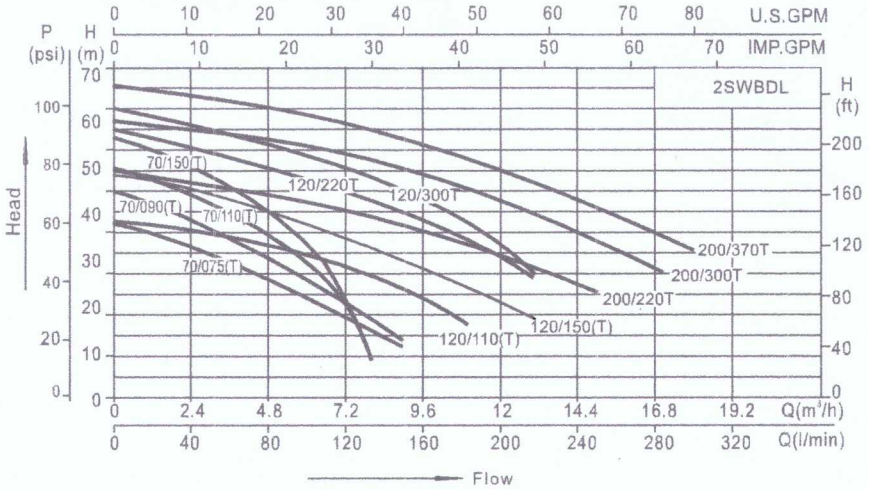
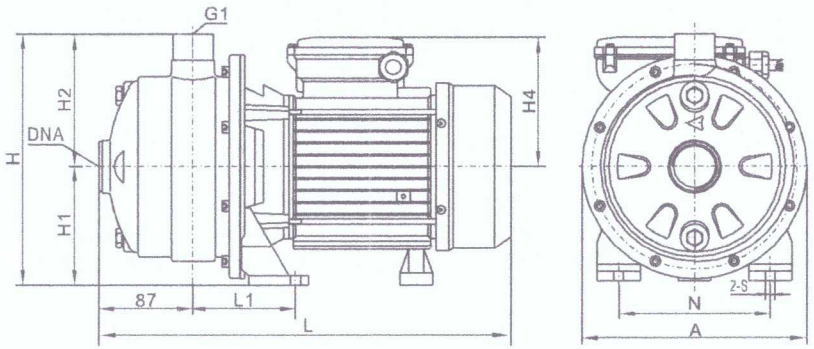
PERFORMANCE CURVES



OVERALL DIMENSION

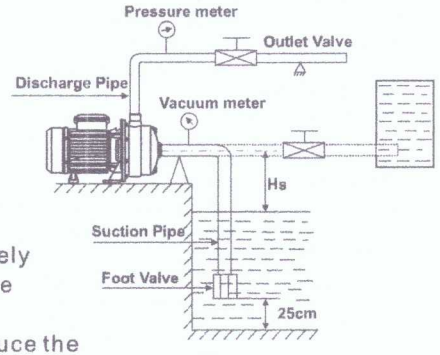


Model	A	L1	N	H	H1	H2	S	Single-phase		Three-phase		DNA
								L	H4	L	H4	
2SWBDL70/075(T)	208	93	120	229	106	123	9	356	108	356	102	G1¼
2SWBDL70/090(T)	208	95	140	229	106	123	9	382	120	382	111	G1¼
2SWBDL70/110(T)	230	95	140	249	118	131	9	382	132	382	111	G1¼
2SWBDL70/150(T)	230	109	140	249	118	131	9	397	132	382	111	G1¼
2SWBDL120/110(T)	208	95	140	229	106	123	9	382	132	382	111	G1¼
2SWBDL120/150(T)	208	109	140	229	106	123	9	397	132	382	118	G1¼
2SWBDL120/220T	230	109	140	249	118	131	9			415	118	G1¼
2SWBDL120/300T	230	109	140	249	118	131	9			437	118	G1¼
2SWBDL200/220T	208	109	140	229	106	123	9			415	118	G1½
2SWBDL200/300T	230	109	140	249	118	131	9			437	118	G1½
2SWBDL200/370T	230	109	160	249	118	131	12			469	148	G1½

INSTALLATION

1.The electric pump must be placed as near as possible to the water level in order to obtain the minimum suction lift and reduce the loss of head.
2.They should be installed in dry, airy places and safe from any possible flooding.
3.If the installation is to be permanent, pump should be attached to the floor or ground using the holes pump bracket.

SUCTION AND DELIVERY PIPES



1.The suction pipe must be kept submerged 50cm below water level but 20cm above the water bottom to prevent the formation of whirls and its inevitable consequence.
2.The installation of suction pipe should be: Hs≤10-(HPSH)r-0.5-hw(hw≈0.5~1.0)
3.The unions or connections must be absolutely watertight, it is recommended to reduce pipe bends to the minimum possible.
4.To avoid head losses, it is suggested to reduce the bends of discharge pipe and make it short as possible.
5.The pipes should not weight on the pump, but on separated supports.
6.It is recommended to install vacuum/pressure meters on suction and discharge pipes to observe the operation.

ELECTRICAL CONNECTION ⚠

1.Make sure voltage,frequency, phase is conform to those marked on the nameplate.
2.The electric pump should be reliable grounded, and install a high sensibility earth leakage circuit breaker(I_N 30mA) to prevent the risk of mortal electric shocks in case of faulty grounding.
3.All conductors should be installed by professional electricians (holders of certificates of electrotechnical skill issued by the State Administration of Work Safety) in accordance with local standards. Electric pumps must be grounded.
4.Type Y attachment - Damaged supply cords to be replaced by the Manufacturer, service agent or similarly qualified person to avoid hazard.

OPERATION ⚠

1.Make sure that the shaft rotates freely.
2.Verify the motor sense of rotating as indicated on the fan cover. (If viewed from the fan cover end, the rotation of fan should be clockwise)1. Fill pump and the suction pipe through the filling plug, and turn off the outlet valve.
3.Fill pump and the suction pipe through the filling plug, and turn off the outlet valve.
4.Start the pump, and adjust flow and head by outlet valve to meet the pump's data.
5.If motor fails to start or does not deliver water, refer to our troubleshooting guide with the possible problems and consequent actions to take. This information will be found on the next pages.
6.Turn off the outlet valve prior to turn off the pump power supply.