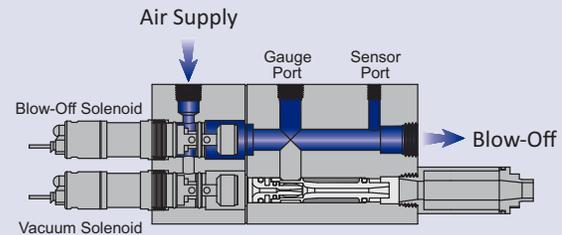
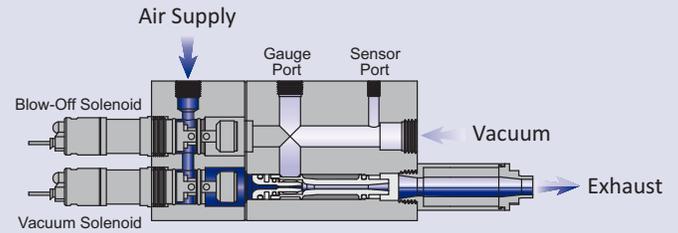


Principles of Operation

Compressed air is supplied to both normally closed (N.C.) solenoid valves simultaneously. To create vacuum, energize the first (vacuum) solenoid valve to allow the compressed air to flow to the miniature venturi cartridge resulting in instantaneous vacuum.

To release the part, de-energize the vacuum solenoid while energizing the blow-off solenoid. Because the blow-off air is at line pressure, a very powerful blow-off will be created.

Vacuum is produced in a venturi cartridge by forcing compressed air through a limiting orifice (nozzle). As the air exits the orifice, it expands, increasing in velocity to supersonic speed before entering the venturi section (diffuser). This creates a vacuum at the inlet port, located between the nozzle and diffuser. The nozzle and diffuser combine to create a vacuum cartridge. The precise fit of the nozzle to the diffuser is critical to the pump functioning properly.



Operating and Installation Instructions:

1. Mount pump. Pump has three through holes that accept 10-32 (M5) screws (screws not supplied). Pump works in any orientation.
2. Attach air line to supply port. Attach vacuum line to vacuum port (when not directly attaching vacuum cup). Use the following tubing (minimum) for vacuum and air supply ports:

| Installed Cartridge: | C60 & C90 | C100 & C150 |
|----------------------|-------------|-------------|
| Vacuum Line: | 3/8" [10mm] | 3/8" [10mm] |
| Supply Line: | 1/4" [6mm] | 3/8" [10mm] |
3. Confirm proper solenoid voltage located on the side of the solenoid valve.
4. Connect positive and negative power supplies (24 VDC or 110 VAC). Check wiring schematic to right to ensure proper connection. Black lead -24 V DC, red lead +24 V DC). Pump is also available with an optional 3-pin male M8 connector.
5. Turn on compressed air and regulate to specified pressure (80 PSI standard, -60 models 60 PSI). Set regulator while pump is operating.
6. Energize vacuum valve to create vacuum.
7. De-energize valve to turn off vacuum
8. Energize vacuum valve to create vacuum.
9. De-energize valve to turn off vacuum



Vaccon Return Policy - Electronic Products (Switches, Sensors, Valves)

To return a product, whether it was ordered incorrectly or is defective, please contact your local Vaccon distributor for a Return Material Authorization number (RMA). For Vaccon distributors, please have the following information available: original invoice number, date ordered, the product part number, quantity being returned and the reason for return.

A. Damage due to improper installation / application - Detailed installation and operating instructions are included with every electronic product. Any installation that deviates from these instructions or any application not within these specifications voids any warranty and the product cannot be returned and credit will not be issued.

B. Modified/Altered Product - Any product that has been altered or modified in any way voids the warranty and the product cannot be returned and credit will not be issued.

C. Incorrect Shipment or Defective Product - If a shipment is incorrect (quantity, model number, etc.) please notify Vaccon within 3 business days of receipt of order. Any defective product, under warranty, that is returned to Vaccon will be repaired, replaced or credited 100% at Vaccon's discretion. Product returned to the customer will be returned at Vaccon's expense. Any product that is returned due to manufacturer's defect must be returned in its original condition or a credit will not be issued.

D. Damage due to shipping/ handling - If product is received damaged due to transportation mishandling, please contact your local Vaccon distributor. Vaccon will credit the shipping charges once a claim number has been filed and Vaccon has received a credit. Any product returned to Vaccon that is not properly packaged and results in the product being damaged will be assessed a charge based on the cost to return it to resalable condition. If the product cannot be repaired, a credit will not be issued.

For a copy of Vaccon's complete return policy please contact your local Vaccon distributor or Vaccon customer service.

Warranty – Electronic Products (Switches, Sensors, Valves)

Vaccon Company warrants that its electronic products are free from defects in workmanship and materials for a period of 90 days after invoice. The company makes no other warranty, expressed or implied, and will not assume any liability for damages, labor or delays incidental hereto. Not intended for life support systems.

***All products are inspected upon arriving at Vaccon before any credits are issued.
Credits are not valid unless issued on an authorized Vaccon credit memo.***