

BDV Series Dust Collector Diaphragm Valve Operation Manual

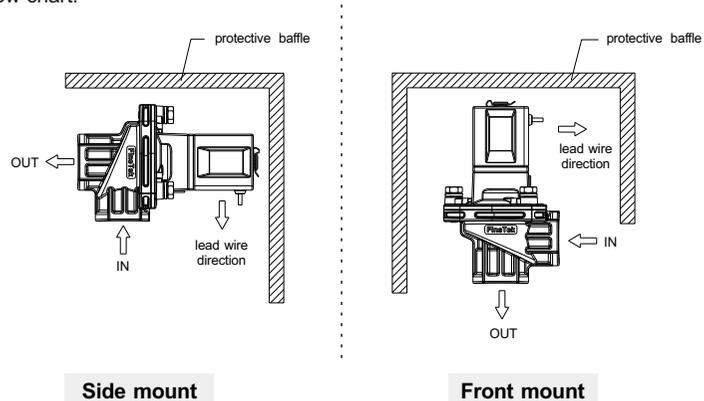
WORKING PRINCIPLE

Fast air flow is generated by the fast opening of the diaphragm valve, and a big volume of air is led to inflate the filter bag and that the dust adhered to the filter bag is shaken off. The volume of air is controllable by adjusting the pressure of the compressed air.

- ☞ Minimum Air Pressure Supplied: 0.3Bar, Maximum Air Pressure Supplied: 8.6Bar
Compressed air which is beyond the rate might result in damage to the diaphragm valve and even human casualty.
- ☞ Operating Temperature: -20°C~85°C, Ambient Temperature: -20°C~60°C
 - ▶ Solenoid Valve (Option) Characteristics:
 - Coil insulation: class F (155°C)
 - Operating temperature: -20°C~50°C
 - Power voltage: 110VA, 220VAC 50/60Hz, 24VDC

⚠ ATTENTION

- ❖ Working Pressure must not go beyond 8.6Bar. Working Temperature must not go beyond 85°C ◦
- ❖ Before installation and maintenance, make sure the supply of compressed air is already completely sluiced out, and both the power and air supply are cut off. Never turn on the power and supply the air pressure before the diaphragm valve is properly installed.
- ❖ For safety consideration, never supply compressed air before the diaphragm valve is properly installed.
- ❖ Make sure there is no particulate and it is clean between the diaphragm valve and the connection tube.
- ❖ Make sure the compressed air is clean and without humidity (It is suggested to install a filter).
- ❖ Please make sure there is no leakage while supplying air pressure after the diaphragm valve is properly installed.
- ❖ Installing protective baffle for diaphragm valve is recommended.
As below chart.



- ❖ The cable entry of the connection cable and solenoid coil must face downward to prevent from water penetration.
- ❖ Regular maintenance should be conducted on the diaphragm valve and pilot solenoid to ensure performance.
- ❖ The ring nut of quit fittings and sealing ring are used only for sealing. They cannot be used to secure the diaphragm valve.



TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	CHECK / SOLUTION
No function	No air supply	Check if the air compressor is activated, and the air valve is open.
	Low air entry pressure	Check if the air control set indicator normally functions.
	Solenoid valve doesn't function.	Solenoid valve needs replacement.
Air outlet leakage	Mistake in the installation of the air inlet	Check if there is power to drive the solenoid valve.
	Particulate in the diaphragm valve	Clean or repair
Jetted air flow volume is too small	Low air supply pressure	Check the air supply and the pressure of the air control set, and raise the value. The specs of the air control set is too small. Too many filter bags are equipped with the single diaphragm valve, therefore, the jetted air flow volume is being decentralized.
Vibration and noise	Screws not tightly secured	Properly and tightly secured the screws.
	Connection tube not properly welded, or weak intensity	Re-check the welding method and intensity.
Noise in solenoid valve	Solenoid coil not properly secured	Properly and tightly secured the solenoid coil.

- ❖ Please contact us in case of any unknown problem.



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