

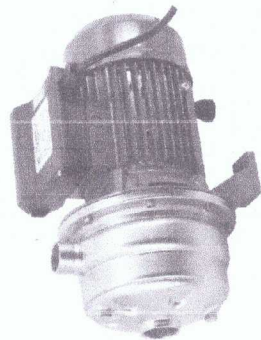
MAINTENANCE

1. Dry running would damage the mechanical seal beyond repair.
2. The pump should avoid frequent operation, and power switch should turn off when voltage change suddenly.
3. To avoid the losses of head, it should not use the inlet valve to adjust the flow.
4. When the pumped water is disrupt or insufficient, please turn off the pump to avoid dry operation.
5. If there is any abnormal noise, the pump should be turned off for faultfinding.
6. Pump body should be drained during periods of low temperatures or long periods of inactivity, if this inactivity last longer. Pump should be cleaned and kept in a dry and airy place.
7. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
8. Children should be supervised to ensure that they do not play with the appliance.
9. Type y attachment damaged supply cords to be replaced by the manufacturer, service agent or similarly qualified person to avoid hazard.

TROUBLESHOOTING GUIDE

PROBLEMS	POSSIBLE	CAUSE/SOLUTIONS
1. The pump does not deliver any flow.	1. The suction and discharge pipes circuit and impeller blocked. 2. The suction connectors is air-leaking. 3. Water level is lower than required.	1. Clean pipes circuit and impeller. 2. Sealed the connecting surfaces. 3. Reinstall and lower the suction pipe.
2. Insufficient Flow	1. Impeller seriously damaged and corrosive. 2. Seal Ring is damaged and corrosive. 3. Motor Speed is lower than the required.	1. Replace by new one. 2. Replace by new ring. 3. Make sure the voltage is normal.
3. Losses of Head	1. Wrong Rotation. 2. NPSH because of high water temperature. 3. Impeller seriously damaged and corrosive.	1. Change motor wiring (3 phase motor). 2. Lower the liquids temperature. 3. Replace by new one.
4. Motor over-heating	1. Flow beyond the applicable scope. 2. There is mechanical wearing. 3. The voltage is lower or higher than standard or motor fan is damaged.	1. Make sure the correct pump model was chosen or adjust the outlet valve to make the pump working around rated scope. 2. Check and erase the mechanical wearing.
5. Pump leak seriously	1. Motor bearing is damaged or lack lubricating oil. 2. Vibration is caused by the unbalanced ground.	1. Replace by new one. 2. Replace by new one.
6. Motor big vibration, loud noise, bearing become hot	1. Motor bearing is damaged or lack lubricating oil. 2. Vibration is caused by the unbalanced ground.	1. Adjust motor is lined with the center of pump, replace bearing or clean bearing and add lubricant oil. 2. Level up the base, and fasten the bolt of bracket.
7. There is noise in Pump	1. Flow is beyond the applicable scope and cause the loss of head. 2. Nut is loose.	1. Make sure the correct pump model was chosen and turn off the outlet valve. 2. Fasten any possible nuts.

All specifications change without prior notice.



Haf Pompe

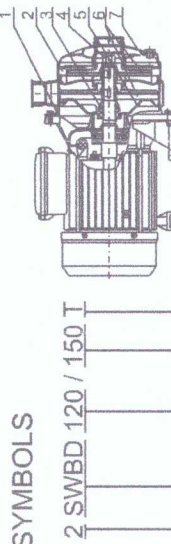
2SWBDL SERIES TWIN IMPELLER STAINLESS STEEL CENTRIFUGAL PUMP INSTRUCTION MANUAL

Model	Power P ₁ (kW)	Flow (m ³ /h)	1.2	2.4	3.6	4.8	7.2	9.0	10.8	12.6	15	17
2SWBDL70/075(T)	1.38	Head (m)	39	36	33	29	18	9	-	-	-	-
2SWBDL70/090(T)	1.5		46	43	39	35	22	12	-	-	-	-
2SWBDL70/110(T)	1.85		52.5	49	45	41	20	-	-	-	-	-
2SWBDL70/150(T)	2.25		60	55.5	50.5	45	18	-	-	-	-	-
2SWBDL120/110(T)	1.85		42	41	39	37	32	27	17	-	-	-
2SWBDL120/150(T)	2.25		52	49	46	45	38	33	27	20	-	-
2SWBDL120/220T	3.6		61	60	58	55	49	45	39	29	-	-
2SWBDL120/300T	3.6		68	66	64	62	56	52	46	30	-	-
2SWBDL200/220T	3.6		55	53	52	48	46	41	38	32	26	-
2SWBDL200/300T	4.7		66	65	63.5	62	58	55	52	47	39	31
2SWBDL200/370T	4.7		75	72	71	69	66	63	56	53	47	40

FEATURES AND APPLICATIONS

The overcurrent component is SUS304 material, Volute pump body adopts liquid bulging technology, compact and firm, Double impeller structure with high lift and high efficiency, Mechanical shaft seal, safe and reliable.
Apply to Circular cleaning system for industrial production lines in all fields, Home water system, booster unit, Agricultural and horticultural sprinkler irrigation, cooling tower.

STRUCTURE



SYMBOLS

NO	Description	Material
1	O-ring	NBR
2	Diffusor	SUS304
3	Mechanical Seal	
4	Nut	SUS304
5	Front Cover	SUS304
6	Impeller	SUS304
7	Casing	SUS304

Note: materials (silicon or rubber) of o-ring are available upon request.

Three phase: T
Single phase without marks
Nominal output power: 1.5 kW
Rated flow: 120 L/min
Stainless steel centrifugal pump
Twin Impeller