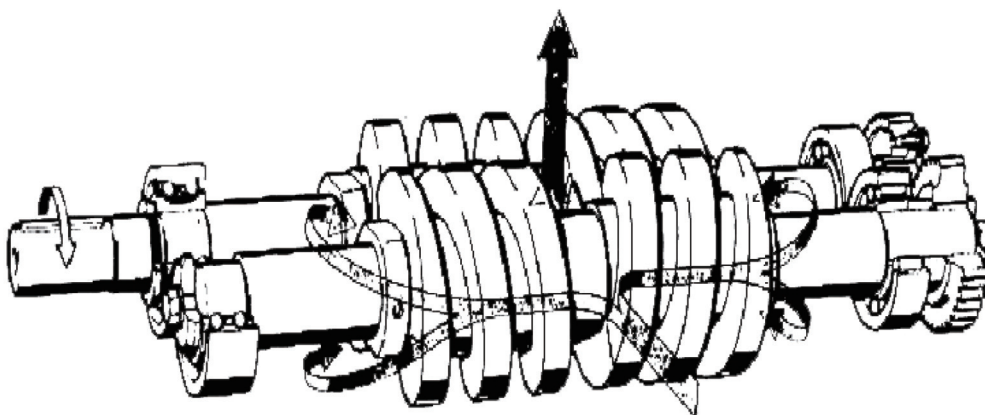




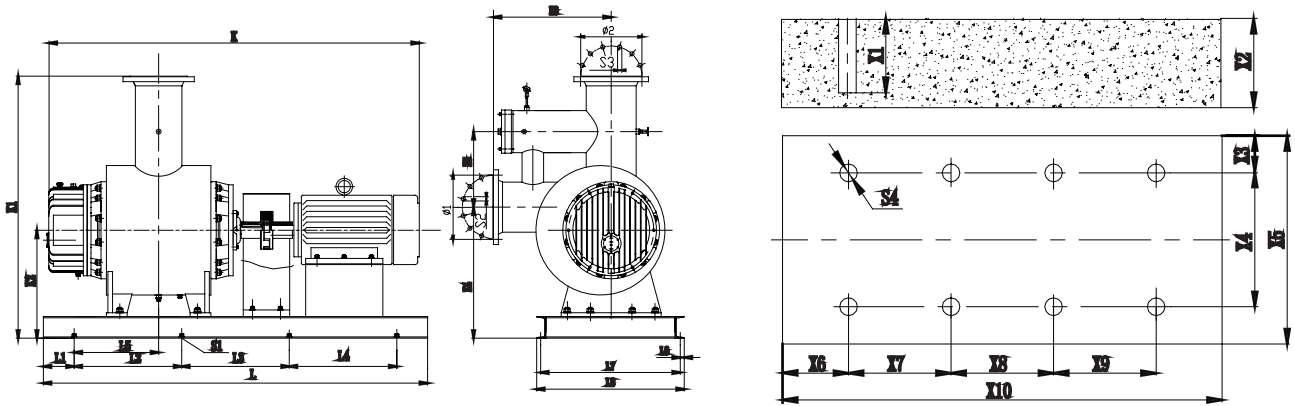
310	J350x72	2LYQB-240//0.6	0.6	240	78.86	90	980	
311		2LYQB-220/1.0	1.0	220	108.99	110		
312		2LYQB210/1.2	1.2	10	124.84	132		
313		2LYQB-200/1.5	1.5	200	148.62	150		
314	J350x80	2LYQB-404//0.6	0.6	404	130.07	160	1450	
315		2LYQB-380/1.0	1.0	380	188.25	200		
316		2LYQB-350/1.2	1.2	350	208.07	220		
317	J350x80	2LYQB-268//0.6	0.6	268	79.66	90	980	
318		2LYQB-254/1.0	1.0	254	125.83	132		
319		2LYQB-230/1.2	1.2	230	153.35	160		
320	J350x80	2LYQB-200//0.6	0.6	200	65.72	75	750	
321		2LYQB-190/1.0	1.0	190	94.129	110		
322		2LYQB-170/1.2	1.2	170	101.06	110		
323	J350x88	2LYQB-440//0.6	0.6	440	130.79	132	1450	
324		2LYQB-400/1.0	1.0	400	198.16	200		
325		2LYQB-370/1.2	1.2	370	219.96	220		
326	J350x88	2LYQB-290//0.6	0.6	290	86.202	90	980	
327		2LYQB-260/1.0	1.0	260	128.80	132		
328		2LYQB-230/1.2	1.2	230	136.73	160		
329	J350x96	LYQB-475/0.6	0.6	475	156.81	180	1450	
330		LYQB-440/1.0	1.0	440	217.98	220		
331	350x96	LYQB-320//0.6	0.6	320	95.120	110	980	
332		LYQB-300/1.0	1.0	300	148.62	160		
333		2LYQB-240//0.6	0.6	240	78.47	90		750
334		2LYQB-228/1.0	1.0	228	108.99	110		
335	350x112	2LYQB-550//0.6	0.6	550	181.19	200	1450	
336		2LYQB-530/1.0	1.0	530	262.57	280		
337	350x112	2LYQB-368//0.6	0.6	368	145.85	160	980	
338		2LYQB-355/1.0	1.0	355	175.51	185		
339	350x112	2LYQB-276//0.6	0.6	276	90.24	110	750	
340		2LYQB-250/1.0	1.0	250	123.85	132		
341	350x120	2LYQB-580//0.6	0.6	580	178.64	185	1450	
342		2LYQB-520/0.8	0.8	520	206.09	220		
343		2LYQB-556/1.0	1.0	500	247.78	250		
344	350x120	2LYQB-388//0.6	0.6	388	115.06	132	980	
345		2LYQB-372/0.8	0.8	372	147.43	160		
346		2LYQB-334/1.0	1.0	334	168.44	185		
347	350x120	2LYQB-290//0.6	0.6	290	95.14	110	750	
348		2LYQB-278/0.8	0.8	278	110.18	132		
349		2LYQB-250/1.0	1.0	250	123.85	132		
350	350x128	2LYQB-610//0.6	0.6	610	181.32	200	1450	
351		2LYQB-585/0.8	0.8	585	231.94	250		
352		2LYQB-525/1.0	1.0	525	260.09	280		
353	350x128	2LYQB-408/0.6	0.6	408	121.63	132	980	
354		2LYQB-360/0.8	0.8	360	142.15	160		
355		2LYQB-320/1.0	1.0	320	158.53	160		
356	350x128	2LYQB-240/0.6	0.6	240	72.796	90	750	
357		2LYQB-210/0.8	0.8	210	83.230	90		
358		2LYQB-190/1.0	1.0	190	94.129	110		

359	350x144	2LYQB-680/0.6	0.6	680	202.13	220	1450
360		2LYQB-610/0.8	0.8	610	241.76	250	
361	350x144	2LYQB-450/0.6	0.6	450	133.76	160	980
362		2LYQB-400/0.8	0.8	400	158.53	160	
363	350x144	2LYQB-330/0.6	0.6	330	98.092	110	750
364		2LYQB-290/0.8	0.8	290	114.93	132	
365	350x160	2LYQB-750/0.6	0.6	750	220.93	250	1450
366		2LYQB-670/0.8	0.8	670	265.54	280	
367	350x160	2LYQB-500/0.6	0.6	500	148.62	160	980
368		2LYQB-450/0.8	0.8	450	178.35	185	

### Structure Drawings for Twin Screw Pump:



## Installation size



Foundation No	L	L1	L2	L3	L4	L5	L6	L7	L8
J30×	2000	250	500	500	500		25	610	660
L60×	2400	300	600	600	600		25	700	750
L100×	2400	150	600	700	700	550	25	750	800
L200×	2500	200	700	700	700	500	25	910	960
L350×	2800	350	700	700	700	400	30	925	985
L200Z×	2500	200	700	700	700	500	25	910	960

Foundation No	K1	K2	K3	K4	K5	K6
J30×	975	525	1850	605		450
L60×	1160	555	2280	655		425
L100×	1355	615	2120	735	370	610
L200×	1520	670	2320	820	400	800
L350×	1795	795	2870	945	490	800
L200Z×	1520	670	2390	820	400	800

Foundation No	ϕ 1	ϕ 2	S1	S2	S3	S4
J30×	ϕ 190	ϕ 190	8-ϕ 26	8-ϕ 26	8-ϕ 26	8-ϕ 120
L60×	ϕ 250	ϕ 250	8-ϕ 26	8-ϕ 26	8-ϕ 26	8-ϕ 120
L100×	ϕ 320	ϕ 320	8-ϕ 26	12-ϕ 30	12-ϕ 30	8-ϕ 120
L200×	ϕ 385	ϕ 385	8-ϕ 26	12-ϕ 33	12-ϕ 33	8-ϕ 120
L350×	ϕ 430	ϕ 430	8-ϕ 26	16-ϕ 30	16-ϕ 30	8-ϕ 120
L200Z×	ϕ 320	ϕ 320	8-ϕ 26	12-ϕ 30	12-ϕ 30	8-v120

Foundation No	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10
J30×	500	600	295	610	1200	500	500	500	500	2500
L60×	500	600	250	700	1200	600	600	600	600	3000
L100×	500	600	275	750	1300	450	700	700	700	3000
L200×	500	600	245	910	1400	450	700	700	700	3000
L350×	500	600	288	925	1500	550	700	700	700	3000
L200Z×	500	600	245	910	1400	450	700	700	700	3000