

VPHF-Series High Flow Vacuum Generators

Doc. No. 13600210D

ANVER's VPHF-Series of High-Flow Vacuum Generators are specifically designed and only suitable for porous applications where constant vacuum at the pads is required to hold the load. Materials such like plywood, OSB, particle board, wood bi-product panels, cement board and dry wall, foam core board etc.

The VPHF-Series offers high capacity pumps, large filters and gauges for trouble-free operation in most demanding production environments. These vacuum generators are designed for use with a wide assortment of vacuum lifters pad attachments and lifting beams. The VPHF-Series features a sturdy welded frame construction and simple ruggedly built construction for lasting reliability in dusty industrial environments.

A whole range of standard vacuum pads and pad attachments are available, however they all must be modified to be used with VPHF-Series high flow generators. This usually requires larger diameter vacuum hose, fittings and vacuum ports to handle the higher flow effectively.

Note: This series of high flow generators cannot be used on non-porous loads.



Features

Front Mounted Controls and Gauge

Manifold vacuum gauge is mounted on manifold block for continuous monitoring by the operator. The electrical control box includes a master on/off switch and circuit breaker as 3 phase power required due to the size of the pump motors. Highly porous materials require high air flow only large vacuum pumps can achieve.

· Ergonomic Adjustable Front Handlebar

Easy to grasp, large loop handlebar enables the operator to easily and safely maneuver the attached load without touching the load itself. To release the load two hands are required to slide the spring loaded levers in for safety.

 Regenerative Pumps offer a compact, reliable source of quiet, vibration-free vacuum.

ANVER's quality vacuum pumps are made from tough, highstrength materials for long life, and require little maintenance other than keeping the filter clean. Note 3 phase power required due to the large size of the pump motors. If a single phase pump was used in this size range of high flow vacuum pumps the amp draw would be too high. An electrician is recommended to wire in and connect with the correct plugs and cords for the voltage used.

Vacuum Relief Valve

ANVER easy adjustable Vacuum Relief Valves (VRV) are designed to protect vacuum pumps from internal damage due to a dead-head situation. VRVs allow a small amount of air into the vacuum pump, which cools the temperature and, in doing so, prevents overheating and possible damage. Note that this VPHF-Series is for highly porous loads and not recommended for non-porous loads which you can use a much smaller and less expensive conventional Vac-Pack.

Vacuum Filter:

High capacity FLT-3 (10 micron, rated flow of 138 SCFM) air filter provides protection against pump damage. The filter is mounted on the side of the lifting frame for easy routine inspection and cleaning.

Frame Construction

VPHF-Series type frames are fully welded with a structural lifting capacity rating of 2950 lb. (1338 Kg.) for 3" sq. and 3" x 6" beams with beam mounting hardware. The porous panel loads these units are designed for are not usually heavy but rather large and bulky.

Application Notes

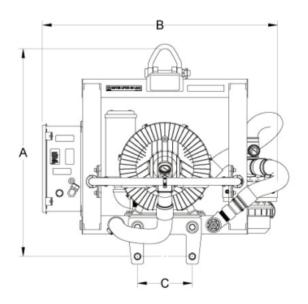
ANVER's VPHF-Series of High-Flow Vacuum Generators do not have a check valve nor vacuum reservoir as these do not help holding a load in case of a power failure for example. That is because in case the vacuum pump stops, the load will fall off from leakage right under the vacuum pads through the porous material its lifting. This makes these High-Flow lifters specialized to only porous panel materials and using these lifters requires workers to always be well clear of loads. These types of lifters are exempt from ANSI spec's because they can not hold vacuum, as air passes through the material.

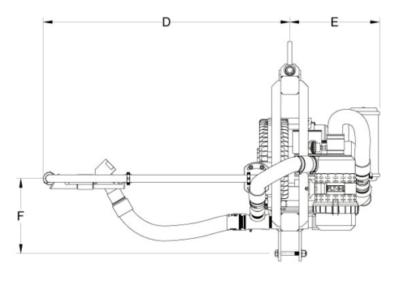
• Another application issue to be aware of, when lifting a smooth surfaced particle panel of a stack of sheets some manually moving or compressed air may need to be blown on the load to break it free from the stack. The reason is the vacuum goes right through top porous panel into the panels below. This is a possibility on all applications with tight stacks of smooth surfaced porous panels. It can be done but make take a preliminary lift on a corner to first break the sheet free in order to lift just one sheet.



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Model No.	VPHF-4	VPHF-41	VPHF-9
Rated Load Capacity [lbs (kg.)]	2950 (1338)	2950 (1338)	2950 (1338)
Approx. Unit Weight [lbs (kg.)]	270 (123)	315 (143)	350 (159)
Fits Tube Size	3x3 (76x76) 3x6 (76x153)	3x3 (76x76) 3x6 (76x153)	3x3 (76x76) 3x6 (76x153)
A Maximum Headroom 3" x 3" Beams [in. (mm)]	34.13 (867)	34.13 (867)	34.13 (867)
A Maximum Headroom 3" x 6" Beams [in. (mm)]	37.13 (943)	37.13 (943)	37.13 (943)
B Unit Width [in. (mm)]	41.2 (1047)	41.2 (1047)	41.2 (1047)
C Hardware Centers [in. (mm)]	9 (228)	9 (228)	9 (228)
D Handlebar Length [in. (mm)]	48 (1219)	48 (1219)	48 (1219)
E Unit Depth [in. (mm)]	14.75 (375)	18 (457)	11.38 (289)
F Handlebar Height 3" x 3" Beams [in. (mm)]	12.31 (313)	12.31 (313)	12.31 (313)
F Handlebar Height 3" x 6" Beams [in. (mm)]	15.31 (389)	15.31 (389)	15.31 (389)
Pump Capacity [SCFM (m3/hr)]	220 (370)	114 (193) @ 50Hz 138 (234) @ 60Hz	120 (203)
Maximum Vacuum at Sea Level [in. Hg (mbar)]	12 (406)	12 (406)	18 (609)
Incoming Power Requirement AC	230/460/575V 3PH/50-60Hz	230/460/575V 3PH/50-60Hz	230/460/575V 3PH/50-60Hz
Vacuum Pump	VB4HF	VB41HF-FR	VB9HV
Replacement Filter Element	FLT-3E	FLT-3E or FLTE41-PA / FLTE41-PO	FLT-3E

Notes: *Refer to the pump specification label for actual ratings. Data listed in the table above is subject to change. Before using the pump, confirm that your operating requirements are compatible with the data on the pump specification label.