

# Switching Mode Electric /Pneumatic Distribution Valve

## 一、Product presentation

Switching Mode Electric /Pneumatic Distribution Valve is applied to control the powder material' s flow direction by adjusting the valve plate position inside the valve, which is widely used in building materials, metallurgy, mining, light industry, food and so on. And it is the ideal equipment for direction change during transmission system for solid grains and powder materials.

## 二、Structural features

The Distribution valve uses quality steel plate welded structure, with a small size, light weight, small resistance. The sealing material of the valve plate is made from PTFE, which has the characteristics of wear-resisting, heat-resisting, and so on. And using French BERNAED electric actuator driver or England KINETROL Pneumatic device can remotely control the flow of materials.

## 三、Technical parameter

Electric or Pneumatic distribution valve	Specification	Φ530mm	Φ830mm	Φ1050mm
	Max. flow capacity	300t/h	500t/h	630t/h
	Installed inclination	8°	8°	8°
The sealing material of the valve plate		PTFE		
Operating temperature℃		≤180		
Power voltage		380V, 50Hz (Can be customized according to the customer)		
Input signal		Digital signal		
Feedback signal		Limit switch signal		

## 四、Primary structure and operational principle

The electric or Pneumatic distribution valve is composed by electric or Pneumatic actuator, casing, valve plate and inflatable device.

When working, the electric or Pneumatic distribution valve plate has one outlet sealed, and the material discharges along the other outlet. When the electric or Pneumatic actuator is input opening digital signal, it drives the valve plate through the central axis to swing for a certain angle, and makes the valve plate turn to the setting position of the other outlet. Under this condition, the

valve achieves full open position, and the feedback signal outputs valve opening signal. When the electric or Pneumatic actuator is input closing digital signal, it drives the valve plate through the central axis to return to the original position, and makes the valve plate turn to the setting position of the other outlet. Under this condition, the valve achieves full close position, and the feedback signal outputs valve closing signal. The inflatable device at the lower part makes the material on the breathable layer to be fluidized and transported along the direction of the discharging, so as to achieve the purpose of controlling the material flow to distribute material.

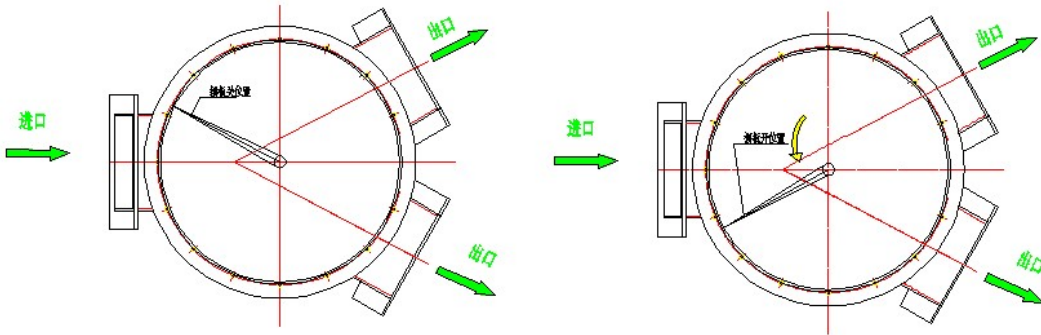
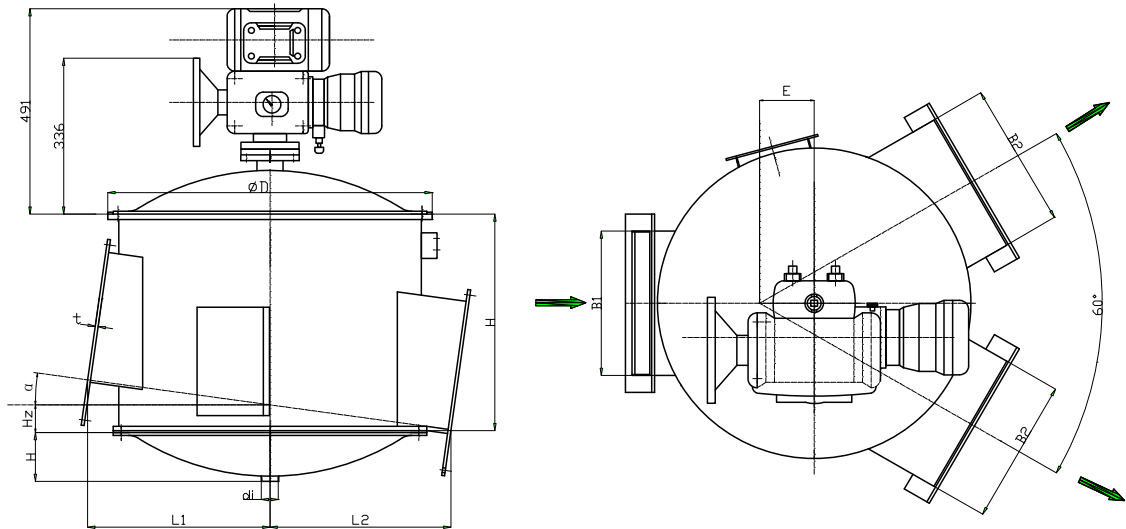


Diagram of valve opening and closing position

五、Dimensions



Specification $\Phi D$ (mm)	B1 (mm)	B2 (mm)	E (mm)	H (mm)	$d_i$ (mm)	h (mm)	H <sub>z</sub> (mm)	$\alpha^\circ$
$\Phi 500$	300	300	100	550	R <sub>P</sub> 11/2	136	51	8
$\Phi 830$	400	400	150	660	R <sub>P</sub> 11/2	115	71	8
$\Phi 1050$	500	500	200	715	R <sub>P</sub> 2	160	107	8

六、Operation notes

1. Install regulating valve on the gas circuit before the gas goes into the inflatable device at the lower part of the electric or pneumatic distribution valve to control the air inflow, and pour water to the air tank on timing according to

the actual operating conditions.

2. Before feeding, let low-pressure air (the low-pressure air should be filtered through the air dryer first) enters the permeable layer. When closing down, first stop feeding and then close the air source. If it is not used for a long time, clean the material on the permeable layer.
3. The gas source for the permeable layer should be Roots blower.
4. The material and sundries which is clustering, caking and has humidity> 1% is not allowed, in order to avoid valve board stuck.

## **七、Maintenance and repair**

1. The application of the electric/ pneumatic actuator should be strictly executed based on the requirements of the manual.
2. Check the permeable layer on a regular basis (3 to 6 months), and promptly replace it if damaged.
3. Check the moving situation of the valve plate on a regular basis (1 to 2 shifts), in case of stuck.
4. Check the sealing material of the sealing device on a regular basis (3 to 6 months), and replace it if worn.
5. Check the wear of the sealing felt at the ends of the bearing on a regular basis (3 to 6 months), and replace it if necessary.
6. Check the wear of the bearing copper sleeve on a regular basis (3 to 6 months), and replace it if necessary.
7. Regularly check the sleeve, and replace it if necessary.
8. Fill oil to the lubrication points on a regular basis.