Description

The Powerex compressed air filter system is especially designed for use in medical air applications. This filter system meets NFPA 99 requirements by having two stages of filtration to remove oil vapors and water aerosols, odors, and solid particles as small as .5 micron with 99.9998% efficiency. The filter system is completely duplexed to provide uninterrupted service and is sized to perform with 100% peak demand through either bank of filters. The filter elements are made with continuous visual monitors.

The filters contain visual monitors that change color from green to red as the filters collect particles.

A separate pressure regulator and gauge is supplied for each bank of filters to allow easy adjustment of air pressure to the desired distribution system and for random air samples.

The ASME code safety valve at the outlet of the filter system is set at 75 PSI and is non-adjustable.

The compressed air filter system will not remove carbon monoxide or other toxic gases.

Installation

The frame work typically supplied with the filter system allows easy wall mounting. Fasteners capable of supporting the weight of the system must be used. Easy accessibility should be provided for performing routine maintenance. The filter system should be installed after an air line dryer, if used, and before any air line monitoring equipment.

After assembly, open all valves in the filter system except the system vents. Slowly pressurize and adjust regulator.

Breathable Air Warning

This filter system is NOT equipped and should NOT be used "as is" to supply breathing quality air. For any application of air for human consumption, you must fit the filter system with suitable in-line safety and alarm equipment. This additional equipment is necessary to properly filter and purify the air to meet minimal specifications for Grade D breathing as described in Compressed Gas Association Commodity Specification G 7.1 - 1966, OSHA 29 CFR 1910.134, and/or Canadian Standards Associations (CSA).

DISCLAIMER OF WARRANTIES

In the event the filter system is used for the purpose of breathing air application and proper in-line safety and alarm equipment is not simultaneously used, existing warranties are void, and Powerex disclaims any liability whatsoever for any loss, personal injury or damage.
Compressed Air Filter System

to desired pressure. Check for leaks with a soapy water solution. Release pressure slowly and remedy any leaks.

Operation
1. Ensure the system vents are closed and then slowly open the quarter turn valves for the upper filter bank in the order given below:
   a. Inlet valve
   b. Outlet valve
2. Close the valves for the lower filter bank in the order given below:
   a. Inlet valve
   b. Outlet valve
3. Slowly open the lower system vent to relieve any pressure. Then close the vent.

<table>
<thead>
<tr>
<th>Max. Air Press.</th>
<th>Max. Air Temp.</th>
<th>Maximum Air Pressure After Regulators</th>
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<tbody>
<tr>
<td>150 PSIG</td>
<td>125°F</td>
<td>75 PSIG</td>
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4. Adjust the output air pressure with the regulator by turning the knob clockwise for increased pressure or counterclockwise for decreased pressure. The outlet safety valve will vent to atmosphere if the pressure exceeds 75 PSI.

Maintenance

![WARNING](MFP-050-342 Qty.)

Relieve all pressure from the filter bank being serviced before performing any maintenance.

Replacement is necessary when the filter element indicator becomes red.
Change the air flow to the opposite filter bank prior to maintenance.
Alternate between filter banks at least annually to perform preventative maintenance.
Replace each filter element and the auto drain valve annually.

![Replacement Parts](Regulator, Outlet, Filter Bank, Inlet, Filter Bank, 1st, 2nd)

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<tbody>
<tr>
<td>.5 Micron filter element (1st)</td>
<td>ST178107AV</td>
<td>ST178121AV</td>
<td>ST178125AV</td>
<td>ST178131AV</td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td>Activated carbon element (2nd)</td>
<td>ST187111AV</td>
<td>ST187123AV</td>
<td>ST187129AV</td>
<td>ST187135AV</td>
<td>1</td>
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<tr>
<td>Auto drain valve</td>
<td>ST178103AV</td>
<td>ST178103AV</td>
<td>ST178103AV</td>
<td>ST178103AV</td>
<td>1</td>
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Powerex Limited Warranty

**Powerex 3 Year / 10,000 Hour Extended Parts Limited Warranty** - Powerex warrants each Compressor Pump or Scroll Air-End against defects in material or workmanship from the date of purchase for a period of **Three years or 10,000 hours**, whichever may occur first. This warranty applies to the exchange of part(s) of the compressor pump or air-end found to be defective by an Authorized Powerex Service Center.

**Powerex 1 Year / 5,000 Hour Inlet to Outlet Limited Warranty** - Powerex warrants each Compressor Unit, System, Pump, or Air-End against defects in material or workmanship from the date of purchase for a period of **One Year or 5,000 Hours**, whichever may occur first. This warranty applies to the exchange of defective component part(s) and labor performed by an Authorized Powerex Service Center.

*The above mentioned warranty applies to POWEREX manufactured units or systems only.*

Items listed in the operator’s manual under routine maintenance are not covered by this or any other warranty.

THERE IS NO OTHER EXPRESS WARRANTY. IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM THE DATE OF PURCHASE; AND TO THE EXTENT PERMITTED BY LAW, ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED. THIS IS THE EXCLUSIVE REMEDY AND LIABILITY FOR CONSEQUENTIAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.

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