

Portable Conveying Control and Vacuum Pump

The PowerFill is a pump, control, and filter wrapped into one compact, mobile package. The PowerFill system can manage and support up to eight (8) vacuum receivers from its simple-to-understand 7-inch touchscreen control.

Using a peripheral pump that requires no oil or belts, plus an easy-to-clean cartridge filter for dust collection, the PowerFill is a versatile, ready-to-use vacuum source for your conveying needs.

Simply wheel the PowerFill into position and connect the unit to a three-phase power source. Vacuum connections are made with flex hose. Snap together cable sets provide quick, no-tools connections from the control to up to eight vacuum receivers.



**Model PF8-4
PowerFill**

Integrated Vacuum System for Up to Eight Fully-Featured Receivers

The PowerFill comes equipped with an Allen-Bradley PLC and HMI that can operate a full range of loading functions including:

- Single material
- Gravity discharge valve
- Material line purging
- Volume or time fill loading

Standard I/O includes:

- Purge valve
- Fill sensor
- Remote demand sensor

Cyclone or DC1 Dust Collector are available options.

An Idle Mode valve is standard, allowing the pump to run between loading cycles, eliminating start and stop cycles that can reduce pump life.

▶ **Pump, dust collector and control**

Because the PowerFill comes with all three, it's a versatile, ready-to-use vacuum source and conveying control.

▶ **Compact, portable design with casters**

The small footprint preserves valuable floor space and makes the PowerFill easy to move to any conveying station.

▶ **Easy to install, mobile**

Just tilt the unit, wheel it into place and connect it to a three-phase power source. Easy plug-in cables and flex hose completes the connections to vacuum receivers.

▶ **Minimal maintenance**

When compared to self-contained loaders with motor brushes and central vacuum pumps, this direct-drive three-phase pump is easy to maintain. The pump doesn't need oiling, and there are no belts to maintain. The single, high-capacity dust collection filter requires no tools for fast removal and cleaning. Optional Cyclone Dust Collector or DC1 dust collector can be added.



Control

HOME 10/23/2017 11:44:54 AM

Powerfill 8 Loading System Software Rev #0

Home screen shown with 4 loaders enabled (top) and 4 loaders disabled (bottom).

Navigation buttons are located on the right-hand side of the home screen.

Active date & time located across the top right section of the screen.

Discharge
Loader State

Loading
Loader State

HELP - Home Screen 10/18/2017 10:45:50 AM

Full context **help** available from all screens

In Demand
Loader State

In Alarm
Loader State

Easy filter removal



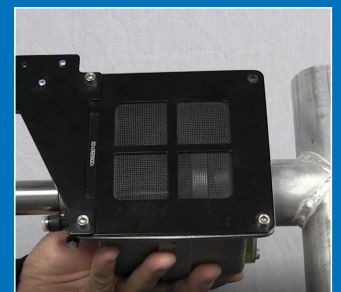
No tools or hardware required, allowing easy removal of dust pan and filter.

Easy cable connections



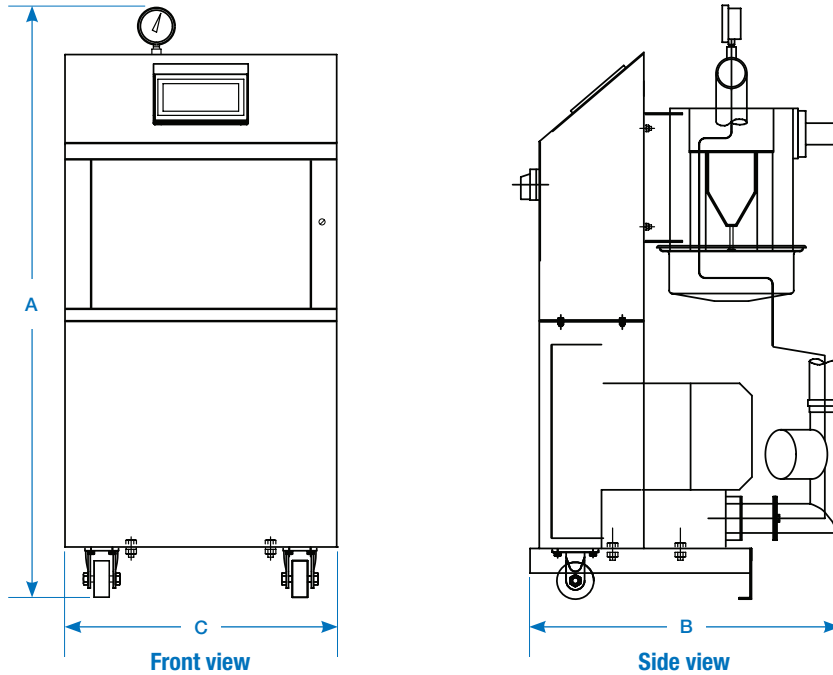
Prewired plug and play design for receiver connection and control connection.

Easy operation



The idle mode valve allows for simple operation.

Specifications



Features

- Three-phase peripheral vacuum pump with gauge
- Multiple optional cable lengths available: 10 foot {3.04 m}, 20 foot {6.09 m}, 50 foot {15.24 m}, 100 foot {30.48 m}, 150 foot {45.72 m}
 - * Cables are end to end compatible and can be extended. 20 + 50 feet {6.09 + 15.24 m} = 70 foot {21.33 m} total length.
- 41ft² cartridge filter
- Dust collection chamber with no-tools access for easy cleaning
- Tilt-back casters
- Tilt-back casters and handles
- Idle mode valve
- Fully featured with I/O for any Conair receiver

Applications

- Up to eight receivers (24 volts DC only)
- Works with Access Receiver (AR), DuraLoad (DL), Powder Receiver (PR), FilterLess (FL), Tube Loader (TLR), Medical Receivers (MR)
- Central vacuum power for small manufacturing cells
- Eliminating noisy, high maintenance vacuum motors on loaders

Model	PF8-3	PF8-4	PF8-6
Performance characteristics			
Maximum throughput lb {kg} per hour	900 {408}	1300 {590}	3200 {1452}
Motor Hp {kW}	2.33 {1.75}	3.6 {2.7}	6.16 {4.6}
Vacuum/material line sizes inches (must be the same size)	1.5	1.75 or 2.00	2.25 or 2.50
Maximum tubing length ft {m}	100 {30.5}	175 {53.3}	225 {68.6}
Dimensions inches {mm}			
A - Height		49 {1245}	
B - Depth		28 {711}	
C - Width		23 {584}	
Approximate weight lb {kg}			
Installed		285 {129}	300 {136}
Shipping		385 {175}	400 {181}
Filter			
Filter type	Paper cartridge filter		
Number of filters	1		
Total filter area ft ² {m ² }	41 {3.8}		
Voltage Full load amps *			
208V / 3 phase / 60 Hz	7.2	10.6	19.5
240V / 3 phase / 60 Hz	6.6	10.2	17.6
380V / 3 phase / 50 Hz	5.2	5.9	8.3
415V / 3 phase / 50 Hz	5.1	5.6	7.8
480V / 3 phase / 60 Hz	3.3	5.1	8.8
575V / 3 phase / 60 Hz	2.7	3.3	7.0

Application Notes

If conveyed materials exceed 200° F {93°C}, an aftercooler may be required on the incoming vacuum line.

The PowerFill dust collector may be supplemented with a higher capacity dust collector if excessive material dust is anticipated. (Cyclone Dust Collector or DC1 Dust Collector)

Rigid tubing is recommended for longer vacuum and/or material lines.

Specification Notes

* FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams of the equipment order and the nameplate applied to the machine.

Specifications can change without notice. Contact a Conair representative for the most current information.

