



Instruction manual for HG chemical pump



四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd

Contents

1. Overview
2. Performance sheet
3. Assembly and disassembly
4. Installation
5. Operation
6. Notes on mechanical seals
7. Trouble shooting
8. Pump sets of supply range

四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd

1. Overview

HG series chemical process pumps are single-stage single-suction cantilever centrifugal pumps. The pump has excellent performance, good anti-cavitation performance, strong load-bearing capacity, long service life of mechanical seals and bearings, reliable operation, novel structure, and is easy maintenance. The pump rotates clockwise when viewed from the drive end.

It is suitable for transporting pure liquid or liquid containing trace amounts of fine particles, and the medium temperature is 80°C-240°C, neutral or corrosive liquid.

Applications include:

- ✓ Refineries, petrochemical industry, coal processing industry and cryogenic engineering
- ✓ Chemical industry, paper making, pulp industry, sugar industry and general process industry
- ✓ Water supply plant, sea water desalination plant
- ✓ Heating and air conditioning systems
- ✓ Power plant
- ✓ Environmental pollution protection project
- ✓ Shipbuilding and offshore industry

Transporting media include:

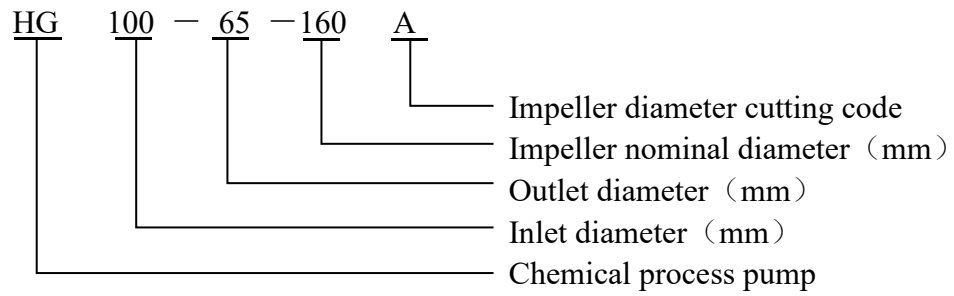
- Inorganic and organic acids
- Liquid petrochemical products, organic compounds, and other corrosive raw materials and products.

Technical parameter:

- Flow range: 2—480m³/h

● Head range: 3—150m

Model type instruction:



四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd

Design feature	Advantage	Economic benefit
Thickened heavy-duty shaft	The deflection of the shaft at the mechanical seal is less than 0.05mm; Long mechanical seal life; Bearing life doubled	Reduce maintenance costs for mechanical seals and bearings Reduce equipment downtime losses due to pump failure
Forced internal cooling cartridge mechanical seal; Spacious shaft seal cavity	Improved mechanical seal cooling and lubrication conditions; Avoid the accumulation of solid particles and gas on the sealing surface; Cartridge type requires no adjustment of axial compression of the mechanical seal	Extend mechanical seal life Reduce pump failures and downtime Install the mechanical seal quickly and reliably
Impeller and shaft are threaded; The impeller inlet is a guide cone; The pump body inlet is equipped with an airfoil cross-section vortex elimination plate	The required NPSH is significantly reduced; Eliminates risk of impeller nut loosening; The seal between the shaft and the impeller is reliable and the shaft is not easily corroded	For harsh cavitation conditions, users do not have to raise settings, saving investment and improving pump reliability.
Simple and fast rotor axial adjustment method	Maintain low pressure in the shaft seal cavity for a long time and reduce axial force	Extended mechanical seal and bearing life
Extra large volume oil pool with water-cooling jacket at the bottom of the pool	The temperature of the lubricating oil decreases, making it suitable for transporting high-temperature media	Extend bearing life Expand the scope of use
The bearing box and the middle connecting seat are integrated into one, the middle seat is spacious	The pump support has high rigidity, which reduces the impact of pipeline load. The mechanical seal and piping	Extend mechanical seal and bearing life Avoid eccentric wear of pump

Sichuan Zhongying Industrial Pump CO., LTD

and the window is wide	are convenient for maintenance.	body sealing ring
Pump body and pump cover with heating or cooling jacket	Used to transport molten sulfur, polymer or high temperature media	Expand the scope of use of the pump
Pump body center support	Suitable for high temperature operation (150—350℃)	Improve the reliability of pumps for special media
Counter Pressure Packing Seal	The packing pressing force distribution is consistent with the sealing pressure distribution	Excellent sealing effect and long packing life
Secondary impeller power seal	For high solids content and low pump inlet pressures	Lower cost than mechanical seals for slurry
highly interchangeable products	Reduced number of spare parts and shorter lead time	Saving spare parts costs



四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd

Structural cross-section

Parts		Materials		
			Cast steel	Stainless steel
			ASTM	ASTM
1	Casing			CA-15 CA-15M
2	Seal ring	grey cast iron	WCA	CF-3 (304L)
3	Impeller		WCB	CF-8 (304)
4	Pump cover		WCC	CF-8M (316)
				CF-3M (316L)
5	Sealing gasket			CN-7M (320)
6	Shaft			CD-4MCu
7	Sealing end cap			asbestos rubber
8	Shaft sleeve			3Cr13
9	Front end cap			CD-4Mcu
10	Front bearing			CD-4Mcu
11	Bearing housing			Gray cast iron; Ductile iron; Cast steel
12	O-ring			Deep groove ball bearings
13	Rear bearing			Gray cast iron; Ductile iron; Cast steel
14	Bearing cover			Oil resistant rubber
				Double row radial thrust ball bearing
				Gray cast iron; Ductile iron; Cast steel

15	lock nut and washer	Steel
16	Oil seal	Oil Resistant Rubber

Structure description

The impeller and the shaft are threaded. When the pump is running or stopped, the medium flows back. The direction of the force acting on the impeller is counterclockwise, tightening the impeller. The impeller uses back blades and an orifice ring to balance the shaft.

The pump cover is positioned with the bearing box through a stop, and the pump cover is fixed and clamped in the middle through the connection between the pump body and the bearing box. The pump body adopts axial suction, radial discharge, foot support type, and can be directly fixed on the base. The side clearance between the impeller back blade and the pump cover can be adjusted by adjusting screws.

For easy disassembly, the structure of the pump is designed in the form of a rear door, so that the impeller, shaft, shaft seal and bearing components can be removed without moving the pump inlet and outlet pipes (that is, the pump body does not move) during maintenance.

The flushing and cooling interfaces of the pump body, pump cover, bearing box and sealing end cover all adopt tapered pipe threads, which increases the reliability of pipeline sealing. The bearings are rolling bearings, oil lubricated, the oil pool has a large volume, and there is a water-cooling clamp at the bottom of the pool. set. Depending on the working conditions, the pump body and pump cover can be equipped with heating or cooling jackets to improve the reliability of the pump when used with special media.

Shaft seal: cartridge-type mechanism seal and spacious shaft seal cavity.

The large tapered cavity of the shaft seal box places the mechanical seal in a spacious cavity. At the same time, it cooperates with the back blade and the guide vane on the inner wall of the cavity to form a self-flushing flow field in the shaft seal box, thereby eliminating the need for contact. External flushing fluid realizes self-flushing; it also

quickly takes away the heat generated on the friction surface, avoiding the accumulation of solid particles (<5%) in the medium on the contact surface of the rotating ring and the stationary ring, reducing wear and prolonging the mechanical seal life span.

The compensating element (spring) is designed to be isolated from the medium, reducing corrosion resistance requirements and costs, while also extending service life. The addition of a deflector cylinder inside the seal effectively realizes forced circulation inside the seal and further extends the life of the mechanical seal.



四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd

2. Performance sheet

(n=2900r/min)

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG50-32-125	7.5	23.0	1.04	45	1.0	Y 90L-2	Y 90L-2	Y 100L-2
	12.5	20.0	1.31	52	1.2	YB	YB	YB
	15.0	18.0	1.44	51	1.5	2.2	2.2	3.0
HG50-32-125A	6.8	18.8	0.81	43	1.1	Y 90S-2	Y 90L-2	Y 90L-2
	11.3	16.4	0.99	51	1.2	YB	YB	YB
	13.6	14.7	1.08	50	1.6	1.5	2.2	2.2
HG50-32-125B	6.2	15.7	0.66	40	1.2	Y 90S-2	Y 90L-2	Y 90L-2
	10.3	13.6	0.79	48	1.4	YB	YB	YB
	12.4	12.3	1.89	47	1.8	1.5	2.2	2.2
HG50-32-160	7.5	34.5	1.95	36	0.9	Y 112M-2	Y 112M-2	Y 132S-2
	12.5	32.0	2.27	48	1.1	YB	YB	YB
	15.0	30.0	2.40	51	1.4	4	4	5.5
HG50-32-160A	6.8	28.5	1.51	35	0.9	Y 100L-2	Y 100L-2	Y 112M-2
	11.3	26.4	1.77	46	1.2	YB	YB	YB
	13.6	24.8	1.91	48	1.5	3	4	4
HG50-32-160B	6.2	23.0	1.12	34	1.1	Y 100L-2	Y 100L-2	Y 112M-2
	10.3	21.5	1.33	45	1.4	YB	YB	YB
	12.4	20.0	1.46	46	1.6	3	3	4
HG50-32-200	7.5	52.5	3.57	30	1.0	Y 132S1-2	Y 132S2-2	Y 160M1-2
	12.5	50.0	4.10	41	1.2	YB	YB	YB
	15	48.0	4.46	44	1.6	5.5	7.5	11
HG50-32-200A	6.8	43.7	2.90	28	1.1	Y 112M-2	Y 132S1-2	Y 132S2-2
	11.3	42.0	3.55	40	1.2	YB	YB	YB
	13.6	40.0	3.47	43	1.6	4	5.5	7.5
HG50-32-200B	6.5	38.5	2.63	26	1.2	Y 112M-2	Y 132S1-2	Y 132S2-2
	10.8	37.0	2.86	38	1.4	YB	YB	YB
	13.0	35.0	2.95	42	1.8	4	5.5	7.5
HG50-32-250	7.5	82.0	6.98	24	1.1	Y 160M1-2	Y 160M2-2	Y 180M-2
	12.5	80.0	8.00	34	1.3	YB	YB	YB
	15.0	70.6	8.45	38	1.8	2.2	15	18.5
HG50-32-250A	7.0	72.0	6.24	22	1.2	Y 160M1-2	Y 160M1-2	Y 160M2-2
	11.5	70.0	6.87	32	1.4	YB	YB	YB
	15.0	69.0	7.52	35	1.9	11	11	15
HG50-32-250B	6.2	58.5	4.94	20	1.3	Y 132S2-2	Y 160M1-2	Y 160M2-2
	10.3	58.0	5.61	29	1.5	YB	YB	YB
	12.4	57.6	6.27	31	2.0	7.5	11	15
HG65-50-125	15	21.2	1.84	47	1.2	Y 100L-2	Y 112M-2	Y 132S1-2
	25	20.0	2.16	63	1.4	YB	YB	YB
	30	18.5	2.36	64	1.7	3	4	5.5
HG65-50-125A	13.6	17.5	1.40	40	1.4	Y 100L-2	Y 100L-2	Y 112M-2
	22.7	16.5	1.65	62	1.5	YB	YB	YB
	27.2	15.5	1.82	63	1.9	3	3	4
HG65-50-125B	12.8	14.5	1.15	44	1.4	Y 90L-2	Y 90L-2	Y 100L-2
	21.3	13.5	1.33	59	1.5	YB	YB	YB
	25.6	12.5	1.45	60	2.0	2.2	2.2	3
HG65-50-160	15.0	36.0	3.06	44	1.2	Y 132S1-2	Y 132S1-2	Y 160M1-2
	25.0	32.0	3.76	59	1.3	YB	YB	YB
	30.0	30.0	4.15	60	1.6	5.5	7.5	11
HG65-50-160A	13.6	30.0	2.31	48	1.2	Y 112M-2	Y 132S1-2	Y 132S2-2
	22.7	27.0	2.93	57	1.4	YB	YB	YB
	27.2	25.0	3.20	58	1.7	4	5.5	7.5
HG65-50-160B	12.8	24.5	1.82	47	1.3	Y 100L-2	Y 112M-2	Y 132S1-2
	21.3	22.0	2.32	55	1.5	YB	YB	YB

Sichuan Zhongying Industrial Pump CO., LTD

	25.6	20.0	2.49	56	1.9	3	4	5.5
HG65-40-200	15.0	53.0	5.28	41	1.2	Y 160M1-2	Y 160M1-2	Y 160M2-2
	25.0	50.0	6.43	53	1.3	YB	YB	YB
	30.0	47.5	7.19	54	1.6	11	11	15

n=2900r/min

Model type	Flow Q (m³/h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG65-40-200A	13.6	44	4.07	40	1.3	Y 132S2-2	Y 160M1-2	Y 160M1-2
	22.7	41	4.97	51	1.3	YB	YB	YB
	27.2	39	5.56	52	1.7	7.5	11	11
HG65-40-200B	12.8	38	3.48	38	1.3	Y 132S2-2	Y 132S2-2	Y 160M1-2
	21.3	34.5	4.18	48	1.5	YB	YB	YB
	25.6	33	4.70	49	2.0	7.5	7.5	11
HG65-40-250	15	81.5	9.55	35	1.5	Y 160L-2	Y 180M-2	Y 200L-2
	25	80	11.59	47	1.7	YB	YB	YB
	30	78.5	12.33	52	2.4	18.5	22	30
HG65-40-250A	14	71	7.96	34	1.5	Y 160M2-2	Y 160L-2	Y 180M-2
	23.4	70	9.91	45	1.7	YB	YB	YB
	28	68.6	10.46	50	2.5	15	18.5	22
HG65-40-250B	13.2	63	6.86	33	1.6	Y 160M2-2	Y 160M2-2	Y 180M-2
	22	61.5	8.40	44	1.9	YB	YB	YB
	26.4	60.5	8.87	49	2.7	15	15	22
HG65-40-315	15	127	18.53	28	1.4	Y 200L2-2	Y 225M-2	Y 250M-2
	25	125	20.76	41	1.7	YB	YB	YB
	30	124	23.02	44	2.2	37	45	55
HG65-40-315A	14	113	15.67	27	1.5	Y 200L1-2	Y 225M-2	Y 225M-2
	23.4	110	17.44	40	1.8	YB	YB	YB
	28	108.5	19.24	43	2.4	30	45	45
HG65-40-315B	13.3	98	13.65	26	1.5	Y 180M-2	Y 200L1-2	Y 200L2-2
	22.2	96.5	15.77	37	1.9	YB	YB	YB
	26.6	95.5	16.87	41	2.5	22	30	37
HG80-65-125	30	23.2	3.16	60	1.6	Y 132S1-2	Y 132S2-2	Y 160M1-2
	50	20	3.90	70	1.9	YB	YB	YB
	60	17.5	4.27	67	2.7	5.5	7.5	11
HG80-65-125A	27.2	19.2	2.50	57	1.7	Y 112M-2	Y 132S1-2	Y 132S2-2
	45.4	16.5	3.00	68	2.1	YB	YB	YB
	54.4	14	3.25	64	2.9	4	5.5	7.5
HG80-65-125B	24.4	15.5	1.87	55	1.9	Y 112M-2	Y 112M-2	Y 132S1-2
	40.7	13.0	2.25	64	2.3	YB	YB	YB
	48.8	11.5	2.50	61	3.1	4	4	5.5
HG80-65-160	30	36	5.07	58	1.3	Y 160M1-2	Y 160M1-2	Y 160M2-2
	50	32	6.40	68	1.7	YB	YB	YB
	60	28.5	7.17	65	2.6	11	11	15
HG80-65-160A	27.2	29	3.76	57	1.4	Y 132S2-2	Y 160M1-2	Y 160M2-2
	45.4	27.2	5.10	66	1.9	YB	YB	YB
	54.4	24	5.55	64	2.8	7.5	11	15
HG80-65-160B	25.4	25	3.26	53	1.5	Y 132S1-2	Y 132S2-2	Y 160M1-2
	42.2	23.4	4.20	64	2.0	YB	YB	YB
	50.7	20.4	4.54	62	3.1	5.5	7.5	11
HG80-50-200	30	55	8.32	54	1.3	Y 160M2-2	Y 160L-2	Y 200L1-2
	50	50	10.63	64	1.5	YB	YB	YB
	60	46	11.93	63	2.1	15	18.5	30
HG80-50-200A	27.2	45	6.30	53	1.5	Y 160M1-2	Y 160M2-2	Y 180M-2
	45.3	41	8.03	63	1.6	YB	YB	YB
	54.4	37.5	8.96	62	2.3	11	15	22
HG80-50-200B	24.4	36.5	4.66	52	1.5	Y 160M1-2	Y 160M1-2	Y 160L-2
	40.7	33.0	5.90	62	1.7	YB	YB	YB
	48.8	30.6	6.66	61	2.5	11	11	18.5
HG80-50-250	30.0	83.5	14.51	47	1.5	Y 200L1-2	Y 200L2-2	Y 225M-2

Sichuan Zhongying Industrial Pump CO., LTD

	50.0 60.0	80.0 76.0	18.46 20.36	59 61	1.7 2.3	YB 30	YB 37	YB 45
HG80-50-250A	28.2 47.0 56.3	74.0 70.2 67.0	12.63 15.49 17.41	45 58 59	1.6 1.9 2.4	Y 180M-2 YB 22	Y 200L1-2 YB 30	Y 200L2-2 YB 37

n=2900r/min

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG80-50-250B	26.4	63.0	10.3	44	1.6	Y 160L-2	Y 180M-2	Y 200L2-2
	44.0	62.3	13.10	57	2.0	YB	YB	YB
	52.8	60.5	15.00	58	2.6	18.5	22	37
HG80-50-315	30	126	22.88	45	1.5	Y 225M-2	Y 250M-2	Y 280S-2
	50	125	31.52	54	1.7	YB	YB	YB
	60	120	34.00	57	2.2	45	55	75
HG80-50-315A	28.2	111	19.34	44	1.5	Y 200L2-2	Y 250M-2	Y 280S-2
	47.0	107	26.34	52	1.8	YB	YB	YB
	56.4	105	29.32	55	2.3	37	55	75
HG80-50-315B	26.4	99	18.50	38	1.6	Y 200L1-2	Y 200L2-2	Y 250M-2
	44	97	23.40	50	2.0	YB	YB	YB
	52.8	93	26.50	41	2.5	30	37	55
HG100-80-125	60	24.5	5.88	68	2.2	Y 160M1-2	Y 160M2-2	Y 160L-2
	100	20	7.16	76	2.7	YB	YB	YB
	120	16	7.36	71	3.5	11	15	8.5
HG100-80-125A	55	20.5	4.58	67	2.2	Y 132S2-2	Y 160M1-2	Y 160M2-2
	91.5	17	5.88	72	2.9	YB	YB	YB
	110	13.2	6.00	66	3.7	7.5	11	15
HG100-80-125B	50	17.0	3.51	66	2.4	Y 132S2-2	Y 132S2-2	Y 160M1-2
	83	13.8	4.59	68	3.0	YB	YB	YB
	100	10.8	4.82	61	3.9	7.5	7.5	11
HG100-80-160	60	37	9.91	61	2.1	Y 160L-2	Y 180M-2	Y 200L1-2
	100	32	11.77	74	2.7	YB	YB	YB
	120	28	12.52	73	3.4	18.5	22	30
HG100-80-160A	54.6	31	7.68	69	2.2	Y 160M2-2	Y 160M2-2	Y 180M-2
	91	26.6	9.16	72	2.7	YB	YB	YB
	109.2	23	9.63	71	3.5	15	15	22
HG100-80-160B	51.2	27	6.39	59	2.2	Y 160M1-2	Y 160M2-2	Y 180M-2
	54	23	7.63	70	2.8	YB	YB	YB
	102.5	20.5	8.42	68	3.7	11	15	22
HG100-65-200	60	56	14.30	64	1.7	Y 180M-2	Y 200L1-2	Y 225M-2
	100	50	18.65	73	2.3	YB	YB	YB
	120	44	19.97	72	2.7	22	30	45
HG100-65-200A	54.5	46	11.81	63	2.0	Y 180M-2	Y 200L1-2	Y 200L2-2
	91	41	14.30	71	2.6	YB	YB	YB
	109	35.5	15.06	70	2.9	22	30	37
HG100-65-200B	49.4	38	8.38	61	2.1	Y 160M2-2	Y 180M-2	Y 200L1-2
	82.3	34.5	11.04	70	2.8	YB	YB	YB
	98.8	30	11.69	69	3.1	15	22	
HG100-65-250	60	88	24.36	59	1.5	Y 225M-2	Y 250M-2	Y 280S-2
	100	80	31.12	70	2.0	YB	YB	YB
	120	74.5	35.28	69	2.6	45	55	75
HG100-65-250A	56	77	20.10	55	1.7	Y 200L2-2	Y 225M-2	Y 280S-2
	93.4	70	26.60	67	2.3	YB	YB	YB
	112	64	29.60	65	2.9	37	45	75
HG100-65-250B	52.8	70	18.3	55	1.8	Y 200L1-2	Y 200L2-2	Y 250M-2
	88.0	62	22.16	67	2.5	YB	YB	YB
	105.6	56	24.42	66	3.1	30	37	55
HG100-65-315	60	132	45.80	49	1.6	Y 280S-2	Y 315S-2	Y 315M1-2
	100	125	53.20	64	2.3	YB	YB	YB
	120	120	60.33	65	3.0	75	110	132
HG100-65-315A	56	115	36.53	48	1.7	Y 280S-2	Y 280S-2	Y 315S-2
	93.4	109	44.67	62	2.5	YB	YB	YB

Sichuan Zhongying Industrial Pump CO., LTD

	112	104	49.56	64	3.1	75	75	110
HG100-65-315B	52.8	103.7	31.71	47	1.9	Y 250M-2	Y 280S-2	Y 315S-2
	88.0	96.7	38.60	60	2.6	YB	YB	YB
	105.6	90.7	43.68	61	3.3	55	75	110

n=2900r/min

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG125-100-200	120	61	28.88	69	2.9	Y 225M-2	Y 250M-2	Y 280S-2
	200	50	34.47	79	3.5	YB	YB	YB
	240	40	34.85	75	4.1	45	55	75
HG125-100-200A	109.2	50.0	21.86	68	2.9	Y 220L2-2	Y 225M-2	Y 280S-2
	182	41.0	26.40	77	36.6	YB	YB	YB
	218.5	32.5	26.50	73	4.3	37	45	75
HG125-100-200B	99.6	42	17.00	67	3.0	Y 200L1-2	Y 200L2-2	Y 225M-2
	166	35	20.80	76	3.8	YB	YB	YB
	199	27	21.00	70	4.6	30	37	45
HG125-100-250	120	91.0	45.75	65	2.8	Y 280S-2	Y 315S-2	Y 315M1-2
	200	80.0	57.33	76	3.5	YB	YB	YB
	240	74	64.50	75	4.0	75	110	132
HG125-100-250A	112	78	38.37	62	2.9	Y 280S-2	Y 280M-2	Y 315S-2
	186.5	70	47.40	75	3.4	YB	YB	YB
	224	63	51.93	74	4.0	75	90	110
HG125-100-250B	105.5	70	34.28	61	2.9	Y 250M-2	Y 280S-2	Y 315S-2
	175.5	62	38.97	74	3.6	YB	YB	YB
	211.0	56	44.08	73	4.3	55	90	110
HG125-100-315	120	130	68.52	62	2.7	Y 315M1-2	Y 315M2-2	
	200	125	94.56	72	3.5	YB	YB	
	240	118	104.2	74	4.0	132	160	
HG125-100-315A	113.0	116	59.54	60	2.7	Y 315M1-2	Y 315M2-2	
	188.4	110	80.70	70	3.6	YB	YB	
	226.0	105	89.76	72	4.1	132	160	
HG125-100-315B	106.0	100.0	48.92	59	2.9	Y 280M-2	Y 315M1-2	Y 315M2-2
	176.8	96.6	67.41	69	3.7	YB	YB	YB
	212.2	92.0	75.95	70	4.0	90	132	160

n=1450r/min

HG50-32-125	3.75	5.7	0.15	37	0.5	Y 801-4	Y 801-4	Y 802-4
	6.3	5.0	0.18	47	0.6	YB	YB	YB
	7.5	4.5	0.20	46	0.8	0.55	0.55	0.75
HG50-32-125A	3.4	4.7	0.12	36	0.5	Y 801-4	Y 801-4	Y 801-4
	5.7	4.1	0.14	46	0.6	YB	YB	YB
	6.8	3.7	0.13	45	1.0	0.55	0.55	0.55
HG50-32-125B	3.1	3.9	0.06	35	0.5	Y 801-4	Y 801-4	Y 801-4
	5.2	3.4	0.11	44	0.7	YB	YB	YB
	6.2	3.1	0.12	43	1.1	0.55	0.55	0.55
HG50-32-160	3.75	8.6	0.26	30	0.4	Y 801-4	Y 801-4	Y 802-4
	6.3	8.0	0.33	42	0.5	YB	YB	YB
	7.5	7.5	0.34	45	0.7	0.55	0.55	0.75
HG50-32-160A	3.4	7.1	0.22	29	0.4	Y 801-4	Y 801-4	Y 802-4
	5.7	6.6	0.26	41	0.5	YB	YB	YB
	6.8	6.2	0.28	43	0.8	0.55	0.55	0.75
HG50-32-160B	3.1	5.8	0.17	28	0.5	Y 801-4	Y 801-4	Y 801-4
	5.2	5.4	0.19	40	0.7	YB	YB	YB
	6.2	5.0	0.21	41	1.0	0.55	0.55	0.55
HG50-32-200	3.75	13.1	0.56	24	0.4	Y 802-4	Y 90S-4	Y 90L-4
	6.3	12.5	0.60	35	0.5	YB	YB	YB
	7.5	12.0	0.65	38	0.8	0.75	1.1	1.5
HG50-32-200A	3.4	10.9	0.44	23	0.4	Y 802-4	Y 90S-4	Y 90L-4
	5.6	10.5	0.47	34	0.5	YB	YB	YB
	6.8	10.0	0.50	37	0.8	0.75	1.1	1.5
HG50-32-200B	3.2	9.6	0.38	22	0.5	Y 801-4	Y 802-4	Y 90L-4

Sichuan Zhongying Industrial Pump CO., LTD

	5.3 6.4	9.22 8.7	0.40 0.43	33 35	0.6 1.0	YB 0.55	YB 0.75	YB 1.1
HG50-32-250	3.75 6.3 7.5	20.5 20 19.5	1.10 1.18 1.24	19 29 32	0.5 0.6 0.8	Y 90L-4 YB 1.5	Y 100L1-4 YB 2.2	Y 100L2-4 YB 3

n=1450r/min

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)			
						(y)			
						1	1.35	1.85	
HG50-32-250A	3.5 5.9 7.0	18.0 17.5 17.0	0.96 1.00 1.05	18 28 31	0.5 0.6 0.9	Y 90L-4 YB 1.5	Y 100L-4 YB 2.2	Y 100L2-4 YB 3	
	HG50-32-250B	3.2 5.4 6.4	15.0 14.7 14.3	0.77 0.80 0.83	17 27 30	0.5 0.7 1.0	Y 90L-2 YB 1.5	Y 90L-4 YB 1.5	Y 100L1-4 YB 2.2
		HG65-50-125	7.5 12.5 15.0	5.3 5.0 4.6	0.24 0.31 0.33	45 56 57	0.6 0.7 0.9	Y 801-4 YB 0.55	Y 801-4 YB 0.55
HG65-50-125A			6.8 11.3 13.6	4.4 4.1 3.9	0.18 0.23 0.25	44 55 56	0.6 0.7 1.0	Y 801-4 YB 0.55	Y 801-4 YB 0.55
	HG65-50-125B		6.4 10.7 12.8	3.6 3.4 3.1	0.15 0.18 0.19	43 54 55	0.6 0.8 1.1	Y 801-4 YB 0.55	Y 801-4 YB 0.55
		HG65-50-160	7.5 12.5 15	9.0 8.0 7.5	0.45 0.52 0.57	41 53 54	0.5 0.6 0.9	Y 802-4 YB 0.75	Y 90S-4 YB 1.1
HG65-50-160A			6.8 11.3 13.6	7.5 6.8 6.3	0.35 0.40 0.44	40 52 53	0.5 0.6 1.0	Y 801-4 YB 0.55	Y 802-4 YB 0.75
	HG65-50-160B		6.4 10.7 12.8	6.1 5.5 5.0	0.27 0.32 0.35	69 50 51	0.5 0.7 1.1	Y 801-4 YB 0.55	Y 801-4 YB 0.55
		HG65-40-200	7.5 12.5 15.0	13.2 12.5 11.8	0.67 0.85 0.94	40 50 51	0.5 0.6 0.9	Y 90L-4 YB 1.5	Y 90L-4 YB 1.5
HG65-40-200A			7.0 11.7 14	11.0 10.2 9.7	0.54 0.65 0.72	38 49 50	0.5 0.7 0.9	Y 90S-4 YB 1.1	Y 90L-4 YB 1.5
	HG65-40-200B		6.4 10.7 12.8	9.5 8.6 8.2	0.45 0.53 0.60	37 47 48	0.5 0.7 1.0	Y 90S-4 YB 1.1	Y 90S-4 YB 1.1
		HG65-40-250	7.5 12.5 15.0	20.4 20.0 19.1	1.39 1.66 1.73	30 41 45	0.6 0.7 1.1	Y 100L2-4 YB 3	Y 112M-4 YB 4
HG65-40-250A			7.0 11.7 14.0	17.8 17.5 17.2	1.17 1.40 1.49	29 40 44.4	0.6 0.7 1.1	Y 100L1-4 YB 2.2	Y 100L2-4 YB 3
	HG65-40-250B		6.6 11.0 13.2	15.8 15.4 15.0	1.01 1.18 1.29	28 39 42	0.7 0.8 1.3	Y 100L1-4 YB 2.2	Y 100L2-4 YB 3
		HG65-40-315	7.5 12.5 15.0	32.5 32.0 31.7	2.90 3.12 3.81	23 35 34	0.5 0.6 0.9	Y 112M-4 YB 4	Y 132S-4 YB 5.5
HG65-40-315A			7.0 11.7 14.0	28.4 28.0 27.8	2.46 2.62 3.21	22 34 33	0.5 0.6 1.1	Y 112M-4 YB 4	Y 132S-4 YB 5.5
	HG65-40-315B		6.6 11.1 13.2	27 26.6 26.3	2.31 2.41 2.70	21 33 32	0.6 0.8 1.0	Y 100L2-4 YB 3	Y 112M-4 YB 4
		HG80-65-125	11 25	5.8 5.0	0.42 0.52	56 66	0.7 0.9	Y 802-4 YB	Y 90S-4 YB

Sichuan Zhongying Industrial Pump CO., LTD

	30	4.4	0.56	64	1.1	0.75	1.1	1.5
--	----	-----	------	----	-----	------	-----	-----

n=1450r/min

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG80-65-125B	12.2	3.9	0.24	54	0.8	Y 801-4	Y 801-4	Y 802-4
	20.4	3.3	0.30	62	1.1	YB	YB	YB
	24.4	2.9	0.32	60	1.6	0.55	0.55	0.75
HG80-65-160	15	9.0	0.71	52	0.6	Y 90L-4	Y 90L-4	Y 100L1-4
	25	8.0	0.85	64	0.8	YB	YB	YB
	30	7.1	0.91	64.4	1.2	1.5	1.5	2.2
HG80-65-160A	13.6	7.4	0.54	52	0.6	Y 90S-4	Y 90L-4	Y 90L-4
	22.7	6.8	0.68	64	0.9	YB	YB	YB
	27.2	6.0	0.72	62	1.3	1.1	1.5	1.5
HG80-65-160B	12.7	6.2	0.43	50	0.7	Y 802-4	Y 90S-4	Y 90L-4
	21.0	5.8	0.55	61	1.0	YB	YB	YB
	25.4	5.1	0.58	61	1.6	0.75	1.1	1.5
HG80-50-200	12.7	6.2	0.43	50	0.7	Y 802-4	Y 90S-4	Y 90L-4
	21.0	5.8	0.55	61	1.0	YB	YB	YB
	25.4	5.1	0.58	61	1.6	0.75	1.1	1.5
HG80-50-200A	13.6	11.0	0.85	48	0.6	Y 90L-4	Y 100L-4	Y 100L2-4
	22.7	10	1.03	60	0.8	YB	YB	YB
	27.2	9.4	1.22	57	1.2	1.5	2.2	3
HG80-50-200B	12.2	9.2	0.64	47	0.6	Y 90L-4	Y 90L-4	Y 100L1-4
	20.4	8.2	0.79	58	0.9	YB	YB	YB
	24.4	7.6	0.90	56	1.4	1.5	1.5	2.2
HG80-50-250	15	21	1.91	45	0.7	Y 112M-4	Y 132S-4	Y 132M-4
	25	20	2.43	56	0.8	YB	YB	YB
	30	19	2.68	58	1.1	4	5.5	7.5
HG80-50-250A	14.1	18.5	1.65	43	0.7	Y 100L2-4	Y 112M-4	Y 132S-4
	23.5	17.6	2.05	55	0.9	YB	YB	YB
	28.1	16.8	2.30	56	1.2	3	4	5.5
HG80-50-250B	13.2	15.8	1.35	42	0.8	Y 100L2-4	Y 112M-4	Y 132S-4
	22.0	15.5	1.82	51	1.1	YB	YB	YB
	26.4	15.0	2.00	54	1.4	3	4	5.5
HG80-50-315	15	31.5	3.49	38	0.6	Y 132M-4	Y 160M-4	Y 160M-4
	25	31.2	4.43	48	0.8	YB	YB	YB
	30	30.0	5.00	47	1.1	7.5	11	11
HG80-50-315A	14.1	27.7	2.87	37	0.6	Y 132S-4	Y 132M-4	Y 160M-4
	23.5	26.7	3.64	47	0.8	YB	YB	YB
	28.2	26.2	4.38	46	1.2	5.5	7.5	11
HG80-50-315B	13.2	24.7	2.49	36	0.6	Y 112M-4	Y 132S-4	Y 132M-4
	22.0	24.2	3.15	46	0.9	YB	YB	YB
	26.4	23.2	3.71	45	1.4	4	5.5	7.5
HG100-80-125	30.0	6.0	0.75	65	1.0	Y 90L-4	Y 90L-4	Y 100L-4
	50.0	5.0	0.95	72	1.3	YB	YB	YB
	60.0	4.0	0.98	57	1.7	1.5	1.5	2.2
HG100-80-125A	27.5	5.0	0.61	63	1.0	Y 90S-4	Y 90L-4	Y 100L1-4
	45.8	4.3	0.76	70	1.4	YB	YB	YB
	55.0	3.3	0.75	66	1.9	1.1	1.5	2.2
HG100-80-125B	25.0	4.3	0.48	61	1.1	Y 90S-4	Y 90L-4	Y 90L-4
	41.5	3.5	0.56	69	1.5	YB	YB	YB
	50.0	2.7	0.57	64	2.1	1.1	1.5	1.5
HG100-80-160	30	9.2	1.27	59	0.8	Y 100L1-4	Y 100L2-4	Y 112M-4
	50	8.0	1.51	72	1.1	YB	YB	YB
	60	7.0	1.63	70	1.6	2.2	3	4
HG100-80-160A	27.3	7.8	1.10	58	0.8	Y 90L-4	Y 100L1-4	Y 100L2-4
	45.5	6.6	1.20	68	1.2	YB	YB	YB
	54.6	5.8	1.35	64	1.8	1.5	2.2	3
HG100-80-160B	25.6	6.8	0.89	53	0.9	Y 90L-4	Y 100L1-4	Y 100L2-4

Sichuan Zhongying Industrial Pump CO., LTD

	42.7 51.3	5.8 5.1	1.02 1.15	66 62	1.3 2.0	YB 1.5	YB 2.2	YB 3
--	--------------	------------	--------------	----------	------------	-----------	-----------	---------

n=1450r/min

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG100-65-200	30	14.0	1.90	60	0.7	Y 112M-4	Y 132S-4	Y 132M-4
	50	12.5	2.43	70	1.0	YB	YB	YB
	60	11.0	2.64	68	1.3	4	5.5	7.5
HG100-65-200A	27.3	11.5	1.42	59	0.7	Y 100L2-4	Y 112M-4	Y 132S-4
	45.5	10.2	1.85	68	1.1	YB	YB	YB
	54.5	9.1	2.02	66	1.4	3	4	5.5
HG100-65-200B	25.7	9.5	1.14	58	0.8	Y 100L-4	Y 100L2-4	Y 112M-4
	41.2	8.6	1.44	67	1.1	YB	YB	YB
	49.4	7.5	1.55	64	1.6	2.2	3	4
HG100-65-250	30	22	3.46	52	0.6	Y 132S-4	Y 132M-4	Y 160M-4
	50	20	4.18	65	0.9	YB	YB	YB
	60	18.5	4.60	66	1.2	5.5	7.5	11
HG100-65-250A	28	19.2	2.96	50	0.6	Y 132-4	Y 132M-4	Y 160M-4
	46.7	17.5	3.47	64	1.0	YB	YB	YB
	56.0	16.0	3.88	65	1.4	5.5	7.5	11
HG100-65-250B	26.4	17.5	2.57	49	0.7	Y 112M-4	Y 132S-4	Y 132M-4
	44.0	15.5	2.94	63	1.1	YB	YB	YB
	52.8	14.0	3.15	64	1.6	4	5.5	7.5
HG100-65-315	30	33.0	6.00	45	0.7	Y 160M-4	Y 160L-4	Y 180M-4
	50	31.2	7.08	60	1.0	YB	YB	YB
	60	30.0	7.90	63	1.4	11	15	18.5
HG100-65-315A	28	28.8	4.91	44	0.7	Y 160M-4	Y 160L-4	Y 160L-4
	46.7	27.3	5.98	58	1.1	YB	YB	YB
	56	26.0	6.60	60	1.5	11	15	15
HG100-65-315B	26.4	26.0	4.45	42	0.8	Y 132M-4	Y 160M-4	Y 160L-4
	44.0	24.2	5.18	56	1.3	YB	YB	YB
	52.8	22.7	5.54	59	1.7	7.5	11	15
HG125-100-200	60	15.2	3.88	64	1.1	Y 132M-4	Y 132M-4	Y 160M-4
	100	12.5	4.60	74	1.3	YB	YB	YB
	120	10.0	4.88	67	1.5	7.5	7.5	11
HG125-100-200A	54.6	12.5	2.95	63	1.1	Y 132S-4	Y 132S-4	Y 132M-4
	91.0	10.3	3.50	73	1.3	YB	YB	YB
	109.3	8.1	3.71	65	1.6	5.5	5.5	7.5
HG125-100-200B	49.8	10.5	2.30	62	1.1	Y 112M-4	Y 132S-4	Y 132M-4
	83.0	8.8	2.72	72	1.4	YB	YB	YB
	99.5	6.8	2.88	64	1.8	4	5.5	7.5
HG125-100-250	60	22.8	6.10	61	1.0	Y 160M-4	Y 160L-4	Y 180M-4
	100	20.0	7.46	73	1.2	YB	YB	YB
	120	18.5	8.39	72	1.5	11	15	18.5
HG125-100-250A	56	19.5	4.96	60	1.0	Y 160M-4	Y 160M-4	Y 160L-4
	93	17.5	6.16	72	1.2	YB	YB	YB
	112	15.8	6.88	70	1.6	11	11	15
HG125-100-250B	52.8	17.5	4.32	58	1.1	Y 132M-4	Y 160M-4	Y 160L-4
	87.8	15.5	6.21	71	1.3	YB	YB	YB
	105.5	14.0	5.83	69	1.8	7.5	11	15
HG125-100-315	60	32.5	9.16	58	0.8	Y 180M-4	Y 180L-4	Y 200L-4
	100	31.2	12.31	69	1.1	YB	YB	YB
	120	29.8	13.72	71	1.3	18.5	22	30
HG125-100-315A	56.0	29.0	7.57	57	0.8	Y 160L-4	Y 180M-4	Y 200L-4
	94.0	27.5	10.51	67	1.1	YB	YB	YB
	112.0	26.2	11.42	70	1.4	15	18.5	30
HG125-100-315B	53.0	25	6.44	56	0.9	Y 160L-4	Y 160L-4	Y 180L-4
	88.4	24.1	8.93	65	1.2	YB	YB	YB
	106.1	23	9.63	69	1.6	15	15	22
HG125-100-400	60	55	16.64	54	1.1	Y 200L-4	Y 225S-4	Y 250M-4
	100	50	21.31	64	1.2	YB	YB	YB

Sichuan Zhongying Industrial Pump CO., LTD

120	45	23.71	62	1.4	30	37	55
-----	----	-------	----	-----	----	----	----

泵转速 n=1450r/min

Model type	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficiency η (%)	NPSH _r (m)	Motor type and rated power (kW)		
						(y)		
						1	1.35	1.85
HG125-100-400A	54.6	45.5	13.00	52	1.1	Y 180L-4	Y 200L-4	Y 225M-4
	91.0	41.2	16.20	63	1.3	YB	YB	YB
	109.2	37.2	18.16	61	1.8	22	30	45
HG125-100-400B	50.0	38.4	10.25	51	1.2	Y 180L-4	Y 200L-4	Y 225S-4
	83.5	35.0	12.83	62	1.4	YB	YB	YB
	100.2	31.4	14.27	60	1.8	22	30	37
HG150-125-250	120	24.8	12.16	67	1.4	Y 180M-4	Y 180L-4	Y 200L-4
	200	20.0	13.75	79	1.8	YB	YB	YB
	240	15.0	14.19	69	2.6	18.5	22	30
HG150-125-250A	109.1	20.5	9.22	66	1.4	Y 160L-4	Y 180M-4	Y 200L-4
	182.0	16.5	10.48	78	1.9	YB	YB	YB
	218.2	12.4	11.30	68	2.7	15	18.5	30
HG150-125-250B	96	16.0	5.44	65	1.6	Y 160M-4	Y 160L-4	Y 180M-4
	160.3	12.8	7.25	77	2.0	YB	YB	YB
	192.4	9.6	7.62	66	2.8	11	15	18.5
HG150-125-315	120	36.8	17.43	69	1.3	Y 200L-4	Y 225M-4	Y 250M-4
	200	32.0	22.35	78	1.7	YB	YB	YB
	240	28.5	23.58	79	2.4	30	45	55
HG150-125-315A	109.1	30.0	13.11	68	1.3	Y 200L-4	Y 225S-4	Y 225M-4
	182.0	26.4	17.22	76	1.7	YB	YB	YB
	218.2	23.5	18.14	77	2.5	30	37	45
HG150-125-315B	103.5	27.4	11.70	66	1.5	Y 180L-4	Y 200L-4	Y 225S-4
	172.5	23.8	15.11	74	1.9	YB	YB	YB
	207.0	21.2	15.93	75	2.6	22	30	37
HG150-125-400	120	57.5	29.83	63	1.2	Y 250M-4	Y 280S-4	Y 315S-4
	200	50.0	37.81	72	1.7	YB	YB	YB
	240	44.0	44.24	65	2.3	55	75	110
HG150-125-400A	109.1	47.5	22.76	62	1.3	Y 225M-4	Y 280S-4	Y 280M-4
	182.0	41.0	28.82	71	1.7	YB	YB	YB
	218.2	36.5	33.89	64	2.4	45	75	90
HG150-125-400B	104.3	43.4	20.21	61	1.3	Y 225M-4	Y 250M-4	Y 280S-4
	173.8	37.8	25.56	70	1.8	YB	YB	YB
	208.6	33.2	29.93	73	2.5	45	55	75
HG200-150-250	240.0	24.5	22.87	70	2.7	Y 225S-4	Y 225M-4	Y 280S-4
	400.0	20.0	26.97	81	3.8	YB	YB	YB
	480.0	15.0	27.25	72	4.6	37	45	75
HG200-150-250A	218.2	20.3	17.48	69	2.7	Y 200L-4	Y 225S-4	Y 225M-4
	364.3	16.6	20.85	79	3.9	YB	YB	YB
	437.1	12.4	21.09	70	4.8	30	37	45
HG200-150-250B	203.0	17.6	14.31	68	2.8	Y 180L-4	Y 200L-4	Y 225S-4
	338.6	14.3	17.12	77	4.0	YB	YB	YB
	406.3	10.7	17.41	68	4.9	22	30	37
HG200-150-315	240.0	35.6	34.19	68	2.2	Y 250M-4	Y 280S-4	Y 315S-4
	400.0	32.0	43.01	81	2.9	YB	YB	YB
	480.0	28	48	78	3.7	55	75	110
HG200-150-315A	218.0	29.4	26.05	67	2.3	Y 225M-4	Y 250M-4	Y 280S-4
	363.0	26.4	36.62	80	3.0	YB	YB	YB
	436.0	24.3	37.48	77	3.9	45	55	75
HG200-150-315B	208.5	26.8	23.06	66	2.4	Y 225S-4	Y 225M-4	Y 280S-4
	347.6	24.2	29.37	78	3.2	YB	YB	YB
	417.0	22.2	33.61	75	4.5	37	45	75
HG200-150-400	240.0	55.8	53.60	68	2.1	Y 280M-4	Y 315M1-4	Y 315M2-4
	400.0	50.0	68.92	79	2.7	YB	YB	YB
	480.0	47.0	77.47	76	3.7	90	132	132
HG200-150-400A	218.2	46.0	42.04	65	2.2	Y 280S-4	Y 315S-4	Y 315M1-4
	363.0	41.0	51.93	78	2.9	YB	YB	YB
	418.0	38.5	58.43	75	3.9	75	110	132
HG200-150-400B	207.6	41.7	36.84	64	2.4	Y 280S-4	Y 280M-4	Y 315S-4

Sichuan Zhongying Industrial Pump CO., LTD

Model type	346.0	37.4	46.37	76	3.1	YB	YB	YB
	415.2	35.2	53.79	74	4.3	75	90	110
	Flow Q (m ³ /h)	Head H (m)	Shaft P (Pa)	Efficien cy η (%)	NPSH _r (m)	Motor type and rated power (kW) (y)		
						1	1.35	1.85
HG250-200-315	650	28	61	52 63 61	1.1 1.3 1.8	Y 280S-4 YB 90		
HG250-200-315A	600	24	49	80	4.5	Y 280S-4 YB 75		
HG250-200-315B	548	20	37.8	79	4.4	Y250M-4YB 55		
HG250-200-400	650	48.5	108	79.5	4.5	Y315M-4YB 132		
HG250-200-400A	620	44	94.1	79	4.5	Y315M-4YB 132		
HG250-200-500	720	74	181.4	80	4.4	Y355M-4YB 220		

四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd

3. Assembly and disassembly

Pump disassembly sequence

- (1) Unscrew the drain pipe plug on the pump body and the oil drain pipe plug on the shaft on the box body, drain the liquid in the pump and the oil in the oil pool in the bearing box. If there is an external liquid sealing pipeline, it should also be removed.
- (2) Remove the connecting bolts between the pump body and the bearing box, and take out all the rotor components such as the bearing box components, pump cover, and shaft seal components from the pump body (the motor should be removed before this)
- (3) Unscrew the impeller
- (4) Loosen the set screw between the mechanical seal and the shaft, remove the pump cover together with the cartridge seal assembly from the shaft, then disassemble the mechanical seal end cover and take out the mechanical seal.
- (5) Remove pump coupling and key
- (6) Remove the gland of the bearing at the front end of the bearing box and its skeleton oil seal (if it is a labyrinth seal, remove the dust plate and then take the shaft, bearing and bearing box out of the bearing box).
- (7) Loosen the bearing fixing nut on the bearing box, remove the bearing box and skeleton oil seal, unscrew the hex nut on the shaft, and remove the front and rear bearings and shaft.

Parts inspection

Check the wear of parts and repair or replace damaged parts.

(1) Impeller and rotation clearance.

Check the wear of the impeller and replace it if it is seriously damaged.

Check the clearance between impeller and mouth ring. If the gap exceeds the requirements in Table 3, repair or replace with new parts according to the values in the table.

Diameter at the gap between impeller and mouth ring (mm)		<75	75~140	>140~200	>200~320	>320~400
Clearance value for new part (mm)	Cast iron	0.3	0.4	0.5	0.6	0.7
	Steel	0.5	0.6	0.7	0.8	0.9
Clearance value for old part (mm)	Cast iron	0.9	1.2	1.5	1.8	2.0
	Steel	1.5	1.8	2.0	0.6	2.8

Table 3

(2) Mechanical seal components

The friction surfaces of the rotating ring and the stationary ring must be free of any scratches. If there are scratches, they need to be reground and polished or replaced.

(3) Bearing

Clean and inspect bearings and replace if damaged.

Reassemble

Clean all pump parts. Immerse the bearing in hot oil, heat it to about 800°C, and then install it on the shaft. Other parts are disassembled and assembled into the complete machine in sequence. When assembling, pay attention to check the gaskets on each sealing surface. The seals should be intact and must not be missed.

4. Installation

(1) Check the pump and motor after unpacking. If it is confirmed that there is no

damage caused by loading, unloading and transportation, or loose fastening parts, the pump inlet and outlet seals are intact, and no dust, dirt, etc. have entered the pump, then There is no need to re-disassemble and assemble, it can be sent directly to the use site for installation.

- (2) The foundation plane on which the pump is installed should be leveled with a level. After the foundation cement has solidified, place the pump on the foundation and use a level to check the level of the pump and motor shaft. The maximum allowable deviation is 0.1mm/m. If it is not level, use a pad to correct it until level. The base and anchor bolt holes are then poured with cement through the grout holes.
- (3) After the cement is dry, check whether the base and anchor bolt holes are loose. If appropriate, tighten the anchor bolts and recheck the levelness.
- (4) When the motor, pump and base are reinstalled, the concentricity of the pump shaft and motor shaft should be strictly checked. The difference between the upper, lower, left and right outer circles of the measured coupling shall not exceed 0.1mm, and the maximum and minimum gap difference between the end faces of the two couplings in one circle shall not exceed 0.3mm.
- (5) The suction pipeline and pressure pipeline of the pump should have their own brackets. The weight of the pipeline is not allowed to be directly carried by the pump to avoid crushing the pump.
- (6) When the installation position of the pump is higher than the liquid level (within the allowable range of the pump's suction lift), a bottom valve should be installed at the end of the suction pipe, and a filling screw hole or valve should be set on the discharge pipe for filling the pump before starting. Use. When the pump is installed at the liquid level (filling state), a control valve and filter device should be installed on the suction pipeline to prevent debris from being sucked into the pump.

- (7) Irregular pipelines and elbows with small turning radius should be avoided, otherwise the resistance will increase, especially for the suction pipeline of the pump. Large pipeline resistance will cause the pressure at the pump inlet to decrease and affect the performance of the pump. The suction capacity of the pump will seriously cause cavitation and the pump will not work properly.

5. Operation

To start

- (1) Prepare necessary tools.
- (2) Check the oil level in the bearing box oil pool. It should be controlled at a position about 2 mm from the center of the oil mark.

Lubricating oil must not contain any impurities, acid or resin, etc. See (Table 4) for the selection of lubricating oil.

Temperature (°C)		ISO Viscosity grade	kinematic viscosity (mm ² /s)		minimum ignition point (°C)
Oil chamber	Bearing support		40°C	50°C	
40~65	>50~75	VG46	45	25	145
65~75	>75~85	VG68	65	36	145

Table 4

First, add lubricating oil through the oil filling hole on the bearing box until oil is visible in the branch pipe of the constant oil cup or until it reaches the indicator line on the oil indicator window of the oil storage room.

Add oil to the constant level oil cup as shown in (Picture 4), and then return the oil cup to the working position (Picture 5). If the amount of oil in the oil cup is less than

2/3 of its capacity when the oil cup is in the working position, repeat the above process until there is 2/3 of the oil in the oil cup.

After a period of use, if the oil level in the oil pool of the bearing box drops, repeat the process of 6.1.2.2.2 until the requirements are reached.

- (3) Since the impeller and shaft are threaded, when using it for the first time, disengage the coupling and jog the motor to confirm that the direction is correct before use. Reverse rotation is strictly prohibited.
- (4) When turning the coupling by hand, you should feel the rotation and even weight, and pay attention to identify whether there are any noises such as friction and foreign objects rolling in the pump. If so, try to eliminate it. And install the coupling cover.
- (5) When the installation position of the pump is lower than the liquid level (in the case of filling), before starting, the gate valve of the suction pipe should be opened so that the liquid fills the pump; if the installation position of the pump is higher than the liquid level (in the case of vacuum), the suction pipe must be installed at the bottom. valve. Before starting, open the inlet pipeline valve, fill the pump with transport medium to exhaust or use a vacuum pump to suction.
- (6) Open the valve in the auxiliary equipment line. Close the inlet and outlet pressure (or vacuum) gauge and pressure outlet pipeline gate valve, start the motor, open the inlet and outlet pressure gauge, and then slowly open the outlet pipeline gate valve to the required position.

Operation and maintenance

- (1) During operation, check the smoothness of the pump unit's operation and observe whether there is any vibration. If any abnormal sound or other faults are found, stop the pump immediately for inspection and continue operation only after the fault is eliminated.
- (2) Always check the temperature rise of the pump and motor. The temperature rise of the bearings should not be higher than 350°C, and the limit temperature should not be greater than 750°C.
- (3) Pay attention to changes in the oil level in the oil storage chamber of the bearing box, and always control it within the specified range. When used for the first time or reused after bearing maintenance, the oil should be drained after the pump has been running for 10 to 15 hours, clean the oil storage chamber, inject new lubricating oil, and then put it into normal operation. During normal use, press (Table 5) requires regular replacement of lubricating oil.

Temperature (°C)		Replacement cycle (month)
Oil chamber	Bearing support	
40~65	> 50~75	12
65~75	> 75~80	6

Table 5

- (4) Never use the gate valve in the suction line to adjust the flow to avoid cavitation.
- (5) The pump is generally not suitable for long-term operation at less than 30% of the design flow rate. If it must be used under such conditions, a bypass pipe should be installed on the outlet pipeline to ensure that the pump flow rate reaches the specified use range.
- (6) Check auxiliary systems frequently during use
- (7) In the case of a spare pump, in order to ensure that the pump can be put into use immediately, trial runs should be carried out regularly.

to stop

- (1) Slowly close the pressure outlet line gate valve.
- (2) Turn off the motor and observe the rotor continuously and slowly stopping and

advancing.

- (3) Close the inlet and outlet pressure (vacuum) gauges, and in the case of filling, close the suction pipeline gate valve. If external liquid drainage is used for sealing, the external liquid drainage valve must also be closed.
- (4) If the ambient temperature is lower than the freezing point of the liquid, the liquid in the pump must be drained to prevent freezing and cracking.
- (5) For pumps that have been out of use for a long time, in addition to draining the corrosive liquid in the pump, they must also be rinsed with clean water, especially the sealing chamber, which must be carefully rinsed. It is best to disassemble the pump, clean it and reinstall it, and seal the inlet and outlet of the pump and keep it in a safe place.

6. Precautions when using mechanical seals

This series of pumps adopt cartridge seals. Different forms of mechanical seals can also be installed according to different usage conditions or user needs, such as internal single balanced type and unbalanced type, double balanced type and unbalanced type, and external mechanical seal, etc. Therefore, depending on the type of seal selected, its usage and precautions are also different. Here are some things to note:

- (1) The cartridge mechanical seal consists of a retainer, a rotating ring, a stationary ring, a spring, a gland, and an end cover arranged outside the shaft sleeve in order, and is integrated with the shaft sleeve through a pallet, a snap ring, and a set screw. After the cartridge mechanical seal and pump are assembled, use set screws for axial positioning. Before pumping, be sure to remove the pallet and keep it. When it is necessary to adjust the axial clearance between the impeller back blade and the pump cover (adjusted through the bolts on the bearing box), just loosen the set screw.
- (2) The mechanical seal should be disassembled carefully, and it is not allowed to use hand hammers, iron tools, etc. to knock, so as not to damage the dynamic and

static sealing surfaces.

- (3) Before installing the mechanical seal, check whether any sealing components are invalid or damaged. If any, they should be repaired or replaced with new ones.
- (4) The grinding sealing end faces of the rotating ring and the stationary ring should be strictly inspected, and no minor scratches, bruises or other defects are allowed. All mechanical seal parts, including pump body, impeller, seal chamber, etc., should be rinsed before assembly. Especially the rotating ring and static ring end face should be carefully wiped clean with a clean, soft cloth or cotton gauze, and then coated with a layer of cleaning grease or engine oil.
- (5) During assembly, attention should be paid to eliminating deviations. When tightening the screws, press them evenly to avoid deflection and seal failure.
- (6) The cartridge mechanical seal does not need to adjust the hydraulic pressure of the spring (the manufacturer has already adjusted it). For mechanical seals that need to adjust the spring compression, they must be adjusted correctly so that the spring is not too tight or too loose. After the pump is installed, when you turn the rotor by hand, you should feel that the electric seal spring has a certain amount of compression, and it can rotate easily and flexibly without any feeling of bite. If there is any abnormality, it must be checked and adjusted.
- (7) For mechanical seals with external flushing, the flushing fluid should be opened to fill the sealing cavity with sealing fluid before overspending. When stopping, stop the pump first and close the seal flushing fluid.

7. Troubleshooting

Table 6

Problem	Cause	Solution
Bearing overheating	<ol style="list-style-type: none"> 1. Too much or too little lubricant 2. Lubricating oil deteriorates 3. The crew is not aligned 4. Vibration 	<ol style="list-style-type: none"> 1. Reduce fuel or add fuel 2. Drain and clean the oil pool and add new oil 3. Readjust concentricity 4. Check the balance of the rotor or operate it at a smaller flow rate
Pump cannot pump liquid	<ol style="list-style-type: none"> 1. There is air left in the suction pipe or inside the pump 2. Pipe valve is closed on the inlet or outlet side 3. Operation head is higher than the maximum head of the pump. 4. Air leakage in pump suction pipe 5. The impeller direction of rotation is incorrect 6. The suction height is too high 7. The suction pipe is too small or blocked by debris 8. The speed does not match 	<ol style="list-style-type: none"> 1. Fill with liquid; remove air 2. Open the valve 3. Replace the pump with higher head 4. Eliminate leakage on the import side 5. Correct the rotation direction of the motor 6. Lower the installation height of the pump 7. Increase the diameter of the suction pipe and clear the blockage 8. Make the motor speed meet the requirements

<p style="text-align: center;">Insufficient flow and head</p>	<ol style="list-style-type: none"> 1. Damaged impeller 2. Excessive wear of the sealing ring 3. Insufficient speed 4. The inlet or outlet valve is not fully opened 5. Air leaks into the suction pipe 6. There is a blockage in the pipe 7. The medium density does not match the pump requirements. 8. The device head does not match the pump head. 	<ol style="list-style-type: none"> 1. Replace with new impeller 2. Replace the sealing ring 3. Increase the speed as required 4. Fully open 5. Seal the leakage well 6. Eliminate blockages 7. Recalculate or replace the motor with appropriate power 8. Try to lower the installation height of the pump
<p style="text-align: center;">Severe seal leakage</p>	<ol style="list-style-type: none"> 1. Improper selection of sealing component materials 2. The friction pair is severely worn 3. The rotating and stationary rings are unevenly matched 4. The friction pair is too large and the stationary ring is broken. 5. O-ring damaged 	<ol style="list-style-type: none"> 1. Explain the medium conditions to the manufacturer to provide appropriate seals 2. Replace worn parts and adjust spring pressure 3. Readjust the sealing assembly 4. Replace the stationary ring so that the verticality error with the shaft is less than 0.10, and install the seal assembly as required. 5. Replace the O-ring

<p>Pump vibrates and makes noise</p>	<ol style="list-style-type: none"> 1. The center lines of the pump shaft and the motor shaft are not aligned 2. Shaft bending 3. Bearing wear 4. Cavitation occurs in the pump 5. Friction between rotating parts and fixed parts 6. Rotating parts lose balance 7. There is debris blocking the pipeline or pump. 8. The inlet valve is not fastened 	<ol style="list-style-type: none"> 1. Adjust to alignment 2. Replace with new oil 3. Replace bearings 4. Consult the manufacturer 5. Repair the pump or improve its usage 6. Check the cause and try to eliminate it 7. Check the sewage discharge 8. Open the inlet valve and adjust the outlet valve
<p>Motor overload</p>	<ol style="list-style-type: none"> 1. The pump and motor are not aligned 2. The relative density of the medium becomes larger 3. Friction occurs in rotating parts 4. The device resistance becomes lower, making the operating point tend to be at a higher flow rate. 	<ol style="list-style-type: none"> 1. Adjust the alignment 2. Change the operating process 3. Repair friction parts 4. Check the pressure of the suction and discharge pipelines and adjust them accordingly.

8. Pump sets of supply range

- (1) pump: 1;
- (2) motor: 1;
- (3) base and coupling guard: 1 each
- (4) spare parts: impellers, sealing rings, etc. are supplied according to contract.

appearance and mounting dimensions



Model type	Motor type Power (KW)	Appearance and mounting dimensions													4-M×L	Net weight kg
		DN ₁	DN ₂	a	A	L	L ₁	L ₂	L ₃	B ₁	B ₂	h ₁	h ₂	h ₃		
HG50-32-125	Y801-4/0.55	50	32	80	70	800	820	150	540	320	360	250	140	30	M16×220	110
	Y802-4/0.75					830										112
	Y90S-2/1.5				830	117										
	Y90L-2/2.2				90	855	820	170	600	350	390					126
	Y100L-2/3.0					900										132
HG50-32-160	Y801-4/0.55	50	32	80	70	800	820	150	540	320	360	250	160	30	M16×220	114
	Y802-4/0.75					800										116
	Y100L-2/3.0				90	900	820	170	600	350	390					138
	Y112M-2/4.0					930										148
	Y132S ₁ -2/5.5				110	950	1020	190	660	400	450				M20×400	178
HG50-32-200	Y801-4/0.55	50	32	80	70	800	820	150	540	320	360	280	180	30	M16×220	124
	Y802-4/0.75					800										126
	Y90S-4/1.1				90	830	920	170	600	350	390					132
	Y90L-4/1.5					855										142
	Y112M-2/4.0				930	158										
	Y132S ₁ -2/5.5				110	945	1020	190	660	400	450				M20×400	188
	Y132S ₂ -2/7.5															196
	Y160M ₁ -2/11				130	1075	1140	210	740	440	490				300	248
HG50-32-250	Y90L-4/1.5	50	32	100	95	975	1020	190	660	400	450	300	225	30	M20×400	184

Sichuan Zhongying Industrial Pump CO., LTD

	Y100L ₁ -4/2.2	60	50	80	130	1040	1270	225	840	490	540	320	140	30	M16×220	190										
	Y100L ₂ -4/3.0															194										
	Y132S ₂ -2/7.5					115										1085	1140	210	740	440	490	240				
	Y160M ₁ -2/11					90										835	920	170	600	350	390	250	140	30	M16×220	330
	Y160M ₂ -2/15															900										134
	Y180M-2/22															930										145
Y801-4/0.55	60	50	80	70	800	820	150	540	320	360	250	140	30	M16×220	111											
Y802-4/0.75															113											
Y90L-2/2.2					835										920	170	600	350	390	250	140	30	M16×220	128		
Y100L-2/3.0					900																			134		
Y112M-2/4.0					930																			145		
Y132S ₁ -2/5.5					110										950	1020	190	660	400	450	250	140	30	M20×400	175	

Model type	Motor type Power (KW)	Appearance and mounting dimensions											4-M×L	Weight kg													
		DN ₁	DN ₂	a	A	L	L ₁	L ₂	L ₃	B ₁	B ₂	h ₁			h ₂	h ₃											
HG65-50-160	Y801-4/0.55	65	50	80	90	800	920	170	600	350	390	250	160	30	M16×220	119											
	Y802-4/0.75					70										830	119										
	Y90S-4/1.1					835										125											
	Y90L-4/1.5					835										134											
	Y100L-2/3.0					900										140											
	Y112M-2/4.0					930										151											
	Y132S ₁ -2/5.5					110										950	1020	190	660	400	450	250	160	30	M20×400	181	
	Y132S ₂ -2/7.5																									190	
	Y160M ₁ -2/11																									130	1075
HG65-40-200	Y90S-4/1.1	65	40	100	90	850	920	170	600	350	390	280	180	30	M16×220	143											
	Y90L-4/1.5					855										147											
	Y100L ₁ -4/2.2					920										153											
	Y132 ₂ -2/7.5					110										970	1020	190	660	400	450	202					
	Y160M ₁ -2/11					130										1100	1140	210	740	440	490	300	250	160	30	M20×400	255
	Y160M ₂ -2/15																										270
HG65-40-250	Y100L ₁ -4/2.2	65	40	100	95	1350	1020	190	660	400	450	300	250	30	M20×400	194											
	Y100L ₂ -4/3.0					1065										198											
	Y112M-4/4.0					1065										210											
	Y132S-4/5.5					115										1080	1140	210	740	440	490	272					
	Y160M ₂ -2/15					1210										349											
	Y160L ₂ -2/18.5					130										1255	1270	225	840	490	540	320	367				
	Y180M-2/22					1280										340											
	Y200L ₁ -2/30.0					155										1383	1320	250	940	550	610	380	40	M24×500	515		
HG65-40-315	Y100L ₂ -4/3.0	60	40	125	115	1065	1140	210	740	440	490	320	225	30	M20×400	220											
	Y112M-4/4.0					1095										231											
	Y132S-4/5.5					1110										253											
	Y132M-4/7.5					1150										268											
	Y180M-2/22					130										1305	1270	225	840	490	540	360	376				
	Y200L ₁ -2/30					155										1410	250	940	550	610	380	225	160	30	M20×400	438	
	Y200L ₂ -2/37																									523	
	Y225M-2/45																									1475	537
	Y250M-2/55					195										1570	1620	290	1060	600	660	400	40	M24×500	620		
HG80-65-125	Y801-4/0.55	80	65	100	70	820	820	150	540	320	360	250	160	30	M16×220	118											
	Y802-4/0.75					850										126											
	Y90S-4/1.1					850										126											
	Y90L-4/1.5					90										855	920	170	600	350	390	250	160	30	M16×220	135	

Sichuan Zhongying Industrial Pump CO., LTD

	Y112M-2/4.0	80	65	100	955									280	180	30	M20×400	152
	Y132S ₁ -2/5.5				110	970	1020	190	660	400	450	182						
	Y132S ₂ -2/7.5				130	1100	1140	210	740	440	490	190						
	Y160M-2/11.0					242												
HG80-65-160	Y802-4/0.75	80	65	100	90	820	920	170	600	350	390	280	180	30	M16×220	139		
	Y90S-4/1.1					850										130		
	Y90L-4/1.5					855										143		
	Y100L ₁ -4/2.2					925										149		
	Y132S ₁ -2/5.5				110	970	1100	190	660	400	450	185						
	Y132S ₂ -2/7.5					193												
	Y160M ₁ -2/11					130	1100	1140	210	740	440	490	245					
	Y160M ₂ -2/15						260											

Model type	Motor type Power (KW)	Appearance and mounting dimensions													4-M×L	net weight kg												
		DN ₁	DN ₂	a	A	L	L ₁	L ₂	L ₃	B ₁	B ₂	h ₁	h ₂	h ₃														
HG80-50-200	Y90L-4/1.5	80	50	100	90	855	920	170	600	350	390	280	200	30	M16×220	154												
	Y100L ₁ -4/2.2					925										160												
	Y100L ₂ -4/3.0					1100										261												
	Y160M ₁ -2/11															276												
	Y160M ₂ -2.15				130	1145	1140	210	740	440	490	300	300	225	30	M20×400	294											
	Y160L-2/1.85					1165											342											
	Y180M-2/22					170											1270	1420	250	940	550	610	340	385				
	Y200L ₁ -2/30																											
HG80-50-250	Y100L ₂ -4/3.0	80	50	125	95	1065	1020	190	660	400	450	300	225	30	M20×400	201												
	Y112M-4/4.0					1095										217												
	Y132S-4/5.5					1110										240												
	Y132M-4/7.5															1150	255											
	Y160L-2/18.5				130	1285	1270	225	840	490	540	360	360	225	40	M24×500	370											
	Y180M-2/22					1305											399											
	Y200L ₁ -2/30				155	1410	1420	250	940	550	610	345	365	405	280	40	M24×500	517										
	Y200L ₂ -2/37					1475												532										
	Y225M-2/45																	607										
	HG-50-315					Y112M-4/4.0												80	50	125	115	1095	1140	210	740	440	490	345
Y132S-4/5.5		1110	570																									
Y132M-4/7.5			1150	272																								
Y160M-4/11		130	1240	1270	225	840	490	540	365	400																		
Y200L ₁ -2/30			155	1410	1420	250	940	550	610	365	405	280	40	M24×500	524													
Y200L ₂ -2/37		1475		538																								
Y225M-2/45		195	1570	1620	290	1060	600	660	425	756																		
Y250M-2/55			225	1635	1820	320	1200	670	730	425	1018																	
Y280S-2/75																												
HG100-80-125		Y90S-4/1.1	100	80	100	75	850	920	170	600	350	390	280	180	30	M16×220	139											
	Y90L-4/1.5	855					143																					
	Y100L ₁ -4/2.2	925					149																					
	Y132S ₂ -2/7.5	95					970										1020	190	660	400	450	198						

Sichuan Zhongying Industrial Pump CO., LTD

	Y160M ₁ -2/11				115	1100	1140	210	740	440	490	300					250					
	Y160M ₂ -2.15																265					
	Y160L-2/1.85				130	1145	1270	225	840	490	540	320					270					
HG100-80-160	Y90L-4/1.5	100	80	100	95	975	1020	190	660	400	450	280	200	30	M20×400	167						
	Y100L ₁ -4/2.2																					173
	Y100L ₂ -4/3.0																					177
	Y112M-4/4.0					1070										188						
	Y160M ₁ -2/11				130	1215	1270	225	840	490	540	320				298						
	Y160M ₂ -2/15																					313
	Y160L-2/1.85					1260																331
	Y180M-2/22					1280										376						
	Y200L ₁ -2/30				155	1385	1420	250	940	550	610	340				M24×500	492					

Model type	Motor type Power (KW)	Appearance and mounting dimensions													4-M×L	Unit weight kg								
		DN ₁	DN ₂	a	A	L	L ₁	L ₂	L ₃	B ₁	B ₂	h ₁	h ₂	h ₃										
HG100-65-200	Y100L ₁ -4/2.2	100	65	100	115	1040	1140	210	740	440	490	300	225	30	M20×400	182								
	Y100L ₂ -4/3.0																						186	
	Y112M-4/4.0					1070																	197	
	Y132S-4/5.5				1925											220								
	Y132M ₁ -4/7.5				1965											234								
	Y160M ₂ -2/15				130	1215	1270	225	840	490	540	320				288								
	Y180M-2/22					1280																378		
	Y200L ₁ -2/30																					496		
	Y200L ₂ -2/37				155	1385	1420	250	940	550	610	360					40	M24×500	510					
	Y225M-2/45					1450																		585
HG100-65-250	Y112M-4/4.0	100	65	125	100	1095	1140	210	740	440	490	320	250	30	M20×400	232								
	Y132S-4/5.5					1110																254		
	Y132M-4/7.5					1150																269		
	Y160M-4/11				115	1240	1270	225	840	490	540	340							369					
	Y200L ₁ -2/30				140	1410	1420	250	940	550	610	380					40	M24×500	524					
	Y200L ₂ -2/37																							538
	Y225M-2/45					1475																		621
	Y250M-2/55				180	1570	1620	290	1060	600	660	400							755					
	Y280S-2/75				210	1635	1820	320	1200	670	730								1080					
HG100-65-315	Y132M-4/7.5	100	65	125	115	1180	1270	225	840	490	540	365	280	30	M20×400	315								
	Y160M-4/11					1270																410		
	Y160L-4/15					1315										1420	250	940	550	610	385		436	
	Y180M-4/18.5				1335							467												
	Y250M-2/55				180	1600	1620	290	1060	600	660	425										768		
	Y280S-2/75				210	1665	1820	320	1200	670	730							1030						
	Y315S-2/110					1905													1386					
	Y315M-2/132					1975													342					
HG125-100-200	Y112M-4/4.0	125	100	125	110	1095	1140	210	740	440	490	320	280	30	M20×400	215								
	Y132S-4/5.5					1110																238		
	Y132M-4/7.5					1150																253		
	Y160M-4/11				115	1240	1270	225	840	490	540					352								
	Y200L ₁ -2/30				140	1410	1420	250	940	550	610	380				40	M24×500	508						

Sichuan Zhongying Industrial Pump CO., LTD

	Y200L ₂ -2/37																	533								
	Y225M-2/45																	1475	605							
	Y250M-2/55																	180	1570	1620	290	1060	600	660	400	532
	Y280S-2/75																	210	1635	1820	320	1200	670	730	607	
HG125-100-250	Y132M-4/7.5	125	100	140	115	1265	1250	225	840	490	540	365	280	30	M20×400			330								
	Y160M-4/11.0					1355												415								
	Y160L-4/15					1400												411								
	Y160M-4/11				140	1400	1420	1420	250	940	550	610	385	472												
	Y180M-4/18.5				155	1410	1620	290	1060	600	660	425	771													
	Y250M-2/55				210	1750	1820	320	1200	670	730	425	280	40	M24×500					1033						
	Y280S-2/75					1800														1104						
	Y315S-2/110					1990															1425					
	Y315M ₁ -2/132					2000																1512				

Model type	Motor type Power (KW)	Appearance and mounting dimensions													4-M×L	bit weight kg																
		DN ₁	DN ₂	a	A	L	L ₁	L ₂	L ₃	B ₁	B ₂	h ₁	h ₂	h ₃																		
HG125-100-315	Y160L-4/15	125	100	140	115	1400	1270	225	840	490	540	390	315	40	M20×400			448														
	Y180M-4/18.5					1420														488												
	Y180L-4/22				140	1460	1420	250	940	550	610	410						512														
	Y200L-4/30					1525														586												
	Y280M-2/90				210	1750	1820	320	1200	670	730	450						1120														
	Y315M ₁ -2/132					2060													1544													
	Y315M ₂ -2/160																		1598													
HG125-100-400	Y180L-4/22	125	100	140		1460							355	40	M24×500			520														
	Y200L-4/30					1525												594														
	Y225S-4/37				160	1570	1620	290	1060	600	660	450						715														
	Y225M-4/45					1595												720														
	Y250M-4/55					1685												836														
HG150-125-250	Y160M-4/11	150	125	140	115	1355	1270	225	840	490	540	410	355	40	M20×400			451														
	Y160M-4/15					1400													476													
	Y180M-4/18.5				140	1420	1420	250	940	550	610							508														
	Y180L-4/22					1460													532													
	Y200L-4/30					1525													616													
HG150-125-315	Y180L-4/22	150	125	140		1460						450	355	40	M24×500			615														
	Y200L-4/30					1525													699													
	Y225S-4/37				160	1570	1620	290	1060	600	660							450	751													
	Y225M-4/45					1595													780													
	Y250M-4/55					1685													915													
HG150-125-400	Y225M-4/45	150	125	140	160	1595	1620	290	1060	600	660	485	400	40	M24×500			905														
	Y250M-4/55																	1680							965							
	Y280S-4/75				190	1750	1820	320	1200	670	730	515						400	40	M24×500					1130							
	Y280M-4/90																								1800							1205
	Y315S-4/110																								2020							1480
HG200-150-250	Y180L-4/22	200	150	160	160	1480	1620	290	1060	600	660	450	375	40	M24×500			620														
	Y200L-4/30																	1545							700							
	Y225S-4/37																	1590							754							
	Y225M-4/45																	1615							782							
	Y250M-4/55																	1705							916							

Sichuan Zhongying Industrial Pump CO., LTD

	Y280S-4/75				190	1770	1820	320	1200	670	730	480					1106
HG200-150-315	Y225S-4/37				190	1660	1820	320	1200	670	730	515	400	40	M24×500		890
	Y225M-4/45					1685											920
	Y250M-4/55	200	150	160		1775											1062
	Y280S-4/75					1840											1172
	Y315S-4/110					2110											1303
HG200-150-400	Y280S-4/75				190	1840	1820	320	1200	670	730	515	450	40	M24×500		1202
	Y280M-4/90					1890											1330
	Y315S-4/110					2110											1503
	Y315M ₁ -4/132	200	150	160		2180											1644
	Y315M ₂ -4/160																1702
	Y315L ₁ -4/160																

Model type	Suction inlet flange size							Discharge outlet flange size						
	DN ₁	D ₁	D ₁₁	d ₁	b ₁	f ₁	n ₁ .d ₀₁	DN ₂	D ₂	D ₁₂	d ₂	b ₂	f ₂	n ₂ .d ₀₂
ZB50-32-125	50	165	125	99	20	3	4-17.5	32	140	100	76	18	2	4-17.5
ZB50-32-160														
ZB50-32-200														
ZB50-32-250														
ZB65-50-125	65	185	145	118	20	3	4-17.5	50	165	125	99	20	3	4-17.5
ZB65-50-160														
ZB65-40-200														
ZB65-40-250														
ZB65-40-315														
ZB80-65-125	80	200	160	132	20	3	8-17.5	65	185	145	118	20	3	4-17.5
ZB80-65-160														
ZB80-50-200														
ZB80-50-250														
ZB80-50-315														
ZB100-80-125														
ZB100-80-160														
ZB100-65-200														
ZB100-65-250														
ZB100-65-315														
ZB125-100-200	125	250	210	184	22	3	8-17.5	100	220	180	156	22	3	8-17.5

Sichuan Zhongying Industrial Pump CO., LTD

ZB125-100-250														
ZB125-100-315														
ZB150-125-250	150	285	240	211	24	3	8-22	125	250	210	184	22	3	8-17.5
ZB150-125-315														
ZB200-150-250	200	340	295	266	24	3	12-22	150	285	240	211	24	3	8-22
ZB200-150-315														
ZB200-150-400														



四川中瑛工业泵有限公司
Sichuan Zhongying Industrial Pump Co., Ltd