

# Instruction Manual of Automatic Proportional Pump (Dosifier)

## 1-Working Principle:

The proportional pump takes the flowing pressure water as power, having small water pressure loss, without any other power facilities. It uses water power of the proportional pump as engine which drives the piston and the connecting rod inside the proportional pump, sucks up the liquid additive directly and makes it dissolve in the water flow. This device moves up and down in a cylinder. When pressing out the water, it uniformly sucks the additives loaded at the bottom of the container into the water flow through a tube. Repeat the up-and-down motion until the effect is achieved that the additive is added to the flowing water evenly and constantly.

## 2-Specification:

Model: 2504 / 3210

Proportional range: 0.4%-4% / 1.0%-10%

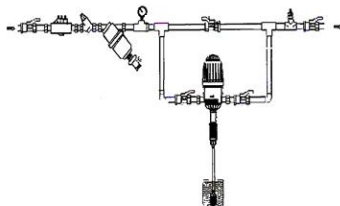
Flow-rate range: 20-2000 L/H / 50 – 3000 L/H

Flow temperature: 4℃ -30℃

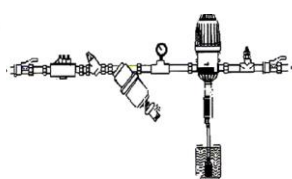
Working water pressure: 0.2-6kg

Caliber of water inlet and water outlet: 32mm/25mm

### Bypass installation



### Inline installation



## 3- Installation and fixation: (Standard installation and bypass installation are shown in the figure)

- 1- Choose the location: the water inlet and water outlet of the proportional pump must be in accordance with those of the mainpipe.
- 2- Proportional pump must be installed according to the method that the proportional pump is above the fluid intake tube.
- 3- Fix the proportional pump to a wall or other facilities.
4. Install the water inlet and outlet of the proportional pump according to the direction of water flow, so as to ensure its leakproofness. (As shown in figure)
5. Install 100-120 mesh screen between the inlets of water valve and proportional pump.
- 6-When the addition of drugs is required, close the side branch valves of the proportional pump. The addition of drugs can be carried out when the valves on both sides of the proportional pump are opened.
- 7-Crack sound will be heard when proportional pump begins to work. At this time, push the air vent valve on the top of the proportional pump and release the valve when small amount of water flows out. In this way, normal operation of doser can be ensured.



## 4- Main Application Fields:

1-Horticulture industry: the fertilization, storage and pest control for flowers, fruits and vegetables, etc. 2-Animal husbandry: the fixed-ratio health dosing for livestock and poultry, such as chickens, ducks, oxen and pigs. 3-Industrial field: water treatment, chemical engineering, metal processing, and fire control, etc. 4-Constant proportion dilution of special solvents such as smell removal solvent, cooling solvent and lubricating solvent; 5-Car-washing industry, printing industry, hospitals, wine industry and other industries.

## 5-Adjust the using proportion:

The proportional pump can adjust the additive proportion in water according to actual situations, so as to achieve the best effect of additive. Specific ways are as follows:

- 1-Loosen the screw, and take off the U-style adjusting lock from the upper part of the proportional pump.
- 2-Predetermine the proportion of liquid additive and water according to the proportion of the water scale on the proportional pump:

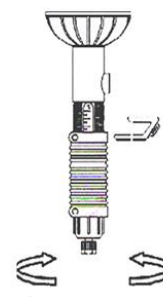
A counterclockwise adjustment is to increase the proportion of liquid additive.

A clockwise adjustment is to decrease the proportion of liquid additive.

The percentage on the proportional pump is calculated on the basis that the final water yield of the proportional pump is 100.

- 3-Please turn the regulator until the hole above the U-style adjusting lock is inserted into the notch of the proportional pump.

- 4-Press the U-model adjusting lock hard into the upper notch of the proportional pump until each other is locked tightly.



## 6-Notice:

- 1-Make sure that the container holding the liquid additive is not empty during the use of the automatic proportional pump!
- 2-Air release valve: It is necessary to press down the air release valve for several seconds to vent the air already existing inside when initially starting the proportional pump. During this process, there may be a little water flowing out. Close the valve quickly after the air is expelled from it.
- 3-Make sure the filter plant is installed at the inlet of the proportional pump while installing and using.
- 4-If the working resistance grows bigger while using, then lubricating oil should be added at the piston to increase the service life.
- 5-The proportional pump should be washed with clean water after using to reduce corrosion and extend the service life of the proportional pump.

Keywords: 1 Doser; 2 Water power proportional pump; 3 Fertilizer applicator; 4 Automatic diluter; 5 Intelligent liquid proportioner; 6 Liquid diluter for car washing; 7 proportional pump