



## DF-96A Pump fully automatically liquid level controller

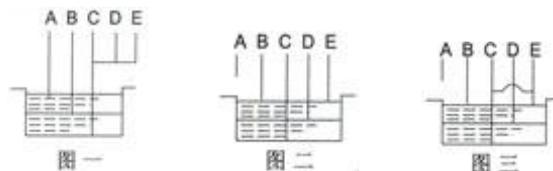
### Function:

The product adopts integrated circuit and is designed by the water grade of cistern of a storied building with the functions of upper and bottom cistern combined control, cistern drainage and water-absent protection, etc. And can automatically realize the water supply and drainage, can effectively prevent the extra height of cistern or water pump racing damage, which is available for industry and home use, and suitable for the wells of cities, villages, schools, industrial mining enterprise units and home, i.e. well water supply project, and is used widely for printing and dyeing, chemical, food, drink, wine-industry and sugar refining, etc.

### Technical index:

Type	DF-96A	DF-96B	DF-96C	DF-96D
Meas. (mm)	126*88*51	126*88*51	126*88*51	126*88*74
Working Voltage	220V	220V	380V	220V
Mounting Type	Wall mounting	Wall mounting	Wall mounting	Rail mounting
Loading	10A	20A	20A	20A

### Single control top pond exploring head installation



I. Installation diagram of single control top pond exploring head as picture 1:

A (passing line): the upper limit water level control point of top pond (water tower), when the water level rises to point A, the water will meet exploring head, and the controller shall close the pump automatically;

B (Blue line): the lower limit water level control point of top pond (water tower), when the water level drops to point B, the water will leave exploring head, and the controller shall open the pump automatically for the pond full of water;

C (Black line): the pond (water tower) earth line, located at the lowest point of pond to meet with pond bottom;

D (green line)、 E (yellow line) to be jointed to C.

II. Installation diagram of single control bottom pond (i.e. drainage pond) exploring head as picture 2:

E: the upper limit water level control point of bottom pond, when the water level rises to point E, the water will meet exploring head, and the controller shall open the pump automatically for drainage, if you don't want drainage, don't connect point E;

D: the lower limit water level control point of bottom pond, when the water level drops to point D, the water will leave exploring head, and the controller shall close the pump automatically, and the pond stops drainage;

C: pond earth line, located at the lowest point of pond to meet with pond bottom;  
Point A and B are not connected.

III. Installation diagram of water shortage protect exploring head as picture 3:

Point C and D are the lower limit water level control point of pond, when the water level drops to the lower limit water level, one of the exploring heads C and D shall leave water surface, and the controller relay begins to work and cuts off the output, and the pump stops working;

Point E and C are connected.

Point A and B are not connected.

Iv. Installation diagram of top pond and bottom pond combined to control exploring head as picture 3:

A: the upper limit water level control point of top pond (water tower), when the water level rises to point A, the water will meet exploring head, and the controller shall close the pump automatically;

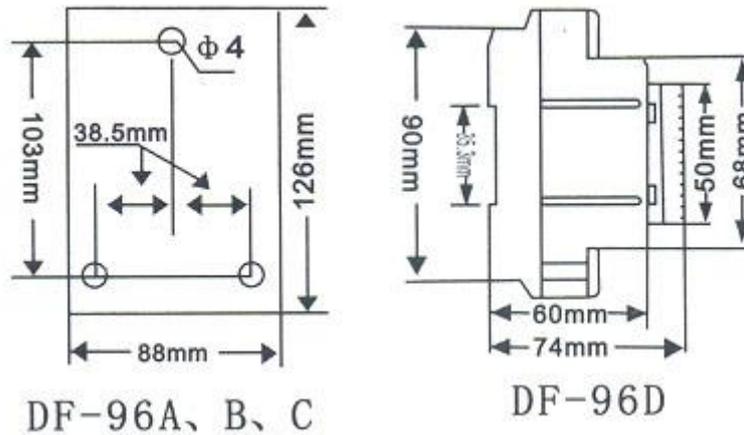
B: the lower limit water level control point of top pond (water tower), when the water level drops to point B, the water will leave exploring head, and the controller shall open the pump automatically for the pond full of water;

C: communal use line for top pond and bottom pond (water tower), located the lowest point to meet with pond bottom;

D: the lower limit water level control point of bottom pond, when the water level drops to point D, the water will leave exploring head, and the controller shall close the pump automatically, and the pond stops drainage;

E: the upper limit water level control point of bottom pond, when the water level rises to point E, the water will meet exploring head, and the controller shall open the pump automatically for drainage, if you don't want drainage, don't connect point E;

### **Mounting size**



### Other notice of installation

1. In order to make sure the water level controller work normally, please check again the connection of input and output, and the connection of exploring heads is secure or not after installation. You can simulate to test the controller whether it is installed right or meet your requirements to work normally or not by moving the exploring heads up and down to make it meet with or leave the water surface.

2. We suggest fix the exploring heads of each point to the inner wall of pond, so that the controller shall not work by mistake caused by the deviations of the exploring head position. (If the pond wall is metallic, you shall not connect at the inner wall excluding the earth line point C, for fear of short circuit, result in the controller not working normally.

3. Finish the connection as above way, you shall check the Manual/Auto switch (DF-96D without it ) at the right of controller, to ensure whether it can open or close the pump manually according to the users' requirements, and return to the "AUTO" position after using, and the controller enters to the working situation.

4. Temporarily need opening or closing the pump, please use the Manual/Auto switch at the left of controller (DF-96D without it).

5. In order to avoid of action by accident, please don't install it at wet, corrosive and of high metal content gases places.

6. Suggest use the matched special exploring heads produced by our company.

### Eliminate the faults

1. Don't work after putting through the power source

a. Check the red indicator works or not, if it not flashes, check the terminals of input and output to be connected well or not;

b. Check the Manual/Auto switch at the left of product, if it is at OFF position, please adjust it returns to "Auto" position, and the controller shall enter working situation.

2.The water level line is higher or lower than the exploring head control point, and the pump doesn't close or open automatically, please press" AUTO/MANUAL" switch to control pump by manual and check it;

a. Whether the exploring head deviates from the original position, or position over high or over

low, resulting in meeting or leaving the water;

b. The connections between top and bottom line and earth line exploring head are wrong with others, or not the correct positions or short circuited;

c. Whether the exploring head is corrosive or tripped off, the connections between exploring head and product, exploring head lines and exploring head are well met.

d. Whether the point C earth line is put at the lowest point of the pond.