

# BATCH CONTROLLER 液體定量控制系統

## 一、內容：

包含(1) 流量計附發信裝置 (2) 控制箱 (3) 電磁器 (4) 過濾器。

## 二、說明：

通常，我們利用流量計來計量液體之累積量，我們必需先記錄流量計之讀數，當液體流過流量計之後，再以手動閥將管路關閉。但是以上之程序非常不方便。「液體定量控制系統」是新的產品，可以用來做自動定量控制之用。「您只須按下按鈕，就可以達到您所需的水量」。

## 三、操作程序：

- (1) 先將本系統照圖安裝妥當，再將旋鈕轉至「自動」之位置。
- (2) 如果您需要注入1000公升之水量，請您在控制箱上設定1000。
- (3) 請按下「ON」的按鈕，水即開始流動，並注入容器內。
- (4) 當水已注入容器內達到1000公升時，電磁閥將會自動關閉管路。
- (5) 本系統之定量控制精度為±1%。

## 四、說明：

- (1) 本系統之設定量調整範圍為：1~9999公升。
- (2) 可選擇計量單位為0.01公升或0.1公升，以適用於少量之定量控制。
- (3) 一般而言，通常設定值皆為四位數，但可應客戶之要求製作五位數之設定計數器。
- (4) 本系統之配管工程，由客戶自行施工，本公司僅提供各項組件。

## 五、本公司提供下列數種「定量控制系統」：

- (1) 冷水之定量控制系統：採用「BC」及「WPBC」型。
- (2) 純水及化學液體之定量控制系統：採用「SC」型。
- (3) 油類之定量控制系統：採用「SYB」型。

## 1. CONTENTS:

It consists of (1) "Flow sensor" (2) "Control Box" (3) "Solenoid Valve" (4) "Strainer".

## 2. DESCRIPTION:

In general, we usually use the flowmeter to calculate the water feeding. We first record the readings then stop the valve by hand. However, this is very inconvenient. The "Batch Controller" is newly developed for automatic water feeding system, JUST PUSH ONE BUTTON, AND YOU GET THE DESIRED VOLUME.

## 3. PROCEDURE OF OPERATION:

- a. After installation, turn the selective switch to "Auto".
- b. If you want to feed 1000 liters of water, then preset number 1000 on the control box.
- c. Push button "On". The water will start to flow.
- d. When the water feeds to 1000 liters, it will stop automatically, the accuracy will be within ±1%.

## 4. REMARKS:

- a. It is easy to change the preset number from 1~9999 liters by finger.
- b. The measuring unit can be changed to 0.01 liter or 0.1 liter for the small volume feeding.
- c. The preset figures is usually a four digit number. However upon customer request, it can be changed to five digits.
- d. The piping work is prepared by the buyer, the manufacturer only supplies the elements of the unit.

## 5. WE HAVE THREE SYSTEMS OF BATCH CONTROLLER

- a. Model: BC, WPBC for "Water" feeding.
- b. Model: SC for "Pure Water" and "Chemical Liquids" Feeding.
- c. Model: SYB for "Oil" Feeding.

# BATCH CONTROLLER 液體定量控制系統安裝說明 INSTALLATION INSTRUCTION

## 一、請參閱圖 (A)

1. 第(3)項：電磁閥僅適用於「水」，如果液體是「油」或「化液體」，請將電磁閥更換為「氣缸式球塞閥」，或「Y型氣缸式控制閥」，但客戶需自備「壓縮空氣」。
2. 為了避免流量超過適用之流量範圍，而免損壞流量計，請客戶自行裝置手動球塞閥，以便調節流量及維修用。
3. 為了使流量能夠穩定，請在流量計之前後分別裝置適當長度之直管，L<sub>1</sub>及L<sub>2</sub>，其長度如下。  
L<sub>1</sub>：至少要有口徑之10倍長度。  
L<sub>2</sub>：至少要有口徑之5倍長度。
4. 為了確保流量計之精確性，在配管時務必照圖施工，出口端要比流量計之位置高，以使液體充滿著流量計。
5. 出口端之位置至少需高出流量計0.3M。

## 二、請參閱圖 (B)

6. 若液體是利用泵浦來輸送，在管路上必需配上回流管，以便能調節流量，使流經流量計之流量不致過大。
7. 若每天使用本系統的次數較少時，不宜時常讓泵浦運轉，故必須要求本公司加裝電磁開關，以便控制馬達之運轉或停止。

## SEE DIAGRAM (A)

- (1) The item (3) solenoid valve is used for "Water" only. If the liquid is "Oil" or "Chemical Liquid", item (3) should be change to air cylinder operated ball valve by the manufacturer, then the customer would prepare the compressed air.
- (2) The hand operated valve (supplied by the customers) is used for regulating the flow rate of water or liquid. It should not exceed the flow range of the specification shown on the catalogues.
- (3) For the accuracy of measuring, the unrestricted straight pipe L<sub>1</sub>, L<sub>2</sub> shall be:  
L<sub>1</sub> : At Least 10 x D (nominal pipe diameter)  
L<sub>2</sub> : At Least 5 x D (nominal pipe diameter)
- (4) The accuracy of a flow sensor is only ensures when the measuring chamber is totally filled with water.
- (5) The downstream pipework should be raised at least 0.3M over the pipeline.

## SEE DIAGRAM (B)

- (6) When the "Water" or "Liquid" is delivered by the pump, the pipeline should prepare the sub-line. To regulate the water flow.
- (7) When the feeding system will not be used for a long period of time everyday, we should use the control box to control the magnetic switch of the pump in order to shut off the pump.