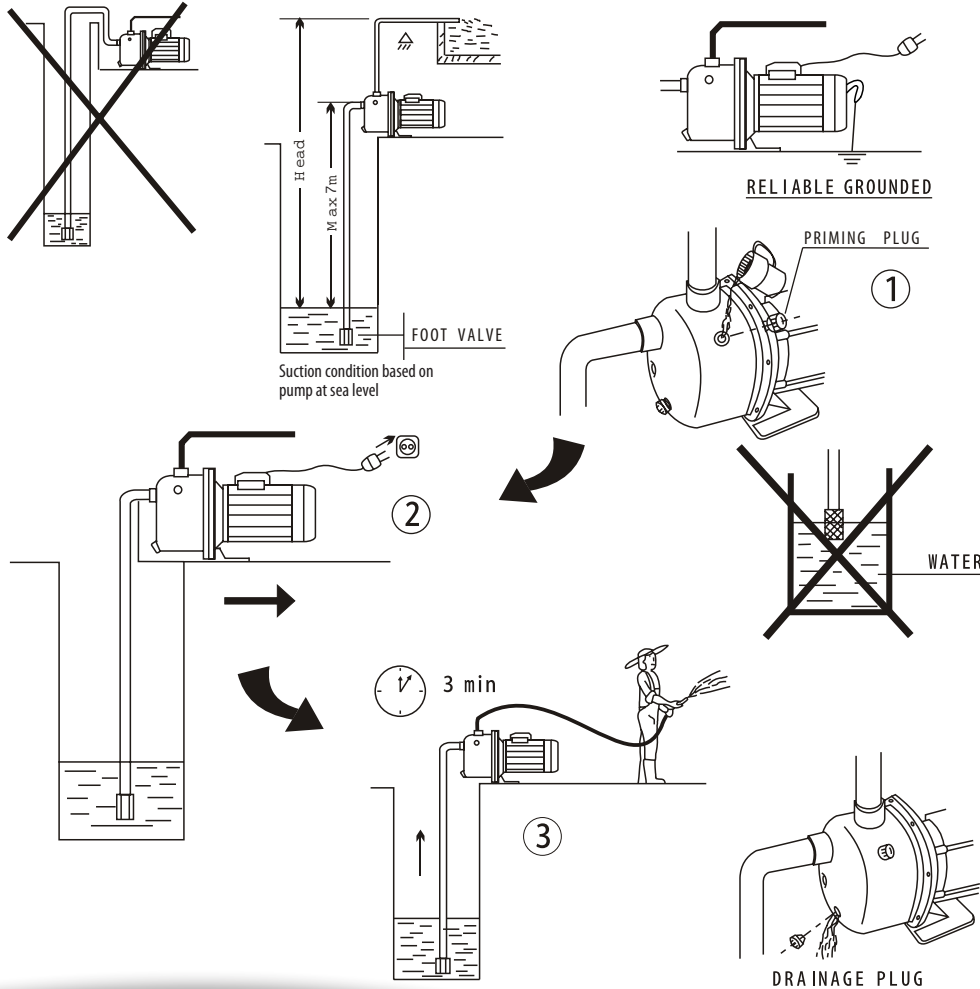


Possible faults causes and solutions - continued

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTIONS
There is no suction. Motor runs but it gives no pressure.	Pump was not primed.	Fill pump body with water.
Motor over-heating. Motor starts and stops continuously.	Room not properly ventilated.	Provide good ventilation.
Motor runs but it gives no pressure. There is no suction.	Air entry.	Seal unions and joints properly.
Flow is insufficient.	Venturi clogged.	Disassemble and take it to your Official Service Dealer.



# UP Series

STAINLESS STEEL SELF-PRIMING JET PUMP

## INSTRUCTION MANUAL



Model	Power(P <sub>2</sub> )		MAX. Suction (m)	Bore (inch)		Flow Q	L/min m <sup>3</sup> /h	5	15	20	30	40	50	58	66	
	kW	HP		in	out											
UP-40DJZ037	0.37	0.5	8.0	1	1	Head (m)		31	25	23	19	14				
UP-40UP037	0.37	0.5		1	1			31	25	23	19	14				
UP-60UP075	0.75	1.0	9.0	1	1			38	32	30	25	22	19			
UP-80UP100	1.00	1.5		1	1			46	42	39	35	31	27	25	18	

220v/60hz, 110v/60hz models are available on request

Speed: 2900r/min

This symbol together with one of the following words "Danger" or "Warning" indicates the risk level deriving from failure to observe prescribed safety precautions.

- DANGER risk of electric shock** - Warning that failure to observe the precautions involves a risk of electric shock.
- DANGER** - Warning that failure to observe the precautions involves a risk of damage to persons and/or equipment.
- WARNING** - Warning that failure to observe the precautions involves a risk of damaging the pump and motor.

### 1. Specification

This manual has been conceived to offer the adequate information on the installation, operation and maintenance of our electro pumps. We suggest you read it thoroughly. These are centrifugal horizontal electro pumps with self-priming capacity and supplied with century system so to reach suctions of up to 9 mts. Connect a foot valve and the pump will get an immediately self-priming. They have been designed to operate with clean water at a maximum temperature of 45C. Operating with any kind of water, other than that just described should be avoided. These pumps have been built with first quality materials which submitted to strict hydraulic and electric controls and verified thoroughly. Following these present instructions and the electrical chart, will help you to achieve a correct installation. If failure to do this could result in motor overcharge and any other consequences, which we wish to be relieved of.

### 2. Installation

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

### 3. Pipe assembly

The suction pipe must be resistant to depression and be kept submerged 30 cms below water level to prevent cavitation Air leaks if suction lift is over 7 mts. the use of a pipe of a bigger diameter than the admission port of the pump is recommended, the unions or connections must be absolutely water-tight. It is recommended to reduce pipe bends to the minimum inclination of 2%.

The discharge pipe should have a diameter equal or bigger than the pump outlet.  
To avoid stress on pump, support both suction and discharge pipes independently.

#### 4. Electrical connection

⚠ The electric installation should be provided by a system of multiple separations with contact openings of at least 3 mm. The protection of the system will be made by a differential switch (1fn=30mA.) The electric cable must correspond to the EMC(2) norm or to the type H07 RN-F according to VDE 0250.

The single phase motors have a built-in thermal protection. Look at the schematic drawing on Fig(1) for a correct electrical connection.

#### 5. Controls prior to the initial starting

- ⚠ Check that the tension and frequency of the electric supply correspond to that indicated on the technical characteristics label.
- Make sure that the shaft rotates freely.
- Fill pump body with water, unscrewing slightly the priming plug.

- Verify the motor sense of rotating as indicated on the fan cover.
- THIS PUMP SHOULD NEVER WITHOUT WATER OPERATED.

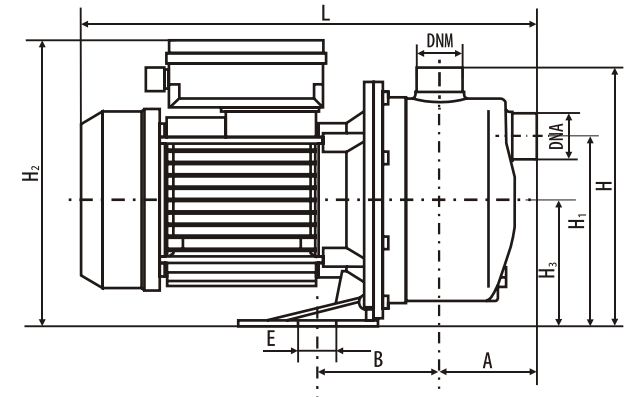
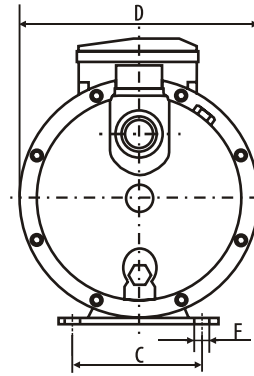
#### 6. Starting

- Open all gate valves installed in the suction and connect the electric supply switch and wait for the priming to be completed. If a foot valve has been installed, the priming will be instantaneous.
- If motor fails to start or does not deliver water.
- Refer to our "trouble Shooting" list with the possible problems and consequent actions to take. This information will be found on the next pages.

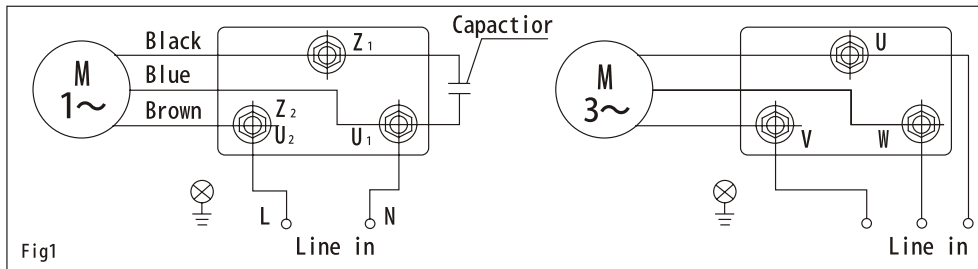
#### 7. Maintenance

⚠ Our electro pumps do not need any special maintenance. Pump body should be drained during periods of low temperatures or long period of inactivity. If this inactivity last longer, pump should be cleaned and kept in a dry and aired place.

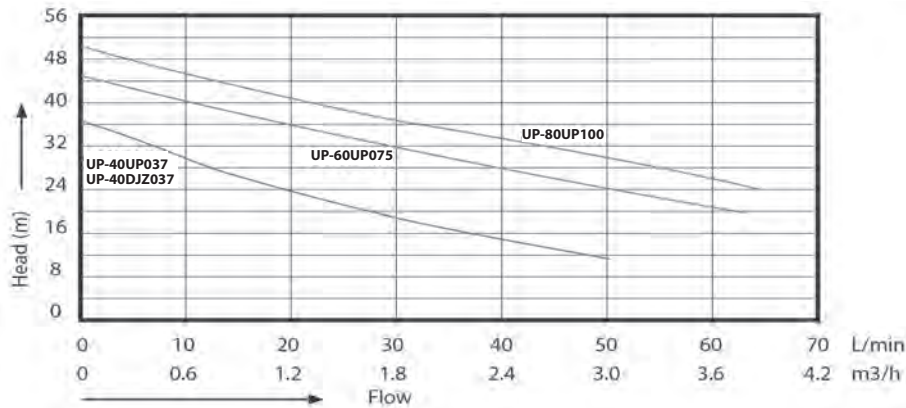
#### Overall dimension



Model	A	B	C	D	E	F	H	H <sub>1</sub>	H <sub>2</sub>	H <sub>3</sub>	L	DNA	DNM	Weight(kg)
UP-40UP037	88	109	100	170	7	7	178	128	195	88	365	25mm		6.0
UP-50UP055	80	80	98	184	20	10	203	157.5	202	98	354	25mm		8.0
UP-60UP075	80	80	98	184	20	10	203	157.5	202	98	354	25mm		9.0
UP-80UP100	80	97	98	198	20	10	212	160	236	105	417	25mm		10.0



#### Performance Curves



#### Possible faults causes and solutions

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTIONS
The motor does start. Motor starts and stops continuously.	Pump blocked.	Disconnect it and take it to the Official Technical Service.
Flow is insufficient	Foot valve clogged.	Clean it or replace by new one.
There is no suction. Flow is insufficient	Total manometric head higher than expected.	Verify geometric head and loss of head.
The motor does not start. Motor over-heating. Motor starts and stops continuously.	Wrong tension.	Check that the tension is the same as that on the technical characteristics label.
There is no suction. Motor runs but it gives no pression. Flow is insufficient.	Water level in well or tank has come down.	Verify suction head.
The motor does not start.	Fuse or thermal relar disconnected.	Change fuse or thermal relar.
Motor runs but it gives no pressure. Flow is insufficient.	Impellers are worn out.	Disconnect pump and take it to your Service Dealer.
There is no suction. Motor runs but it gives no pressure.	Foot valve not submerged.	Be sure suction pipe is submerged.