

The ESV Electric Distribution Valve

Product application

ESV series electric 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.

The electric distribution valve is mainly controlled by electric actuator, with input 4 ~ 20mA electrical signal for operation on adjusting type electric actuator, and switch signal input for operation on switch type electric actuator.

Structural features

The Distribution valve uses quality steel plate welded structure, with a small size, light weight, small resistance, and using French BERNAED electric actuator driver which can remotely control the flow of materials.

Technical parameter

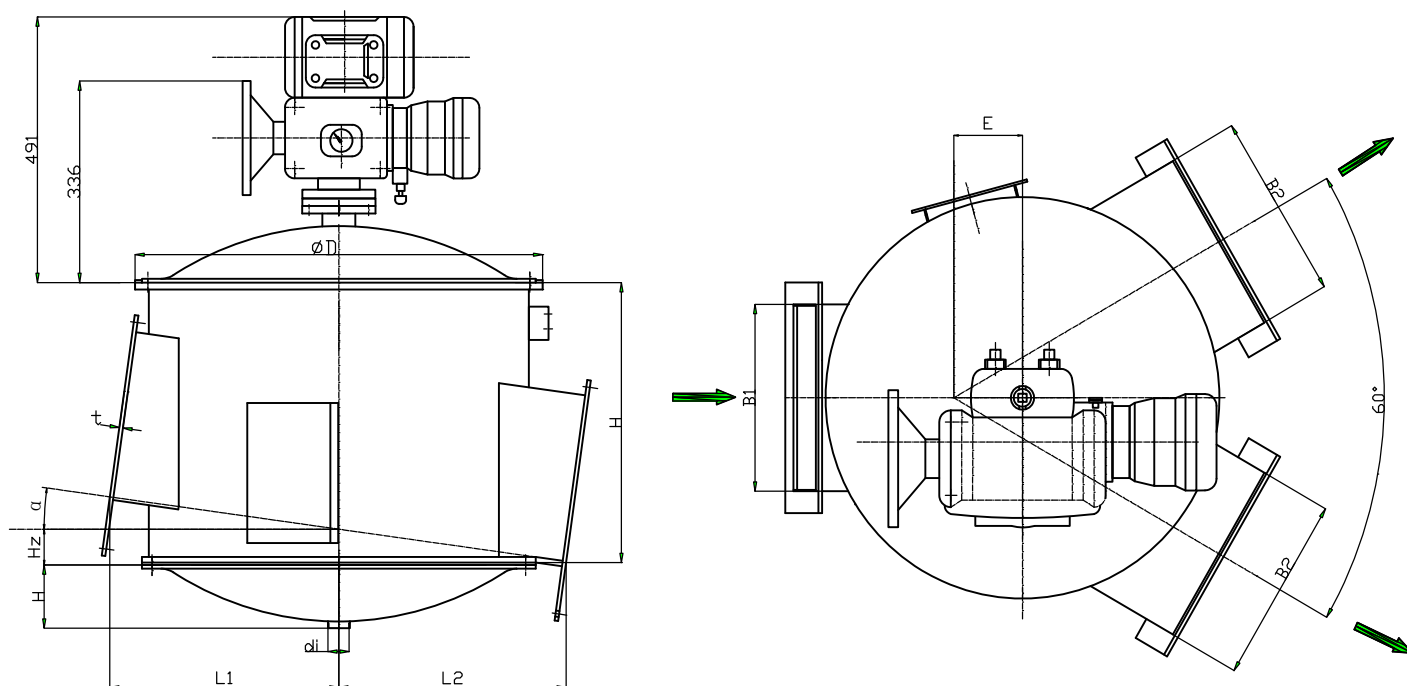
Electric distribution valve	Specification	Φ530mm	Φ830mm	Φ1050mm	Φ1200mm
	Max.flow capacity	300t/h	500t/h	630t/h	750t/h
	Install inclination	8°	8°	8°	8°
Execution mechanism model		BERNAED electric actuator			
Max.torque(Nm)		250	500	1000	1500
Input/output signal (mA)		4~20			
Operate time		30s			
Operating temperature		≤180℃			

Primary structure and operational principle

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

When working, the electric actuator drives the valve plate through the central axis to swing for a certain angle, to adjust and set position. The inflatable device at the lower part makes the material on the a breathable layer to be fluidized and transported out along the direction of the material, so as to achieve the purpose of controlling the material flow to distribute materials.

Dimensions



Specification ΦD (mm)	B1(mm)	B2(mm)	E(mm)	H(mm)	di(mm)	h(mm)	Hz(mm)	α°
$\Phi 530$	300	300	100	550	R _P 11/2	136	51	8
$\Phi 830$	400	400	150	660	R _P 11/2	115	71	8
$\Phi 1050$	500	500	200	715	R _P 2	160	107	8
$\Phi 1200$	630	630	200	900	R _P 2	160	107	8

Handling notes

1. The installation and using of the electric actuator should be strictly executed based on the requirements of the manual.
2. Install regulating valve on the gas circuit before the gas goes into the inflatable device at the lower part of the electric distribution valve , to control the feed rate, and drop water from the air tank on timing according to the actual operating conditions,.
3. Before feeding, let low-pressure air (the low-pressure air should be filtered through the air dryer first) enters the permeable layer first. Stop feeding and then stop the air source when you need to stop the valve. When it is not used for a long time cleans the materials on the permeable layer.
4. The gas source for the permeable layer should be Roots blower.
5. The materials and debris which are clustering, caking and humidity> 1% are not allowed, to avoid valve board stuck.

Maintenance and repair

1. Checking the permeable layer on a regular basis (3 to 6 months), and promptly replace it if damaged.
2. Checking valve plate rotation on a regular basis (1 to 2 classes), should be no stuck.
3. Checking the wear of the seal felt for the big covers on a regular basis (3 to 6 months), timely replace subject to wear and tear or leak.
4. Regularly check the sleeve, and replace if necessary.
5. Filling oil to the lubrication points on a regular basis.