

# SELF PRIMING JET PUMPS INSTRUCTION MANUAL



These symbols  $\triangle \Delta$  in together with one of the following words"Danger" or Warning indicates the risk level deriving from failure to observe prescribed safety precautions.

DANGER risk electric shock Warns that failure to

observe the precautions involves a risk of damage to persons and /or things.

DANGER

Warns that failure to observe the precautions involves a risk of damaging the pump and /or the plant

# WARNING

Warns that failure to observe the precautions involves a risk of electric shock.

# **1. SPECIFICATION**

This manual contains essential information on the installation, operation and maintenance of Bromic electro pumps. Please read it thoroughly. Bromic pumps, are centrifugal horizontal electro pumps with self-priming capacities. The pumps are supplied with century systems to attain suctions pressure of up to 9 Metres. When a foot valve is connected, the pump will immediately self prime. Bromic pumps have been designed to operate with clean water only, at a maximum temperature of 45°C. Other water types, must not be used. Bromic pumps have tested under Bromic stringent test conditions. All Bromic pumps conform to hydraulic and electric testing.

It is critical to follow these instructions including the electrical chart in order to install the pumps correctly. Failure to follow these instructions may result in motor overcharging and any other malfunctions. Bromic is not liable should instructions not have been followed.

# 2. INSTALLATION

The electric pumps must be placed as low as possible below the water level in order to obtain the maximum suction lift.

For permanent installation of the pump, the pump should be attached to the floor or ground using the appropriate holes in pump bracket. The pump should be installed in a dry flood proof area.

# 3. PIPE ASSEMBLY

The suction pipe must not be "kinked" be or restricted and must be submerged 30 cms below water level. This will prevent the formation of whirs and air suction pockets Air will leak if suction exceeds 7 Metres. The use of a pipe with a larger diameter than the admission port of the pump is recommended. The connections must be water-tight. It is recommended to reduce pipe bends to a minimum inclination of 2%. The discharge pipe should have a diameter equal or larger than the outlet pipe on the pump. The suction and discharge pipes must not rest on the pump.

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## 4. ELECTRICAL CONNECTION OVERALL DIMENSION

Electrical installation must only be completed by an authorised and trained technician in line with Australian safety regulations. 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 with Australian standards and be sufficient for the load generated. The single phase motors have a built-in thermal protection. Look at the schematic drawing on Fig(1) for a correct electrical connection. KEEP AWAY FROM CHILDREN.

#### 5. CONTROLS PRIOR TO THE INITIAL STARTING

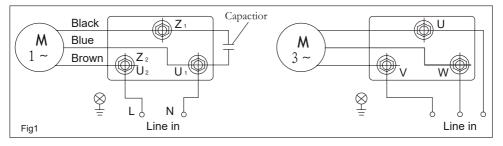
Check that the voltage and frequency of the electric supply correspond to that indicated on the technical characteristics label. Make sure that the shaft rotates freely. Fill pump body with water, unscrewing slightly the priming plug. Verify the motor sense of rotating as indicated on the fan cover. THIS PUMP SHOULD NEVER BE DRY OPERATED.

#### 6. STARTING

Open all gate valves installed in the suction (LINE), connect to the electric supply switch, wait for the priming to be completed. If a foot valve has been installed, the priming will be instantaneous. If the motor fails to start, or does not deliver water. Refer to our trouble-shooting guide with the possible problems and subsequent actions to take.

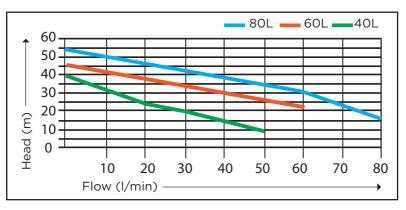
#### 7. MAINTENANCE

Bromic electro pumps do not require special maintenance. The pump body must be drained during periods of low temperatures (temperatures below 1°C) or long period of inactivity. If the pump is inactive for over 60 days, the pump should be cleaned and stored in a dry and ventilated place.

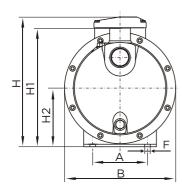


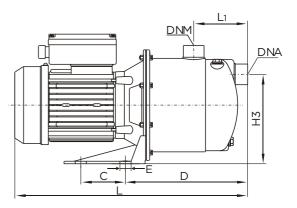
# PERFORMANCE CURVE

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## **OVERALL DIMENSIONS**





Bromic Part #	Model	А	В	С	D	E	F	н	Н1	H 2	Н 3	L	L 1	DNA	DNM
7575101	40L PUMP	100	170	-	197	20	10	182	178	88	128	365	88	G1	G1
7575100	60L PUMP	98	184	-	160	20	10	228	202	98	148	354	80	G1	G1
7575107	80L PUMP	98	198	80	219	20	10	232	212	105	160	417	97	G1	G1

# TROUBLESHOOTING

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SYSTEM PROBLEM	POSSIBLE PROBLEM	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.				
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 aired.	Provide good ventilation.				
There is no suction. Motor runs but it gives no pressure.	Air entry.	Disassemble and take it to your official Service Dealer.				
Flow is insufficient.	Venturi clogged.	Seal unions and joints properly.				

VERSION 1.0 AS OF 11/09/2013 FOR MORE ON OUR WATERBOY PUMP RANGE PLEASE VISIT BROMICPLUMBING.COM

