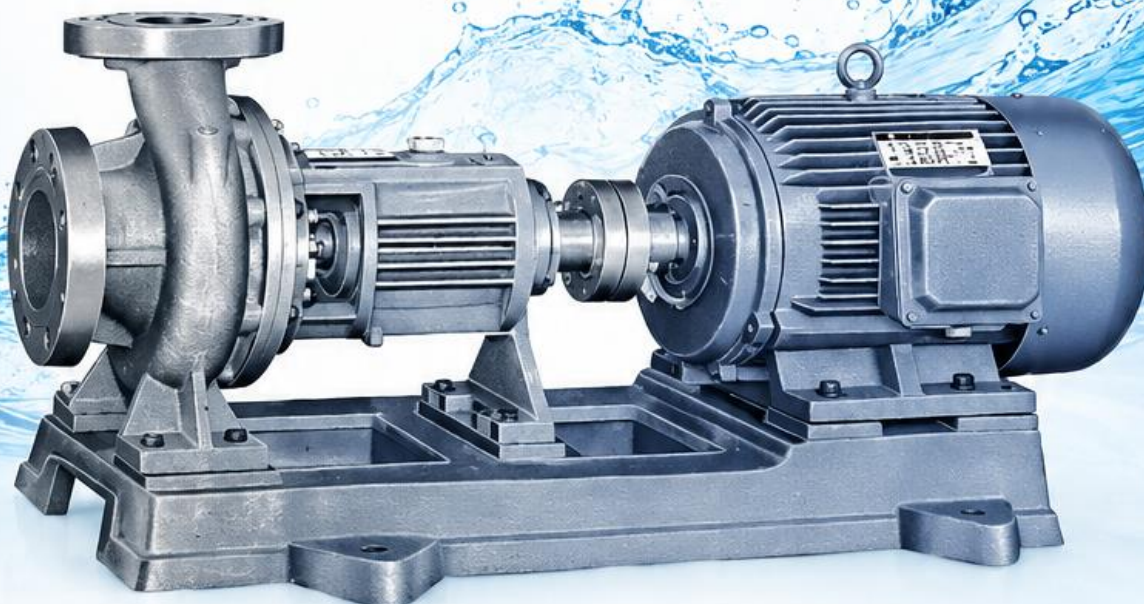


IS TYPE WATER CENTRIFUGAL PUMP

HIGH EFFICIENCY | DURABLE | RELIABLE

The IS Type Water Centrifugal Pump is designed for continuous and stable operation, delivering high performance for various industrial and commercial applications.



ISR MODEL



HOT WATER CENTRIFUGAL PUMP

Specifically designed for hot water applications, the ISR model ensures stable performance and long service life even under high temperature conditions.

ISY MODEL



CENTRIFUGAL LIGHT OIL PUMP

Ideal for transferring light oils and low-viscosity fluids, the ISY model offers efficient operation, smooth flow and dependable performance.

KEY FEATURES



HIGH
EFFICIENCY



ROBUST
CONSTRUCTION



HEAT RESISTANT
(For ISR Model)



SUITABLE FOR
LIGHT OIL
(For ISY Model)



EASY
MAINTENANCE

IDEAL FOR:



INDUSTRIAL



REFINERIES



COMMERCIAL
BUILDINGS



WATER SUPPLY



OIL & FUEL
TRANSPORT

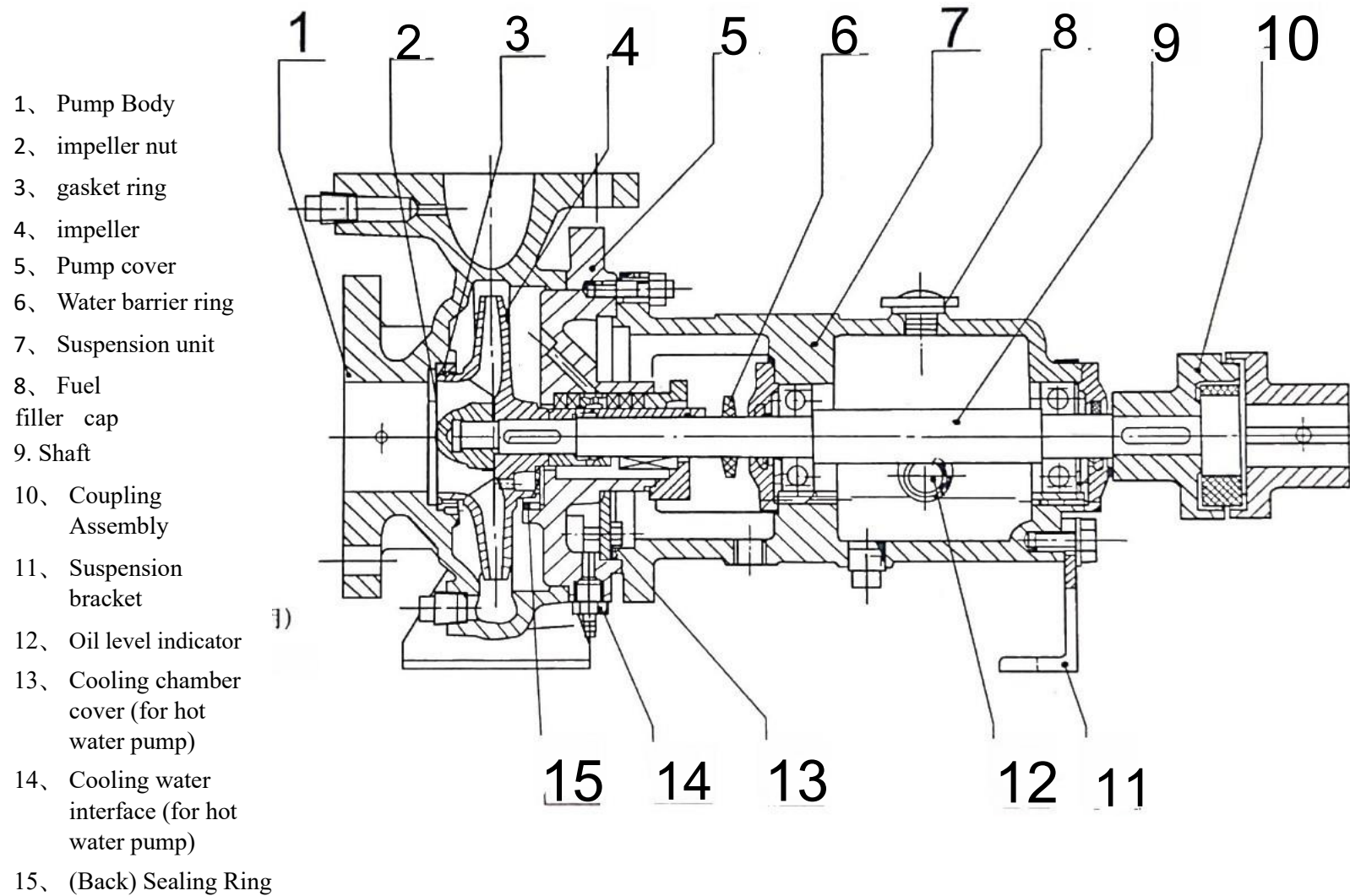


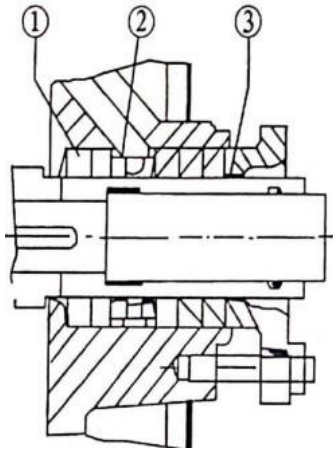
AGRICULTURE



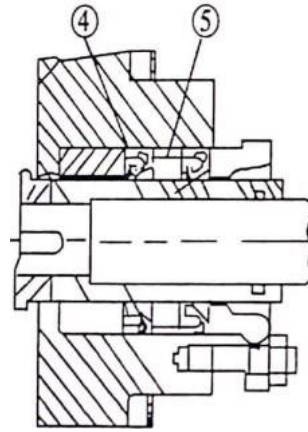
MARINE
APPLICATIONS

IS ISR-type pump structural diagram

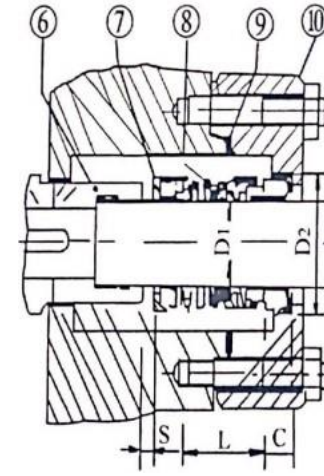




soft stuffing-box seals



rubber oil seal



contact seal

- 1、 filling
- 2、 packing ring
- 3、 axle sleeve
- 4、 rubber oil seal
- 5、 oil seal ring
- 6、 Short bushing
- 7、 Clamping ring
- 8、 Mechanical seal
- assembly 9,
Flat gasket
- 10、 Cover plate

Model	D ₁	D ₂	S	L	C	Model	D ₁	D ₂	S	L	C	Model	D ₁	D ₂	S	L	C						
50-32-160	25 g6	Zhong 40H8	0	30	10	50-32-250	35g6	Φ 50H8	0	32.5	10	125—80—315	Zhong 45g6	63H8	0	34	11						
65-50—160						100—80-160			1			125-80—400											
80-65—160						65—40—250			4			125—100—250											
50-32-125						80—50—250						150—125—250											
65—50—125			1			100—65—200						200—150-250											
						100—65—250						100—65--315											
						125—80—160						125—100—315											
						125-80-200			150—125—315														
50—32-200			125—80—250			6			125—100—400														
65-40-200			125—100—200						150—125—400														
80-50-200									65—40—315			7			200—150—315								
						80-50—315			200—150—400														

Model	Leaf Wheel	Rate of flow	Head	PowerKW		Productiveness	Essential Steam Removal allowance	Rate of flow	Head	PowerKW		Productiveness	Essential Steam Removal allowance					
	Type	m³ h		Shaft power	Any power-generating or power-driven machine Power			m³ h		m	Shaft power			Any power-generating or power-driven machine Power	%	m		
2900r/min								1450r/min (J)										
50—32—125	O	7. 5 12. 5 15. 0	22. 0 20. 0 18. 5	0. 96 1. 13 1. 26	2. 2	47 60 60	2. 0 2. 0 2. 5	3. 8 6. 3 7. 5	5. 4 5. 0 4. 6	0. 13 0. 16 0. 17	0. 55	43 54 55	2. 0 2. 0 2. 5					
		A	7. 2 11. 9 14. 3	20. 0 18. 2 16. 8		0. 85 1. 02 1. 13	2. 2	46 58 58	2. 0 2. 0 2. 25	3. 6 6. 0 7. 2		4. 9 4. 6 4. 2	0. 11 0. 14 0. 15	0. 55	42 52 53	2. 0 2. 0 2. 25		
			B	6. 7 11. 2 13. 4		17. 5 15. 9 14. 7		0. 71 0. 86 0. 96	1. 5	45 56 56		2. 0 2. 0 2. 05	3. 4 5. 6 6. 7		4. 3 4. 0 3. 7	0. 10 0. 12 0. 13	0. 55	41 50 51
	C	6. 2 10. 4 12. 5		15. 2 13. 8 12. 8	0. 59 0. 72 0. 80	1. 1	44 54 54	2. 0 2. 0 2. 0		3. 1 5. 2 6. 2	3. 7 3. 5 3. 2	0. 08 0. 10 0. 11	0. 55	40 48 49	2. 0 2. 0 2. 0			
		50—32—160	O	7. 5 12. 5 15. 0	34. 3 32. 0 29. 6		1. 59 2. 02 2. 16	3	44 54 56	2. 0 2. 0 2. 5	3. 8 6. 3 7. 5	8. 5 8. 0 7. 5		0. 25 0. 29 0. 31	0. 55	35 48 49	2. 0 2. 0 2. 5	
	A			6. 8 11. 4 13. 7	28. 4 26. 6 24. 6	1. 27 1. 59 1. 73	3		41. 5 52 53	2. 0 2. 0 2. 16	3. 4 5. 7 6. 8	7. 1 6. 7 6. 2	0. 19 0. 23 0. 25	0. 55		34 45. 5 46	2. 0 2. 0 2. 16	
				B	6. 1 10. 1 12. 2	22. 5 21. 0 19. 4			0. 95 1. 16 1. 26	2. 2	39 50 51	2. 0 2. 0 2. 0	3. 0 5. 1 6. 1			5. 6 5. 3 4. 9	0. 14 0. 17 0. 19	0. 55
	C		5. 4 9. 0 10. 8		17. 9 16. 7 15. 4	0. 73 0. 91 1. 0	1. 5	36 45 45. 5	2. 0 2. 0 2. 0		2. 7 4. 6 5. 4	4. 4 4. 2 3. 9	0. 11 0. 14 0. 15	0. 55	30 38 38. 5	2. 0 2. 0 2. 0		
			50—32—200	O	7. 5 12. 5 15. 0	52. 5 50. 0 48. 0		2. 82 3. 54 3. 95	5. 5	38 48 51	2. 0 2. 0 2. 5	3. 8 6. 3 7. 5	13. 1 12. 5 12		0. 41 0. 51 0. 56	0. 75	33 42 44	2. 0 2. 0 2. 5
	A				7. 3 12. 1 14. 6	49. 4 47. 0 45. 1	2. 61 3. 30 3. 58	5. 5		37. 5 47 50	2. 0 2. 0 2. 3	3. 6 6. 1 7. 3	12. 3 11. 8 11. 3	0. 38 0. 47 0. 52	0. 75		32. 5 41. 5 43. 2	2. 0 2. 0 2. 3
					B	7. 0 11. 7 14. 0	45. 3 43. 2 41. 5			2. 33 2. 96 3. 20	4	37 46. 2 49. 2	2. 0 2. 0 2. 15	3. 5 5. 9 7. 0			11. 3 10. 8 10. 4	0. 34 0. 42 0. 46
	C			6. 5 10. 9 13. 0		39. 6 37. 7 36. 2	1. 95 2. 47 2. 67	4	36 45. 2 48. 2	2. 0 2. 0 2. 0		3. 3 5. 5 6. 5	9. 9 9. 4 9. 1	0. 28 0. 36 0. 39	0. 55	31 39. 5 41. 2	2. 0 2. 0 2. 0	
50—32—250				O	7. 5 12. 5 15. 0	82. 0 80. 0 78. 5	5. 87 7. 16 7. 83		11	28. 5 38 41	2. 0 2. 0 2. 5	3. 8 6. 3 7. 5	20. 5 20. 0 19. 5	0. 91 1. 07 1. 14		1. 5	23 32 35	2. 0 2. 0 2. 5
	A				7. 0 11. 6 13. 9	70. 6 68. 9 67. 6	4. 78 5. 80 6. 41	11		28 37. 5 40	2. 0 2. 0 2. 25	3. 5 5. 9 7. 0	17. 7 17. 2 16. 8	0. 76 0. 88 0. 93	1. 5		22. 1 31. 2 34. 2	2. 0 2. 0 2. 25
					B	6. 5 10. 8 13. 0	61. 2 59. 7 58. 6			3. 93 4. 84 5. 30	7. 5	27. 5 36. 3 39	2. 0 2. 0 2. 05	3. 2 5. 4 6. 5			15. 3 14. 9 14. 6	0. 63 0. 73 0. 77
	C			6. 0 10. 0 12. 0		52. 5 51. 2 50. 2	3. 18 3. 98 4. 38	5. 5	27 35 37. 5	2. 0 2. 0 2. 0		3. 0 5. 0 6. 0	13. 1 12. 8 12. 5	0. 51 0. 60 0. 63	1. 1	21 29. 5 32. 5	2. 0 2. 0 2. 0	

Model	Leaf Wheel	Traffic	Yang Cheng	Power kW		Efficiency	Essential Steam Removal allowance	Traffic	Head	Power(KW)		Productiveness	Essential Steam Removal allowance
	Type			Shaft Power Output	Any power-generating or power-driven machine Power					Shaft Power	Electric motor		
		m³ h	m			%	m	m³ h	m	Power		%	m
2900r/min								1450r/min (J)					
65—50—125	O	15.0	21.8	1.54		58	2.0	7.5	5.4	0.21		53 64	2.0
		25.0	20.0	1.97	3	69	2.5	12.5	5.0	0.27	0.55	65	2.0
		30.0	18.5	2.22		68	3.0	15	4.7	0.30			2.5
	A	14.1	19.2	1.33		55	2.0	7.0	4.7	0.18		50.5	2.0
		23.5	17.6	1.68	3	67	2.4	11.7	4.4	0.23	0.55	61.5 62	2.0
		28.2	16.3	1.89		66	2.8	14.1	4.1	0.26			2.3
	B	13.2	16.8	1.19		50.5	2.0	6.6	4.1	0.16		46.5	2.0
		21.9	15.4	1.48	2.2	62	2.3	11.0	3.8	0.20	0.55	57	2.0
		26.3	14.2	1.67		61	2.6	13.2	3.6	0.23		57.5	2.15
	C	11.3	12.4	0.88		43.5	2.0	5.7	3.0	0.11		51.5	2.0
		18.9	11.4	1.10	2.2	53	2.15	9.4	2.8	0.15	0.55	48	2.0
		22.6	10.5	1.25		52	2.4	11.3	2.7	0.17		48.5	2.0
65—50—160	O	15.0	35.0	2.65		54	2.0	7.5	8.8	0.36		50	2.0
		25.0	32.0	3.35	5.5	65	2.0	12.5	8.0	0.45	0.75	60	2.0
		30.0	30.0	3.71		66	2.5	15	7.2	0.49		60	2.5
	A	14.1	30.8	2.25		52.5	2.0	7.0	7.8	0.32		47	2.0
		23.5	28.2	2.86	4	63	2.0	11.7	7.0	0.39	0.75	58	2.0
		28.2	26.4	3.16		64	2.25	14.1	6.3	0.42		58	2.25
	B	13.0	26.1	1.86		49.5	2.0	6.5	6.6	0.25		45.5 55	2.0
		21.6	23.9	2.42	4	58	2.0	10.8	6.0	0.32	0.55	55	2.0
		25.9	22.4	2.68		49	2.05	13.0	5.4	0.35			2.05
	C	12.0	22.5	1.58		46.8	2.0	6.0	5.7	0.22		53	2.0
		20.1	20.6	2.05	3	55	2.0	10.0	5.2	0.27	0.55	52	2.0
		24.1	19.3	2.30		55	2.0	12.0	4.6	0.29		52	2.0
65—40—200	O	15.0	53.0	4.42		49	2.0	7.5	13.2	0.63		43	2.0
		25.0	50.0	5.67	7.5	60	2.0	12.5	12.5	0.77	1.1	55	2.0
		30.0	47.0	6.29		61	2.5	15	11.8	0.85		57	2.5
	A	14.3	47.8	3.81		48.7	2.0	7.1	11.9	0.54		43	2.0
		23.8	45.1	4.91	7.5	59.5	2.0	11.9	11.3	0.66	1.1	55	2.0
		28.5	42.4	5.44		60.5	2.3	14.3	10.7	0.73		57	2.3
	B	13.5	42.9	3.27		48.3	2.0	6.8	10.7	0.46		43	2.0
		22.5	40.5	4.21	5.5	59	2.0	11.3	10.1	0.56	1.1	55	2.0
		27.0	38.1	4.67		60	2.1	13.5	9.6	0.62		57	2.1
	C	12.8	38.3	2.77		48	2.0	6.4	9.5	0.39		42	2.0
		21.3	36.1	3.64	5.5	57.5	2.0	10.6	9.0	0.48	0.75	54	2.0
		25.5	34.0	4.00		59	2.0	12.8	8.5	0.52		57	2.0
65—40—250	O	15.0	82.0	9.05		37	2.0	7.5	21	1.23		35	2.0
		25.0	80.0	10.9	15	50	2.0	12.5	20	1.48	2.2	46	2.0
		30.0	78.0	12.0		53	2.5	15	19.4	1.65		48	2.5
	A	14.1	72.0	7.55		36.5	2.0	7.0	18.4	1.01		35	2.0
		23.4	70.2	9.14	15	49	2.0	11.7	17.6	1.25	2.2	44.8	2.0
		28.1	68.5	10.0		52.4	2.26	14.1	17.0	1.39		47	2.26
	B	13.1	62.7	6.21		36	2.0	6.6	16.0	0.82		34.8	2.0
		21.9	61.1	7.64	11	47.6	2.0	10.9	15.3	1.04	1.5	43.8	2.0
		26.2	59.6	8.34		51	2.07	13.1	14.8	1.15		46.2	2.07
	C	12.3	55.0	5.18		35.5	2.0	6.1	14.1	0.68		34.5 43	2.0
		20.5	53.7	6.46	11	46.3	2.0	10.2	13.4	0.87	1.5	45	2.0
		24.6	52.3	7.04		49.7	2.0	12.3	13.0	0.97			2.0

Model	Impeller	Rate of flow	Head	PowerKW		Productiveness	Essential Steam Removal allowance	Rate of flow	Head	PowerKW		Productiveness	Essential Steam Removal allowance					
	Type	m³ h		m	Shaft Power					Any power-generating or power-driven machine Power	%			m	Shaft power	Any power-generating or power-driven machine Power	%	m
2900r/min								1450r/min (J)										
65—40—315	O	15 25 30	127 125 123	18.5 21.3 22.8	30	28 50 44	2.5 2.5 3.0	7.5 12.5 15	32.3 32.0 31.7	2.63 2.94 3.16	4	25 37 41	2.5 2.5 3.0					
		A	14 23.3 28.0	111 109 107		15.0 17.5 18.8	22	28 39.5 43.5	2.5 2.5 2.75	7.0 11.7 14.0		28.1 27.9 27.6	2.15 2.42 2.58	4	25 36.6 40.8	2.5 2.5 2.75		
			B	13.1 21.9 26.3		97.5 96.0 94.4		12.5 14.7 15.7	18.5	28 39 43		2.5 2.5 2.65	6.6 11.0 13.1		24.8 24.6 24.3	1.78 2.02 2.15	3	25 36.3 40.6
	C			12.1 20.2 24.3	83.2 81.9 80.6	9.83 11.7 12.5		15		28 38.5 42.5	2.5 2.5 2.5	6.1 10.1 12.1	21.2 21.0 20.8		1.41 1.61 1.70	3		25 36 40.4
		80—65—125		O	30 50 60	22.5 20 18	2.87 3.63 3.98			5.5	64 75 74	3.0 3.0 3.5	15 25 30	5.6 5.0 4.5	0.42 0.48 0.51			0.75
			A		28.7 47.9 57.4	20.6 18.3 16.5	2.56 3.27 3.56		5.5		63 73 72.5	3.0 3.0 3.3	14.4 23.9 28.7	5.1 4.6 4.1	0.37 0.43 0.45		0.75	
	B				26.1 43.6 52.3	17.1 15.2 13.7	2.01 2.59 2.84	4			60.5 69.5 68.5	3.0 3.0 3.1	13.1 21.8 26.1	4.3 3.8 3.4	0.29 0.34 0.36	0.55		
				C	23.1 38.6 46.3	13.4 11.9 10.7	1.45 1.91 2.09			3	58 65.5 64.5	3.0 3.0 3.0	11.6 19.3 23.1	3.3 3.0 2.7	0.21 0.25 0.27			0.55
			80—65—160		O	30 50 60	36 32 29		4.82 5.97 6.59		7.5	61 73 72	2.5 2.5 3.0	15 25 30	9 8 7.2		0.67 0.79 0.86	
	A					28.2 46.9 56.3	31.7 28.2 25.5	4.05 5.07 5.59	7.5			60 71 70	2.5 2.5 2.8	14.1 23.5 28.2	7.9 7.0 6.3	0.57 0.68 0.74	1.1	
				B		25.9 43.2 51.9	26.9 23.9 21.7	3.21 4.20 4.63		5.5		59 67 76	2.5 2.5 2.6	13.0 21.6 25.9	6.7 6.0 5.4	0.47 0.56 0.61		1.1
					C	24.1 40.1 48.2	23.2 20.6 18.7	2.67 3.52 3.89			5.5	67 64 63	2.5 2.5 2.5	12.0 20.1 24.1	5.8 5.2 4.6	0.40 0.47 0.52		
80—50—200	O					30 50 60	53 50 47	7.87 9.87 10.8	15			55 69 71	2.5 2.5 3.0	15 25 30	13.2 12.5 11.8	1.06 1.31 1.44	2.2	
				A		28.0 46.9 55.9	46.0 43.4 40.8	6.42 8.21 8.93		11		54.5 67 69.5	2.5 2.5 2.7	14.0 23.3 27.9	11.5 10.9 10.2	0.86 1.09 1.20		1.5
					B	25.6 42.17 51.2	38.6 36.4 34.2	5.02 6.40 6.96			11	53.5 66 68.5	2.5 2.5 2.53	12.8 21.3 25.6	9.6 9.1 8.6	0.68 0.86 0.96		
	C					23.5 39.2 47.1	32.6 30.8 28.9	3.98 5.09 5.45	7.5			52.5 64.5 68	2.5 2.5 2.5	11.8 19.6 23.5	8.1 7.7 7.3	0.54 0.68 0.76	1.1	

Model	Impeller	Rate of flow	Yang Cheng	Power kW		Productiveness	Essential Steam Removal allowance	Rate of flow	Yang Cheng	Power kW		Efficiency	Essential Steam Removal allowance
	Type	m³ h	m	Shaft power	Electric motor Power Output	%	m	m³ h	m	Shaft power rating	Any power-generating or power-driven machine Power	%	m
2900r/min								1450r/min (J)					
80—50—250	O	. 30 50 60	84 80 75	13.2 17.3 19.2	22	52 63 64	2. 5 2. 5 3. 0	15 25 30	21 20 18. 8	1. 75 2. 27 2. 52	3	49 60 61	2. 5 2. 5 3. 0
	A	28.3 47.2 56.6	74.9 71.3 66.8	11.0 14.6 16.1	22	52. 3 62. 6 64	2. 5 2. 5 2. 8	14.2 23.6 28.3	18.7 17.8 16.8	1. 47 1. 95 2. 16	3	49 58.7 59.7	2. 5 2. 5 2. 8
	B	26.6 44.4 53.3	66.2 63. 59.1	9. 1 12. 3 13. 4	18. 5	52. 7 62. 2 64	2. 5 2. 5 2. 6	13.3 22.2 26.6	16.6 15.8 14.8	1. 23 1. 64 1. 81	2. 2	49 58 59.5	2. 5 2. 5 2. 6
	C	23.8 39.6 47.5	52.7 50.2 47.0	6.43 8.90 9.59	15	53 60.8 63.5	2. 5 2. 5 2. 5	11.9 19.8 23.8	13.2 12.6 11.8	0.87 1. 19 1. 29	2. 2	49 57 59	2. 5 2. 5 2. 5
80—50—315	O	30 50 60	128 125 123	25.5 31.5 35.3	37	41 54 56.7	2. 5 2. 5 3. 0	15 25 30	32. 5 32 31. 5	3. 4 4. 19 4. 6	5. 5	39 52 56	2. 5 2. 5 3. 0
	A	28.0 46.7 56.0	112 109 107	20.7 25.9 28.8	37	41 53.5 56.7	2. 5 2. 5 2. 7	14.0 23.3 28.0	28.3 27.9 27.4	2.77 3.43 3.75	5. 5	39 51.7 55.8	2. 5 2. 5 2. 7
	B	26.3 43.8 52.6	98.3 96.0 94.4	17.2 21.6 24.0	30	41 53 56.3	2. 5 2. 5 2. 63	13.1 21.9 26.3	25.0 24.6 24.2	2.29 2.85 3.11	4	39 51.4 55.6	2. 5 2. 5 2. 63
	C	24.3 40.5 48.6	83.9 81.9 80.6	13.5 17.2 19.0	22	41 52.5 56	2. 5 2. 5 2. 5	12.1 20.2 24.3	21.3 21.0 20.6	1.81 2.26 2.46	4	39 51.1 55.4	2. 5 2. 5 2. 5
100—80—125	O	60 100 120	24 20 16.5	5.86 7.0 7.28	11	67 78 74	4.0 4.5 5.0	30 50 60	6 5 4	0.77 0.91 0.92	1. 5	64 75 71	2. 5 2. 5 3. 0
	A	56.6 94.2 113	21.3 17.8 14.7	5.17 6.25 6.45	11	63.5 73 70	4.0 4.4 4.8	28.3 47.1 56.6	5.3 4.4 3.6	0.67 0.79 0.83	1. 5	61 72 66	2. 5 2. 5 2. 8
	B	53.5 89.2 107	19. 15.9 13.1	4.64 5.52 5.89	7. 5	60 70 65	4.0 4.3 4. 65	26.8 44.6 53.5	4.8 4.0 3.2	0.61 0.73 0.73	1. 1	57 66 64	2. 5 2. 5 2. 6
	C	47.9 79.1 95.0	15.0 12.5 10.3	3.57 4.22 4.28	5. 5	54.5 64 62.5	4.0 4.2 4.4	23.7 39.6 47.5	3.8 3.1 2.5	0.51 0.55 0.55	1. 1	48 61 59	2. 5 2. 5 2. 5
100—80—160	O	60 100 120	36 32 28	8.42 11.2 12.2	15	70 78 75	3.5 4.0 5.0	30 50 60	9.2 8.0 6.8	1.12 1.45 1.57	2. 2	67 75 71	2.0 2.5 3.5
	A	56.9 94.8 114	32.4 28.8 25.2	7.19 9.58 10.5	15	69.7 77.5 74.2	3. 5 3. 97 4. 5	28.4 47.4 56.9	8.3 7.2 6.1	0.96 1.22 1.35	2. 2	66.5 76 70	2.0 2.34 2.6
	B	53.4 89.0 107	28.5 25.4 22.2	5.99 8.02 8.75	11	69.3 76.6 73.8	3. 5 3. 77 4. 1	26.7 44.5 53.4	7.3 6.3 5.4	0.8 1.05 1.14	1. 5	66 73.3 69	2.0 2.25 2.9
	C	50.6 84.4 101	25.6 22.8 19.9	5.12 6.89 7.48	11	69 76 73.5	3. 5 3. 65 3. 93	25.3 42.2 50.6	6.6 5.7 4.8	0.69 0.90 0.97	1. 5	65.5 73 68.5	2.0 2.17 2.4

Model	Leaf Wheel	Traffic	Yang Cheng	PowerKW		Productiveness	Essential Steam Removal allowance	Traffic	Head	PowerKW		Productiveness	Essential Steam Removal allowance
	Type	m³ h	m	Shaft power	Any power-generating or power-driven machine Power	%	m	m³ h	m	Shaft power	Any power-generating or power-driven machine Power	%	m
2900r/min								1450r/min (J)					
100—65—200	O	60	54	13.6		65	3.0	30	13.5	1.84		60	2.0
		100	50	17.9	22	79	3.6	50	12.5	2.33	4	73	2.0
		120	47	19.9		77	4.8	60	11.8	2.61		74	2.5
	A	56.4	47.8	11.3		65	3.0	28.2	11.9	1.53		60	2.0
		94.	44.2	14.8	22	76.5	3.45	47.0	11.1	1.95	3	72.7	2.0
		113	41.6	16.6		77	4.3	56.4	10.4	2.18		73.7	2.29
	B	53.5	42.9	9.6		65	3.0	26.7	10.7	1.30		60	2.0
		89.	39.7	12.9	18.5	74.5	3.35	44.6	9.9	1.67	3	72.3	2.0
		107	37.3	14.3		76	3.6	53.5	9.4	1.86		73.3	2.15
	C	50.5	38.3	8.09		65	3.0	25.3	9.6	1.10		60	2.0
		84.2	35.4	11.1	15	73	3.25	42.	8.9	1.41	2.2	72	2.0
		101	33.3	12.2		75	3.6	50.5	8.4	1.57		73.3	2.0
100—65—250	O	60	87	23.4		61	3.5	30	21.3	3.16		55	2.0
		100	80	30.3	37	72	3.8	50	20	4.00	5.5	68	2.0
		120	74.5	33.3		73	4.8	60	19	4.44		70	2.5
	A	56.0	75.8	19.4		59.5	3.5	28.0	18.6	2.67		53	2.0
		93.3	69.7	25.6	37	69.3	3.7	46.7	17.4	3.38	5.5	65.5	2.0
		112	64.9	28.1		70.5	4.35	56.0	16.6	3.72		67.8	2.25
	B	52.2	65.9	16.6		56.5	3.5	26.1	16.1	2.25		51	2.0
		87.	60.6	21.8	30	66.1	3.6	43.5	15.2	2.90	4	62	2.0
		104	56.5	24.0		67	4.0	52.2	14.4	3.17		64.6	2.05
	C	48.5	56.8	14.1		53	3.5	24.2	13.9	1.87		49	2.0
		80.8	52.2	18.3	30	62.8	3.5	40.4	13.1	2.45	4	58.5	2.0
		96.6	48.6	20.1		67	3.75	48.5	12.4	2.70		60.6	2.0
100—65—315	O	60	133	39.6		55	3.0	30	34	5.44		51	2.0
		100	125	51.6	75	60	3.6	50	32	6.92	11	63	2.0
		120	118	57.5		67	4.2	60	30	7.67		64	2.5
	A	56	116	32.1		55	3.0	28	29.6	4.43		51	2.0
		93.3	109	42.5	55	65.2	3.45	46.7	27.9	5.64	11	62.8	2.0
		112	103	47.5		66	3.95	56	26.1	6.30		63.3	2.25
	B	52.6	102	26.6		55	3.0	26.3	26.1	3.66		51	2.0
		87.6	96	35.5	45	64.5	3.32	43.8	24.6	4.67	7.5	62.7	2.0
		105	90.6	39.9		65	3.70	52.6	23.0	5.30		62.2	2.10
	C	48.5	87.2	21.0		55	3.0	24.3	22.3	2.89		51	2.0
		81.0	81.9	28.7	37	63	3.2	40.5	21.0	3.76	5.5	61.5	2.0
		97.	77.3	32.0		64	3.5	48.6	19.7	4.25		61.2	2.0
125—80—160	Z	105	42.8	16.9		72		52.3	10.7	2.21		69	
		174	38	22.6	30	80	5.6	87.2	9.5	2.93	4	77	2.5
		209	33.3	24.6		77		105	8.31	3.20		74	
	O	96	36	13.1		72		48	9	1.71		69	
		160	32	17.5	22	80	5.6	80	8	2.26	3	77	2.5
		192	28	19.0		77		96	7	2.47		74	
	A	89.8	31.5	11.0		70		44.9	7.9	1.44		67	
		150	28	14.7	18.5	78	5.6	74.8	7	1.90	2.2	75	2.5
		180	24.5	16.0		75		89.8	6.1	2.08		72	
	B	83.1	27	8.99		68		41.6	6.8	1.18		65	
		139	24	11.9	15	76	5.6	69.3	6	1.55	2.2	73	2.5
		166	21	13.0		73		83.	5.3	1.70		70	

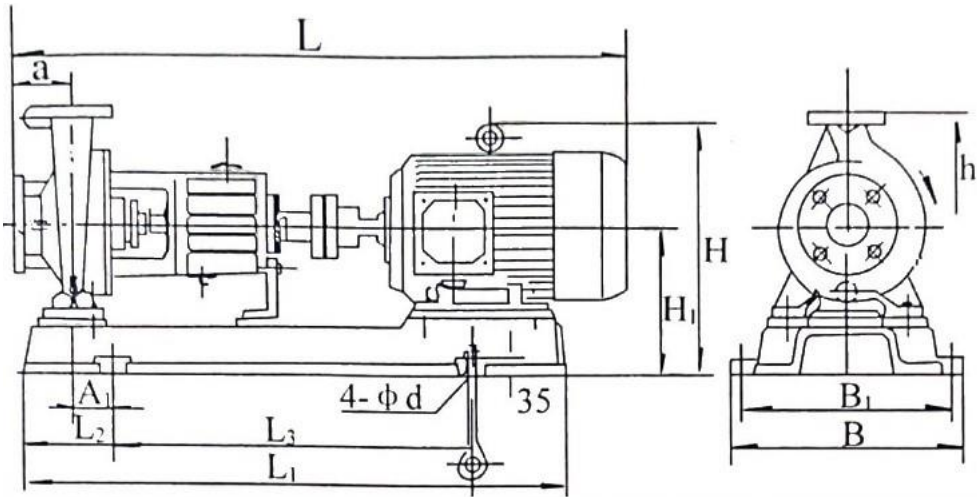
Model Number	Impeller Type Type	Traffic	Yang Cheng	Power kW		Efficiency %	Essential Steam	Traffic	Yang Cheng	Power kW		Productiveness	Essential Steam
		m³ h	m	Shaft Power Output	Any power- generating or power-driven machine Power		Etch 余 量 m		m	Shaft Power Output	Any power- generating or power-driven machine Power	%	Etching 余 量 m
2900r/min								1450r/min (J)					
125—80—200	Z	105 175 210	66 60 55.2	28.6 35.8 40.5	45	66 80 78	5.2	52.6 87.6 105	16.5 15 13.8	3.75 4.65 5.27	5.5	63 77 75	2.5
	O	96 160 192	55 50 46	21.8 27.2 30.8	37	66 80 78	5.2	48 80 96	13.6 12.5 11.5	2.85 3.54 4.0	4	63 77 75	2.5
	A	90.1 150 180	48.4 44 40.5	18.3 22.8 25.8	30	65 79 77	5.2	45.0 75.1 90.1	12.1 11 10.1	2.39 2.96 3.35	4	62 76 74	2.5
	B	83.6 139 167	41.8 38 35.0	14.9 18.5 21.0	22	64 78 76	5.2	41.9 69.7 83.7	10.5 9.5 8.7	1.95 2.41 2.73	3	61 75 73	2.5
125—80—250	Z	103 172 206	100 92 84	43.2 55.8 63.9	75	65 77 74	4.8	51.5 85.8 103	25 23 21.3	5.66 1.26 8.40	11	62 74 71	2.2
	O	96 160 192	87 80 73	35.0 45.3 51.6	55	65 77 74	4.8	48 80 96	21.8 20 18.3	4.59 5.89 6.72	7.5	62 74 71	2.2
	A	89.8 150 180	76.1 70 63.9	29.1 37.5 42.8	45	64 76 73	4.8	44.9 74.8 89.8	19.0 17.5 16.0	3.81 4.89 5.58	5.5	61 73 70	2.2
	B	83.1 139 166	65.3 60 54.8	23.5 30.2 34.4	37	63 75 72	4.8	41.6 69.3 83.1	16.3 15.0 13.7	3.08 3.93 4.49	5.5	60 72 69	2.2
125—80—315	Z	100 167 200	145 136 129	68.0 84.7 96.7	110	58 73 73	4.5	49.5 82.5 99.0	35.6 34 31.9	8.72 10.9 12.3	15	55 70 70	2.1
	O	96 160 192	133 125 119	60.0 74.6 85.2	90	58 73 73	4.5	48 80 96	33.5 32 30	7.96 9.96 11.2	15	55 70 70	2.1
	A	91.7 153 183	121 114 109	53.1 65.9 75.3	75	57 72 72	4.5	45.3 75.5 90.6	29.8 28.5 26.7	6.82 8.49 9.55	11	54 69 69	2.1
	B	87.1 145 174	110 103 98.	46.4 57.4 65.6	75	57 72 72	4.5	43. 71.1 86.8	27.0 25.8 24.1	5.97 7.40 8.33	11	53 68 68	2.1
	C	82.4 137 165	97.9 92 87.6	39.9 49.1 56.1	75	55 70 70	4.5	40.7 67.8 81.4	24.1 23 21.6	5.13 6.34 7.13	7.5	52 67 67	2.1
125—100—200	O	120 200 240	57.5 50 44.5	28.0 33.6 36.4	45	67 81 80	4.5 4.5 5.0	60 100 120	14.5 12.5 11.0	3.83 4.48 4.79	7.5	62 76 75	2.5 2.5 3.0
	A	111 185 222	49.3 42.9 38.2	23.1 27.7 30.0	37	64.5 78 77	4.5 4.5 4.7	55.6 92.6 111	12.4 10.7 9.4	3.08 3.68 3.91	5.5	61 73.5 73	2.5 2.5 2.75
	B	103 172 207	42.6 37. 3.30	19.2 23.2 25.1	30	62.5 75 74	4.5 4.5 4.55	51.7 86.1 103	10.8 9.3 8.2	2.61 3.11 3.33	5.5	58 70 69	2.5 2.5 2.55

Model	Leaf Wheel	Rate of flow	Head m	Power kW		Efficiency %	Essential Steam	Traffic m³ h	Head m	PowerKW		Productiveness %	Essential Steam Removal allowance
	Type	m³ h		Shaft power	Any power-generating or power-driven machine Power		Etch 余量 m			Shaft power	Any power-generating or power-driven machine Power Output		m
2900r/min								1450r/min (J)					
125—100—200	C	94.4	35.6	15.3	30	60	4.5	47.2	9.0	2.10	4	55 66	2.5
		157	31.0	18.7		71	4.5	78.7	7.7	2.51		66	2.5
		189	27.9	20.3		70	4.5	94.4	6.8	2.66			2.5
125—100—250	O	120	87	43.0	75	66	3.8	60	21.5	5.59	11	63	2.5
		200	80	55.9		78	4.2	100	20	7.17		76	2.5
		240	72	62.8		75	5.0	120	18.5	7.84		77	3.0
	A	112	75.8	35.0	75	66	3.8	56	18.7	4.53	11	63 76	2.5
		187	69.7	45.3		78.2	4.08	93.3	17.4	5.83		77	2.5
		224	62.7	52.		73.5	4.6	112	16.1	6.38			2.7
	B	104	65.6	28.4	55	66	3.8	52.2	16.3	3.68	7.5	63	2.5
		174	60.6	36.9		78	4.0	87.	15.2	4.76		75.5	2.5
		209	54.6	42.5		73	4.4	104	14.0	5.19		76.8	2.53
	C	96.9	56.8	22.7	45	66	3.8	48.5	1.40	2.94	5.5	63	2.5
		162	52.2	29.5		77.8	3.9	80.8	13.1	3.82		75.2	2.5
		194	47	34.0		73	4.15	96.9	12.1	4.17		76.5	2.5
125—100—315	O	120	133	72.	110	60	5.0	60	33.5	9.4	15	58	2.5
		200	125	90.8		75	4.5	100	32	11.9		73	2.5
		240	120	102		77	5.0	120	30.5	13.5		74	3.0
	A	112	116	60.4	110	59	4.9	56.2	29.4	8.04	15	56	2.5
		187	110	76.4		73.3	4.7	93.7	28.1	10.0		71.5	2.5
		225	105	85.9		75.1	4.4	112	26.8	11.3		72.5	2.8
	B	104	100	49.3	90	58	4.3	52.2	25.4	6.69	15	54	2.5
		174	94.8	63.5		70.8	4.5	87.1	24.3	8.28		59.5	2.5
		209	1.0	70.8		73.1	4.0	104	23.1	9.33		70.5	2.6
	C	96.5	85.7	39.5	75	57	4.0	48.3	21.7	5.38	11	53	2.5
		161	80.9	51.8		68.4	4.2	80.4	20.7	6.77		67	2.5
		193	77.7	57.3		71.3	4.43	96.5	19.7	7.63		68	2.5

Model Number	Traffic m³ / h	Yang Cheng m	Power Output Rate KW		Productiveness %	Required-Automotive Remaining etching amount m
			Shaft Power	Motor Power Output		
1450r/min						
125-80-400	Z	52.6 87.6 105	63.6 60 55.2	17.7 22.7 25.1	30	51 63 63 2.0
	A	48 80 96	53 50 46	13.6 3	22	51 63 63 2.0
	B	45.0 75.1 90.1	46.6 44 40.5	11.4 14.5 16.0	18.5	50 62 62 2.0
	C	41.9 69.7 83.7	40.3 38 35.0	9.4 11.8 13.1	15	49 61 61 2.0
150-125-250	O	200	23.2 20 17.0	10.7 13.5 14.3	18.5	71 81 78 3.0 3.0 3.5
	A	Hong	20.2 17.4 14.8	9.0 11.5 12.0	15	68.5 Hong 3.0 3.0 3.2
	B	103 171 205	16.9 14.6 12.4	7.3 9.1 9.8	15	64.5 75 71 3.0 3.0 3.05
	C	95.4 cases	14.7 10.6	6.2	11	61.5 71 68 3.0 3.0 3.0
150-125-400	O	240	53 50 46	27.9 36.3 40.6	45	62 75 74 2.8 3.5
	A	112 186 224	46.1 43.5 40.1	22.6 29.4 32.9	45	62 74.5 73 2.0 2.65 3.2
	B	174 209	40.3 38.0 35.0	18.5 24.4 27.5	37	4 72.4 2.0 2.5 2.95
	C	96.5 161 193	34.3 32.3 29.7	14.5 19.4 21.9	30	62 72.8 71.5 2.0 2.35 2.7
200-150-315	O	460	37 32 28.5	34.6 42.5 44.6	55	70 82 80 3.0 3.1
	A	369 420	30.9 26.7 23.8	27.2 35.0 36.4	45	68 76.2 75 3.0 3.35 3.6
	B	330 380	25.2 21.8 19.4	221 28.3 29.1	37	69.3 69 3.0 3.2 3.4
	C	6 348	21.2 18.3 16.3	18.1 23.6 24.9	30	58 64 62 3.0 3.1

Model Number	Traffic m³ / h	Yang Cheng m	Power kW		Productiveness %	Required-Automotive Removal allowance m
			Shaft power	Electric Motor Power		
1450r/min						
125-100-400	O	60 120	3 扣 48.5	16.1 21.0 23.6	30	2.5 0 3.0
	A	56.4 93.9 113	45.9 44.1 428	13.3 17.4 19.7	22	2.5 2.5 2.75 66.8
	B	52.3 87.1 105	39.4 37.9 36.8	10.6 13.9 15.7	18.5	53 64.7 66.5 2.5 2.5 2.6
	C	48.6 81.0 97.2	34.1 32.8 31.8	8.5	15	53 64.4 66.2 2.5 E 2.5
150-125-315	O	120 200 240	34 32 29	15.9 22.1 23.7	30	70 79 80 25 3.0
	A	112 186 224	29.6 27.8 25.2	13.0 18.0 19.4	22	2 2.5 2.5 2.7
	B	104 174 208	25.6 24.1 21.8	10.7 14.7 15.9	18.5	68 77.7 78 2.5 2.5 2.55
	C	96.4 20.6 18.7	21.7 20.6 18.7	8.6 11.8 12.7	15	76.2 2.5 2.5 2.5
200-150-250	O	480	25 22	23.7 29.1 30.6	37	69 82.5 82 3.0 3.5 4.0
	A	427	21.5 18.9 17.2	19.5 23.9 25.2	30	67 80 79.5 3.0 3.4 3.7
	B	345 397	186 16.4 14.9	16.0 19.8 20.9	30	65.4 77.5 77 3.0 3.3 3.5
	C	190 317 365	15.7 13.8 12.6	12.7 16.2 17.0	22	64.4 74 73.5 3.0 3.2 3.35
200-150-400	O	400 460	55 50 45	48.6 67.2 74.2	90	74 81 76 3.0 3.8 4.5
	A	224 429	47.7 43.4 39.1	39.8 55.2 62.0	75	73 79.8 73.5 3.0 3.6 4.1
	B	209 348 401	41.7 37.9 341	33.0 45.8 51.7	75	72 78.6 72 3.0 3.4 3.8
	C	194 373	36.1 32.8 29.5	26.9 37.6 42.5	55	71 77 70.5 3.0 3.25 3.9

Installation Size



Select Y-series motors or YB-series explosion-proof motors.

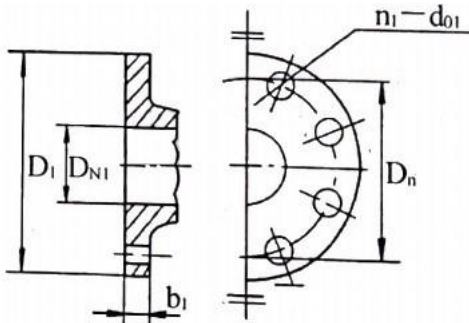
Pump	Any power-generating or power-driven machine		Ai	L ₁	L	L	H ₁	B ₁	B	d	a	h	L		Gross masskg	
	Model	KW											Y	YB	Y	YB
50—32—125	90L-2	2.2	90	755	170	480		350	400	20	80	140	800	850	95	107
	90S-2	1.5	70	730	150	440	200	320	370	16			755	805	90	100
	802-2	1.1	70	705									750	795	82	90
			70	705												
	801-4	0.55	70		150	440	200	320	370	16			750	795	83	90
50—32—160	100L—2	3	90	780	170	480	220	350	400	20	80	160	845	895	113	125
	90L-2	2.2		755									800	850	105	117
	90S—2	1.5					200						775	825	102	110
			70	730	150	440		320	370	16						
	801-4	0.55	70	705	150	440	200	320	370	16			750	795	92	98
50—32—200	132S ₁ -2	5.5	110	830	185	540	250	400	450	20	80	180	940	975	152	165
	112M-2	4	90	790	170	480		350	400	16			865	925	131	140
	802-4	0.75	70	705	150	440	250	320	370	16			750	795	97	102
	801-4	0.55													96	103
50—32—250	160M ₁ -2	11	130	1125	220	660		490	540	20	100	225	1200	1255	256	274
	132Sr--2	7.5	115	965	205	600	270	440	490	16			1075	1110	205	219
	132S ₁ -2	5.5													199	212
	90L-4	1.5	95	885	185	540	270	400	450	20			935	985	158	168
	90S—4	1.1											910	960	153	164
65—50—125	100L-2	3	90	770	170	480	200	350	400	20	80	140	845	895	113	125
	90L-2	2.2		755			200						800	850	103	115
				705	150	440		320	370	16			750	795	91	97
	801-4	0.55	70													
65—50—160	132S-2	5.5	110	820	190	540			450	20	80	160	940	975	148	183
	112M-2	4		790			220			16			865	925	130	138
	100L—2	3	90	780	170	480		350	400	20			845	895	117	129
	802-4	0.75	70	705	150	440	220	320	370	16			750	795	96	101
	801-4	0.55													95	100
65—40—200	132S ₂ -2	7.5	110	830	185	540	250	400	450	20	100	180	1075	1100	170	184
	132S—2	5.5													164	177
	90S--4	1.1	90	755	170	480	250	350	400	16			910	960	119	130
	802-4	0.75		715	165								885	930	111	116
65—40—250	160M-2	15	130	1125	220	660	270	490	540	20	100	225	1200	1255	278	303
	160M-2	11													270	288
	100L—4	2.2	95	910	185	540	270	400	450	16			980	1030	178	189
	90L-4	1.5		885						20			935	980	170	180

Pump	Any power-generating or power-driven machine		Ai	LI	L ₂ 2	LI	H ₁	B ₁	B	d	a	h	L		Total weight(kg)					
	Model Number	KW											Y	YB	Y	YB				
65—40—315	200L—2	30	155	1200	245	740	290	550	600	20	125	250	1400	1430	417	441				
	180M—2	22	130	1130	220	660		490	540				1295		365	370				
	160L—2	18.5		1270									1355		320	343				
	160M—2	15		1225						1325			298		326					
							1280													
	112M—2	4	115	915	200	600	290	440	490	16			1205	1265	212	217				
	100L—2	3											1005	1055	205	214				
80—65—125	132S ₁ —2	5.5	110	820	190	540	220	400	450	20	100	160	960	995	138	151				
	112M—2	4	90		170	480		350	400	16				945	124	132				
	100L—2	3			790					885			915	107	119					
					780					20			865							
	802—4	0.75	70	705	150	440	220	320	370	16			770	815	84	89				
	801—4	0.55											83	88						
80—65—160	132S ₂ —2	7.5	110	830	185	540	250	400	450	20	100	180	960	995	155	169				
	132S—2	5.5													149	162				
	90L—4	1.5	90	755	170	480	250	350	400	16			820	870	108	118				
	90S—4	1.1											790	840	105	116				
	802—4	0.75			715			165						770	815	95	100			
80—50—200	160M—2	15	130	960	205	600	250	440	490	20	100	200	1085	1140	230	256				
	160M—2	11														222	240			
	132S ₂ —2	7.5	110	830	185	540			400				450				160	174		
	100L—4	2.2	90	780						20			865	915	120	130				
	90L—4	1.5		755	170	480	250	350	400	16			820	870	114	124				
	90S—4	1.1											795	845	109	120				
80—50—250	180M—2	22		1130	220	660	270			20	125	225	1270	1330	335	370				
	160L—2	18.5	130	1125				490	540	20			1245	1300	305	328				
	160M—2	15											1200	1255	270	300				
	100L—4	3	95	910	185	540	270	400	450	16			980	1030	175	184				
		100L—4	2.2													171	182			
80—50—315	200L—2	37	155	1200	245	740	315	550	600	20	125	280	590	620	430	465				
	200L ₁ —2	30	130	1130	220	660		490	540				565	595	416	440				
	180M—2	22													363	398				
	132S 4	5.5	115	965	205	600	315	440	490	16			500	535	235	247				
	112M—4	4		915	200						100	180	470	530	207	215				
100—80—125	160M—2	11	115	960	200	600		440	490	20			1085	1140	210	228				
	132S ₂ —2	7.5	95	850	185	540	250	400	450	16			960	995	157	171				
	132S—2	5.5													151	164				
	90L—4	1.5	75	765	165	480	250	350	400	16			820	875	111	121				
100—80—160	90S—4	1.1											795	845	106	117				
100—80—160	160M—2	15	130	1090	215	660	250	490	540	20	100	200	1200	1255	250	276				
	160M—2	11													242	260				
	100L ₁ —4	2.2	95	910	185	540	250	400	450	16			980	1030	150	161				
100—65—200	90L—4	1.5		855						20	100	225	935	985	141	151				
	180M—2	22		1130	220	660	270			20			1270	1330	335	370				
	160L—2	18.5	130	1125				490	540	20			1245	1300	303	326				
	160M—2	15												1200	1255	270	296			
	112M—4	4			200								980	1030	181	189				
	100L—4	3	115	915	205	600	270	440	490	16					177	186				
100L ₁ —4	2.2									173					184					
100—65—250	200L—2	37	140	1215	240	740	290	550	600	20	125	250	1400	1430	440	475				
	200L ₁ —2	30													425	450				
	132S—4	5.5	100	1015	200	600	290	440	490	16			1100	1135	231	243				
	112M—4	4		940	210								1025	1085	203	211				

Pump	Any power-generating or power-driven machine		Ai	LI	L ₂	L	H ₁	B:	B	d	a	h	L		Gross masskg		
	Model	KW											Y	YB	Y	YB	
100-65—315	280S-2	75	210	1505	325	940	390	670	720	20	125	280	1655	1665	824	929	
	250M-2	55	180	1385	295	840	360	600	650				1585	1590	683	785	
	225M-2	45		1295			335						1500	1525	568	678	
	200L-2	37	140	1260	250	740	315	550	600				1465	1495	496	530	
	160M-4	11		1125	220					20			1255	1310	353	378	
	132M-4	7.5	115		1055	225	660	315	490				540	1170	1230	300	314
	132S-4	5.5											1130	1165	286	298	
125—80—160	200L ₁ - 2	30	155	1200	245	740	290	550	600	20	125	225	1410	1440	386	410	
	180M—2	22		1135									1305	1365	326	360	
	160L-2	18.5	130	1125	220	660	270	490	540				1280	1330	285	308	
	160M-2	15											1225	1280	262	288	
	112M—4	4								16			1035	1095	174	182	
	100Lz-4	3	115	915	205	600	270	440	490				1015	1065	170	179	
	100L—4	2.2													165	176	
125-80-200	225M—2	45		1240	250		315			20	125	250	1450	1475	500	610	
	200L—2	37	155	1200	245	740	290	550	600				1410	1440	430	465	
	200L ₁ -2	30													415	439	
	180M-2	22	130	1135	220	660	270	490	540				1305	1365	345	380	
	132M-4	7.5								16			1145	1180	245	259	
	132S—4	5.5	115	1005	205	600	270	440	490				1105	1140	230	242	
	112M-4	4		915									1035	1095	220	230	
125—80-250	280S-2	75	210	1505	325	940	390	670	720	20	125	280	1635	1645	875	981	
	250M—2	55	180	1385	295	840	360	600	650				1565	1570	860	962	
	225M-2	45		1295			335						1450	1475	530	640	
	200L ₂ -2	37	140	1216	240	740	315	550	600				1410	1440	455	490	
	160M—4	11		1125						20			1225	1280	315	340	
	132M-4	7.5	115	1055	220	660	315	490	540				1150	1185	260	268	
	132S-4	5.5											1110	1145	245	257	
125-80-315	315S-2	105	210	1530	320		430			20	125	315	1855	1905	1290	1310	
	280M-2	75				940		670	720				1715	1725	910	1010	
	280S-2	10		1505	325		415						1665	1675	815	920	
	160L—4	15	140	1180	250	740	340	550		20			1310	1365	400	422	
	160M—4	11		1125									1265	1320	370	395	
	132M—4	7.5	115	1055	220	660	340	490	540				1180	1215	315	323	
	125—100—200	225M-2	45		1260	245		335			20	125	280	1440	1465	500	610
200L-2		37	140			740		550	600						435	470	
200Li--2		30		1215	240		290			1400				1430	420	445	
132M—4		7.5								16			1140	1175	227	241	
132S-4		5.5	100	1015	200	600	290	440	490				1100	1135	214	226	
112M—4		4		940	210								1025	1085	200	208	
125-100—250		280S-2	75	210	1505	325	940	390	670	720	20	140	280	1690	1700	817	923
	250M-2						360			1620				1630	676	778	
	225M-2	45	180	1385	295	840	335	600	650	1505				1530	560	670	
				1295													
	160M—4	11		1125						20			1290	1345	346	371	
	132M-4	7.5	115		1055	225	660	315	490				540	1205	1240	292	306
	132S—4	5.5											1165	1200	279	291	
125—100-315	315S-2	110			320		430			20	140	315	1870	1920	1290	1310	
	280M-2	90	210			940		670	720				1820	1830	920	1000	
	280S—2	75		1505	325		390						1680	1690	845	950	
	160L—4	15	140	1180	250	740		550	600	20			1325	380	410	432	
	160M-4	11	115	1125	220	660	340	490	540				1280	1335	373	398	

Pump	Any power-generating or power-driven machine		Ai	Li	L ₂	L	H ₁	B ₁	B	d	a	h	L		Gross masskg	
	Model Number	KW											Y	YB	Y	YB
125-80-400	200L-4	30	140	1260	250	740	370	550	600	20	125	355	1440	1470	575	605
	180L-4	22		1375									1415	500	580	
	180M-4	18.5		1230									1395	490	530	
	160L-4	15		1180									1365	450	472	
125100-400	200L-4	30	160	1285	290	840	390	600	650	20	140	355	1455	1485	700	730
	180L-4	22		1390									1430	530	610	
	180M-4	18.5		1245									1350	1410	522	560
	160L-4	15		1215									1325	1380	490	512
150-125-250	180M 4	18.5	140	1210	250	740	340	550	600	20	140	355	1350	1410	435	473
	160L-4	15		1180									1325	1380	400	422
	160M-4	11		115				1125	220				440	490	1280	1335
150-125-315	200L-4	30	160	1285	290	840	390	600	650	20	140	355	1455	1485	605	635
	180L-4	22		1245									1390	1420	525	605
	180M-4	18.5		1215									1350	1410	517	557
	160L-4	15											1325	1380	486	508
150-125--400	225M-4	45	160	1345	290	840	425	600	650	20	140	400	1545	1570	640	750
	225S-4	37		1285									1520	1545	610	716
	200L-4	30											1475	1505	600	630
200-150--250	225S-4	37	160	1320	290	840	390	600	650	20	160	375	1500	1525	635	740
	200L-4	30		1285									1455	1475	625	705
	180L-4	22		1245									1390	1430	545	625
200-150315	250M-4	50	190	1550	320	940	425	670	720	20	160	400	1750	1800	825	908
	225M-4	35		1495									1665	1680	730	850
	225S-4	30											1640	1665	690	796
	200L-4												1595	1630	685	765
200--150-400	280M-4	75	190	1658	320	940	425	670	720	20	160	450	1890	1900	1110	1243
	280S-4	E		1550									1840	1850	1050	1138
	250M-4												1770	1820	865	948

Flange Plate Dimensions



DN ₁	D ₁	D _n	b ₁	n- φdo1	DN ₁	Do	D1	b ₂	n- φ do1
32	140	100	18	4-17.5	80	200	160	20	8-17.5
					100	220	180	22	8-17.5
					125	250	210	22	8-17.5
40	150	110	18	4-17.5	150	285	240	24	8-22
65	185	145	20	4-17.5	200	340	295	24	12-22

IS, ISY, and ISR Pump Installation and Operation Manual

1. Summary

- 1.1

This pump series consists of single-stage, single-suction cantilever centrifugal pumps designed for pumping clean water at temperatures below 80°C, as well as liquids with properties similar to water and no solid particles. The ISY model is suitable for transporting light oils such as gasoline and diesel, while the ISR model is intended for conveying hot water at temperatures ranging from 80°C to 100°C.
- 1.2

This pump series comprises 34 basic models; by adjusting the impeller diameter and speed, 242 different performance options are available for users to choose from.
- 1.3

This pump series complies with the following national standards:

GB5662–85"*Light-duty suction centrifugal pumps (16 Bar): Marking, Performance and Dimensions*", GB5661–85"*Cavity dimensions for mechanical seals and soft packing in axial-suction centrifugal pumps*", GB/T5657–1995"*Technical specifications for centrifugal pumps*".
- 1.4

This pump series differs from the IS-type pumps manufactured by other domestic manufacturers in the following ways:

a. The test pressure for the pump body and pump cover is 2.4 MPa.

B.The pump's inlet and outlet flanges shall employ flat flanges (with a sealing surface without any boss) as specified in the national standard GB2556–81 "*Shapes and Dimensions of Sealing Faces for General-Purpose Pipe Flanges*".

c. Add a product category with a flow rate of 160 ³ m³/h, in accordance with the international ISO 2858 standard.

1.5 Pump model designation: e.g., IS125–80–160A(J)–S1, IS125–80–160Z.

IS – Single-stage centrifugal pump conforming to international standards

ISY – Single-stage centrifugal oil transfer pump ISR – Single-stage centrifugal hot water pump

125— Oral diameter (mm) 80 ——— Outlet diameter (mm)

160 – Maximum nominal impeller diameter (mm)

A—First cutting of the impeller outer diameter Z – Increase impeller outer diameter

(J) — A pump with a design speed of 2900 r/min is operated at a reduced speed of 1450

r/min; S1 – Internal mechanical seal (not applicable to pumps with packing seals).

1.6 The pump is driven by a motor via an elastic coupling. From the perspective of the prime mover, the pump rotates in a clockwise direction.
- ## 2. structure declaration
- 2.1 The IS-type pump is designed according to the performance and dimensional specifications defined in the international standard ISO 2858. Except for the pump body, the remaining components – including the pump cover, impeller, shaft, sealing rings, shaft sleeves, suspension assembly, and rolling bearings – constitute the rotor assembly.

The pump's rotor assembly is secured to the pump body using bolts; during maintenance, the entire assembly can be removed without the need to move the pump body or the inlet and outlet water pipelines.

The pump housing (i.e., the pump body and the pump cover) constitutes the pump's working chamber.

To balance the axial force of the pump, most pumps are equipped with sealing rings both at the front and rear of the impeller, and a balancing hole is provided on the rear cover plate of the impeller. For pumps with low axial forces, no sealing ring or balancing hole is installed on the back side of the impeller; in such cases, the axial force is borne by the rolling bearings.

Receive.

15

2.2 Pump Shaft Seal Structure.

2.2.1 The pump's axial soft packing seal system consists of a packing gland, a packing ring, and packing material, designed to prevent air ingress or significant water leakage. If the pump impeller is equipped with balancing holes, the soft packing chamber communicates with the impeller's suction inlet; however, if the liquid at the impeller inlet is under vacuum, air can easily enter along the surface of the shaft sleeve. Therefore, a packing ring is installed within the packing chamber to direct pressurized water from the pump chamber to the packing ring for sealing purposes via small holes in the pump cover. To prevent shaft wear, a shaft sleeve protector is installed at the section where the shaft passes through the packing chamber; an O-ring seal is also placed between the shaft sleeve and the shaft to prevent air or water from entering along the mating surfaces.

2.2.2 The pump's mechanical seal system consists of a gland, a flat gasket, a retaining ring, a short bushing, and a mechanical seal component; it is a single-face unbalanced mechanical seal. The main installation dimensions of the mechanical seal component comply with the DIN 24960 standard; the relevant dimensions are indicated in Figure 2 for the user's reference when replacing the seal. If the axial dimension of the mechanical seal component being replaced is longer, the S-value may be reduced or the length of the short bushing may be shortened (when S = 0). For pumps equipped with a mechanical seal, a throttle plug should be installed at the end of the drain hole on the pump cover to allow a small amount of water to enter the packing chamber.

2.2.3 The rubber oil seal system is commonly used in ISY-type oil transfer pumps and consists of a packing gland, a standard skeleton-type rubber oil seal, and an oil sealing ring. The oil sealing ring is filled with grease, which provides lubrication for the relative motion between the sleeve and the oil seal. When a rubber oil seal is employed, the pump cover does not feature any holes for guiding pressure fluid into the packing chamber.

2.3. An additional cooling chamber cover is installed between the ISR-type hot water pump's pump cover and the suspension body; cooling water is circulated through the cavity between this cooling chamber cover and the pump cover to cool the shaft seal area, thereby preventing heat from transferring to the bearings.

When delivering hot water, the pump's inlet pressure shall not be lower than the value specified in the table below to prevent cavitation.

Water supply temperature (°C)	80	90	100
Entrance pressureMPa	0. 1	0. 12	0. 15

3. Assembly and Disassembly

Before assembly, the pump should first be inspected to check for any defects that could affect assembly, and then it should be thoroughly cleaned before proceeding with assembly.

3.1 Prior to assembly, all connecting bolts, thread plugs, and other components should be tightened securely onto their respective parts.

3.2 The O-ring, paper gasket, felt, etc., can be pre-installed on the corresponding parts.

3.3 The sealing ring, packing (or oil seal), packing ring (or sealing oil ring), and packing gland may be installed sequentially into the pump cover. For hot water pumps, the cooling chamber cover shall be fitted onto the pump cover.

3.4 Install the rolling bearing onto the shaft, then mount it into the suspension; finally, tighten the gland to secure the rolling bearing and fit a water shield over the shaft.

3.5 Mount the shaft onto the shaft assembly, then install the pump cover onto the suspension; next, attach the impeller, stopper washer, and impeller nut, and tighten them using a socket wrench.

When installing the mechanical seal, pre-install the stationary ring and flat gasket onto the gland; then sleeve the gland onto the shaft. Next, sequentially install the moving ring, moving ring seat, spring, spring seat, retaining ring, and short shaft sleeve onto the shaft. Install the impeller and tighten it using the impeller nut; adjust the clearance S, then tighten the two lock screws on the retaining ring. Afterward, remove the impeller and install the pump cover; secure the gland to the pump cover, and finally reinstall the impeller, stopper ring, impeller nut, and other components and tighten them securely. Finally, mount the entire assembly into the pump body and tighten all connecting bolts between the pump body and the pump cover.

3.6 During the aforementioned assembly process, small components such as flat keys, felt rings, water-sealing rings, and inner O-ring

16

seals for shaft sleeves are prone to being overlooked or installed in the wrong sequence; special care should be taken with these items.

3.7 The disassembly sequence for the pump can generally be performed in the reverse order of its assembly sequence. **4.**

install

The quality of pump installation has a significant impact on the pump's operation and service life; therefore, the installation and alignment must be performed with care.

4.1 Installation and Alignment

- (a) Remove grease and dirt from the base; then place the base on the foundation.
- (b) Use a level to check the horizontal alignment of the base; leveling may be performed using wedge plates (for already assembled units, the horizontal alignment can be checked using the pump's outlet flange plane).
- (c) Fill the anchor bolt holes with cement.
- (d) After the cement has cured, check whether the anchor bolts are loose; then tighten the anchor bolts and recheck the levelness.
- (e) Clean the support surface of the base, as well as the surfaces of the water pump and motor feet; then install the water pump and motor onto the base.

(f) A certain clearance should be maintained between the couplings; check whether the centerlines of the water pump shaft and the motor shaft are aligned; this can be adjusted using thin washers to ensure concentricity.

The maximum deviations in the upper/lower or left/right dimensions of the coupling shall not exceed 0.1 mm; the maximum and greatest gap differences over the entire circumference of the end faces of the two couplings shall not exceed 0.3 mm.

4.2 installation instructions

- (a) The pump installation height, pipeline length and diameter, and flow velocity shall be determined according to the calculations to minimize unnecessary energy losses; refer to the attached table for verification.
- (b) For long-distance transportation, a larger pipe diameter should be used. The pump's pipeline should be supported by its own supports; the weight of the pipeline must not be placed on the pump to prevent damage to it.
- (c) If a check valve is installed on the discharge pipeline, the installation sequence is as follows: pump outlet → gate valve → check valve → discharge pipe.
- (d) When the pump's suction inlet is under negative pressure, a gate valve should not be installed on the suction pipeline. When multiple pumps are operated in parallel, each pump must have its own dedicated suction pipeline.
- (e) The hot water pump's pump cover features two hose connectors for the supply and discharge of cooling water. When the two connectors are arranged horizontally, the supply and discharge pipes can be installed in any orientation; when the connectors are arranged vertically (with the supply pipe at the bottom and the discharge pipe at the top), the supply pipe is located at the bottom and the discharge pipe at the top. Except for the models 200–150-315 and 200–150-400, which have supply and discharge pipes with a diameter of 3/8", all other pump models use supply and discharge pipes with a diameter of 1/4".

5. Start, Stop and Operation

5.1 start

- (a) Before connecting the motor and pump, verify that the motor's rotation direction is correct and that the pump rotates smoothly (or check the motor's rotation direction after filling the pump with water; it is strictly prohibited to run the pump without water).
- (b) Close the gate valve on the discharge pipeline.
- (c) Fill the pump with water, or use a vacuum pump to draw water in.
- (d) Connect the power supply; once the pump has reached its normal operating speed, gradually open the gate valve on the discharge pipeline and adjust it to the required operating conditions. When the gate valve on the discharge pipeline is closed, the pump should not operate continuously for more than 3 minutes.

5.2 Stop

(a) Gradually Close the Gate Valve on the Discharge Pipeline and Disconnect the Power Supply.

(b) If the ambient temperature falls below 0°C, drain the water from the pump to prevent freezing and cracking.

(c) In the event of prolonged discontinuation of use, disassemble the pump, clean it, lubricate it, and store it in its original packaging.

5.3 revolve

(a) During driving and operation, it is essential to monitor whether instrument readings, bearing temperature rise, packing leakage and temperature rise, as well as pump vibration and noise, are within normal limits; any abnormality detected should be addressed promptly.

(b) The difference between the bearing temperature and the ambient temperature shall not exceed 40°C; the maximum bearing temperature rise shall not exceed 80°C.

(c) The packing leakage should be a small, uniform amount.

(d) The bearing oil level should be maintained at the center mark on the oil level indicator; it must not be too high or too low. If the oil level is too low, lubricating oil should be added promptly.

(e) If the clearance at the interface between the sealing ring and the impeller has worn out excessively, replace it with a new sealing ring (the diameter clearance for a new pump should be approximately 0.15–0.25 mm).

(f) The pump should be operated as closely as possible to the performance point specified on its nameplate (e.g., flow rate, head, etc.), which allows the pump to operate continuously within the high-efficiency range, thereby achieving the maximum energy-saving benefit.

6. Possible Pump Failures and Troubleshooting Methods

Hitch	Cause	Resolvent
The pump fails to draw water; the pressure gauge fluctuates violently.	Insufficient water supply to the system; air accumulation inside the pump; leakage in the suction or discharge pipes.	Pour in sufficient water. Inspect the pipelines and eliminate any air leaks.
The vacuum gauge indicates a high vacuum, yet the pump still fails to draw in water.	The bottom valve is not open or is severely clogged; the suction pipe has high resistance; the suction height is too high.	Check the flexibility of the bottom valve; remove any obstructions. Keep the suction piping as simple as possible. Reduce the suction height.
The export pressure gauge indicates pressure, but very little water is being pumped out or no water is being pumped out.	High discharge pipe resistance; incorrect steering; impeller clogging; insufficient rotational speed.	Reduce pipeline resistance; check motor rotation direction; remove any obstructions from the impeller; increase rotational speed.
Flow rate is below the design flow rate	Impeller blockage; excessive wear of the sealing ring clearance; insufficient rotational speed.	Remove the obstruction. Replace the sealing ring. Increase the rotational speed to the value specified on the label.
The pump is consuming excessive power.	The packing is installed too tightly, causing the packing chamber to overheat; the impeller is wearing; the pump's water supply rate is too high.	Relax the packing gland. Replace the impeller. Partially close the gate valve to reduce flow rate.
Abnormal pump noise; pump fails to discharge water.	Excessive suction pipe resistance; excessive suction height; air ingress into the suction pipe; excessively high temperature of the liquid being pumped or delivered.	Check the suction pipe for any blockages. Clean the foot valve, lower the liquid temperature, or reduce the suction height.

18

Hitch	Cause	Resolvent
Water pump vibration	The pump shaft is not aligned with the motor shaft. The impeller is unbalanced. The bearing clearance is excessive.	Adjust the pump and motor to align their axes. Perform a balancing test on the impeller; the unbalanced weight should be approximately 3 grams. Replace the bearings.
Bearing overheating	Bearing oil level is insufficient or the oil viscosity is too high, impairing lubrication; excessive bearing wear or clearance; misalignment between the pump and the motor.	Refuel the engine using oil of appropriate viscosity or low-viscosity oil. Replace the bearings. Adjust the pump and motor to ensure concentric alignment.
High noise level	The pump and motor are not aligned. Wear on the pump or motor bearings has caused runout.	Adjust the pump and motor to ensure concentric alignment. Replace with new bearings.

7. Other

7.1 Complete supply package: one pump, one motor, one base, one set of couplings, one bottom drain valve, one gate valve, one check valve, and four sets of anchor bolts.

7.2 Random technical documentation: one copy of the pump installation and operation manual, one copy of the pump product qualification certificate, one copy of the motor product qualification certificate, and one copy of the product packing list.

7.3 Quality Assurance: Provided that the materials used for the pump's flow-through components comply with the requirements of the conveyed medium and the user properly adheres to the storage and operating instructions, should the product become damaged or fail to function properly due to manufacturing defects within 12 months from the date of shipment (provided that the product has been in continuous operation for no more than 6 months), the manufacturer shall provide the user with free replacement or repair of the product or its components; however, this warranty does not apply to wear parts.