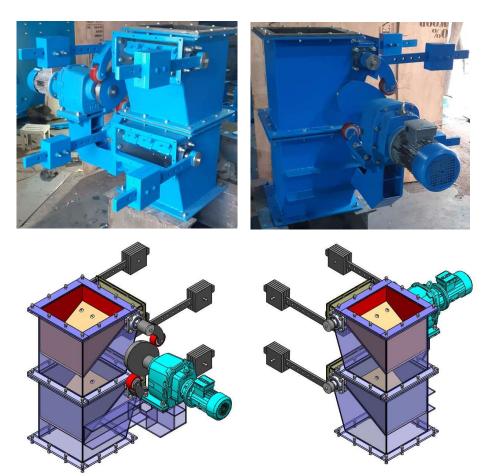


### MOTORISED PENDULUM TYPE DOUBLE STAGE SINGLE FLAP VALVE



# **Technical Description-**

Double Flap valves, also known as or double flap gates, are a type of airlock valve commonly used in industrial applications as a component in bulk material handling applications. Double flap valves are primarily used to discharge separator and cyclones operating under positive or negative pressure.

## Advantage -

Double flap valves are IDEAL to discharge a flow of material while at the same time serving as an airlock transition point to preserve the pressure differential below the valve. Pressure & Dust-tight construction.

This type of material handling valve is ideal for use with bulky or abrasive materials that would tend to jam or damage a rotary feeder.

#### Operation -

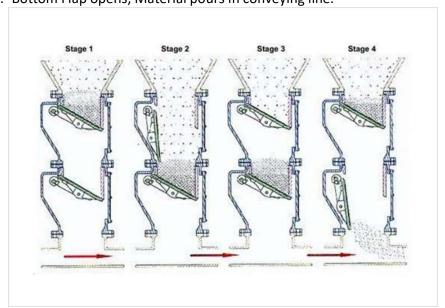


Double flap valves have two trap-door flap plates which open and close on an alternating cycle. The top gate opens to allow collected material to drop through onto the bottom gate. The top gate then re-closes to prevent air leakage above the valve. The bottom gate then opens to allow material to pass completely through the valve. The bottom gate then re-closes to prevent air leakage below the valve. This cycle is continuously repeated in order to maintain a steady discharge of material from the valve, while maintaining a positive seal on the system. Counterbalance - This type of double flap valve works essentially, like a stacked pair of trickle valves. Each flap plate is held closed with a counterweighted arm. As material builds up on the top plate the weight of the head of material pushes it open where it dumps onto the bottom plate. This type of double flap valve has no electrical or pneumatic controls and is the least expensive method of operation. However, it is difficult to sustain a properly timed cycle. Cam-operated-A motor-driven cam rotates and alternately opens the top gate and the bottom plate. A counterweight attached to the gate's shaft re-closes the gates. This type of double dump valve is generally the most reliable and can be operated with an electric motor. The speed of the cycle can be selected through the gear reducer ratio or by adjusting the motor speed

### Stages -

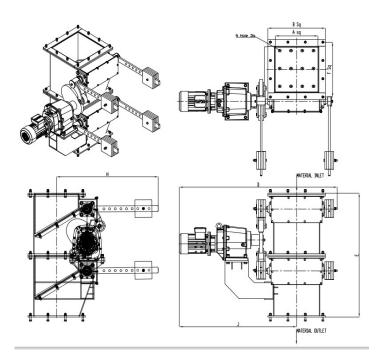
Stage One: -Both Flap Closed

Stage Two: -Upper Flap opens, Material pours in Bottom valve. Stage Three: -Upper Flap Closes, Material Collected in upper valve. Stage Four: -Bottom Flap opens, Material pours in conveying line.



FEATURES: -





1. Liner Box is with Hard Plate of 60 HRC
2. CAM is CNC Machined and grind
Cam follower is with bearing and Teflon circumference
4. Flap and its liner can be changed from Inspection Door.
5. Flap has bolted Liner of 60 HRC
6. Flanged Type Bearing
7. Shaft material - EN8
8. Paint – Polyurethane Paint
9. Counter Weight can be shift backward to close flap

MOTORISED DOUBLE PENDULUM TWO STAGE FLAP VALVE									
Model	Drive kW	RPM	A	В	С	D	Е	DIA	WEIGHT Kg
DFV200	0.75	12	200	330		1000	800	14	150
DFV300	1.1	12	300	430		1150	1000	14	280
DFV400	1.5	12	400	530		1250	1200	14	525
DFV500	2.2	12	500	630		1550	1400	18	750
DFV600	3	12	600	730		1680	1600	18	1050

Above parameters are indicative, actual dimension can be produced with General arrangement Drawing. Customized Pneumatic and gravity operated Flap valve shall be manufacture as per requirement of customer.