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# PRE-FILTER

OWNER/ OPERATOR MANUAL



# PLUMBING REQUIREMENTS

## PIPE RECOMMENDATIONS

The Masport Pre-Filter comes in three standard porting sizes ( 1 1/2", 3", and 4" N.P.T.) to accommodate pumps up to 500 SCFM. Note that some type of pipe sealer should be used on the threads of all pipe fittings to prevent leaks. "LOCTITE" Pipe Sealer With Teflon has proven to be the easiest and most effective product Masport has tested. Teflon Tape should not be used as pieces of the tape can be drawn into the pump and cause vanes to stick.

Also, make certain that all fittings used in the installation of the pumping system are free from metal chips sometimes left in the fitting when it is produced. These chips can cause considerable damage to the pump on initial start up if allowed to remain in the system. Also, this would be a good time to check all the plumbing and plugs, making sure they are all tight and leak proof.

## HOSE SIZE AND TYPE

The hose between the pump, the accessories, and the tank should be no smaller than the pump porting. Using a smaller hose than pump porting will restrict the airflow of the vacuum pump.

When selecting the type of hose to use, keep in mind that Masport Pumps are capable of up to 28" Hg and 30 PSIG. It is therefore important to select an interconnecting hose rated for full vacuum service and adequate pressure, such as a black rubber hose with wire reinforcements.

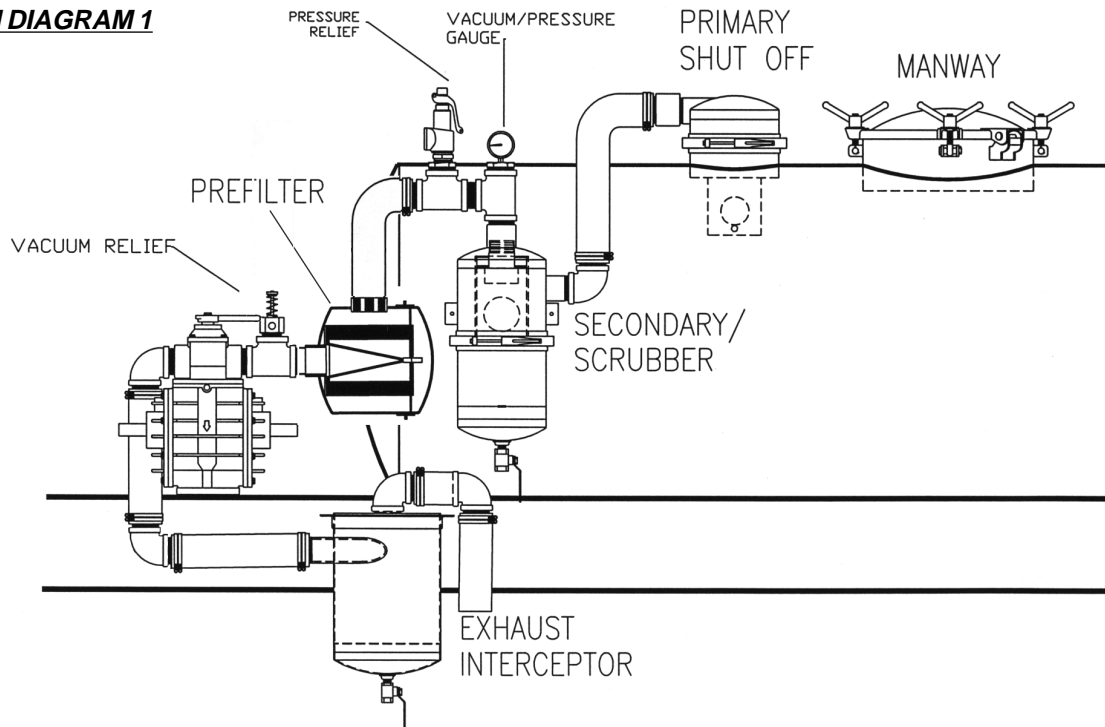
# PUMP PROTECTION

In order to perform properly, the pump must be protected at all times from liquid or foreign materials entering the mechanism. Pump protection can be achieved through the use of a Masport Pre-Filter in addition to properly designed primary and secondary moisture trap scrubbers. Due to the high air flow rates and rapid loading capabilities of the system, a Pre-Filter, in addition to both the primary and secondary is recommended.

## PRE-FILTER FEATURES AND BENEFITS

Masport's Pre-Filter is designed as an added protective measure to be installed between the Secondary Scrubber and the Pump on the Inlet side (See Installation Diagram 1). It can be mounted vertically or horizontally without losing its effectiveness, this makes it extremely versatile and easy to adapt to any system set-up.

## **INSTALLATION DIAGRAM 1**



## **FILTER ELEMENT FEATURES AND MAINTENANCE**

Masport's Pre-Filter features a custom made, pleated stainless steel filter with heat and oil resistant silicone seals. The filter elements that go into the 3" and 4" Pre-Filters are composed of 22.8 square feet of filter material, for the 1 1/2" Pre-Filter, the element contains 6.2 square feet of material.

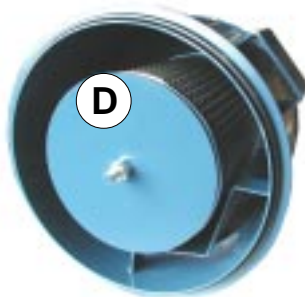
To remove the filter element, release the clamp ring lever and gently pry it away with a screwdriver or a rubber mallet. After removing the lid, remove the filter element retainer disk by removing the bolt that keeps it in place. (See photos below.)

Masport's filter element can be cleaned with warm water and soap (do not use high pressure washers), from the inside of the filter element to the outside. The filter can be used repeatedly, and does not need replacement until damaged.

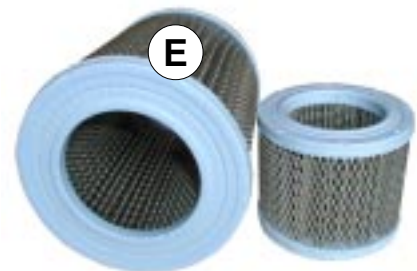
### **FILTER REMOVAL**



1. Release clamp ring lever A
2. Remove lid B



3. Remove bolt C
4. Remove retainer plate D



5. Clean Filter Element E, with warm water and soap.

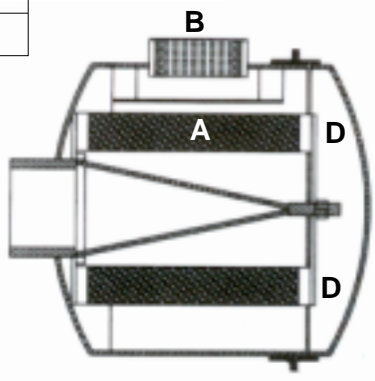
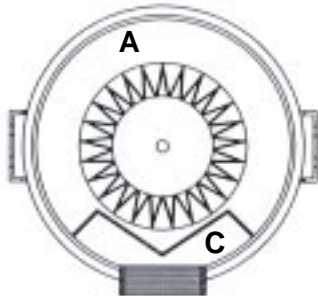
# SPECIFICATIONS

ASSEMBLY NUMBER	15112	15109	15110
Porting Size N.P.T.	1 1/2"	3"	4"
Filter Element	300micron	300micron	300micron
Net Weight - lbs.	25	48	48
Quick Release Clamp Material	Stainless Steel	Stainless Steel	Stainless Steel

REPLACEMENT FILTER ELEMENTS:	
26108	1 1/2" Filter Element
26107-50	3" Filter Element
26107-50	4" Filter Element

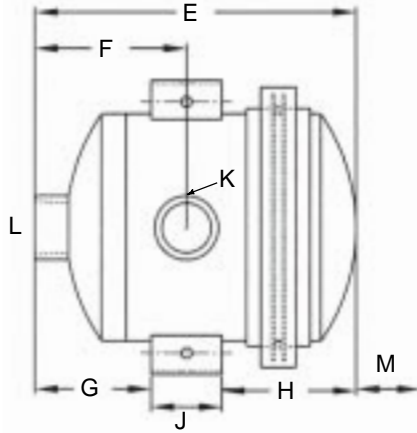
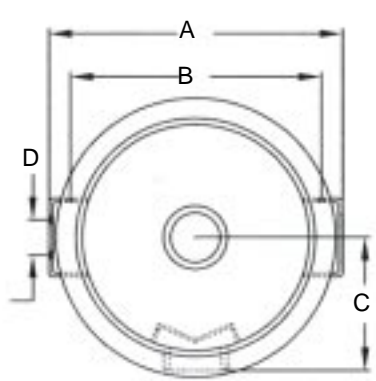
## OPERATIONAL DATA

### All Pre-Filter Models



- A. Filter Element**
  - 50 mesh for Superior protection
  - 300 Micron pleated cleanable stainless steel for ease of maintenance.
- B. Portings**
  - 1 1/2", 3" and 4" N.P.T. to match a variety of pumps.
- C. Air Deflector**
  - 12 Gauge Hot Rolled Steel for ruggedness and durability.
- D. Silicone Endcaps**
  - Heat and chemical resistant.

## DIMENSIONAL DATA



### Assembly Numbers

	15112	15109	15110
A	10 3/8	14 1/2	14 1/2
B	8 7/8	12 7/8	12 7/8
C	4 11/16	7 1/4	7
D	1 1/4	1 1/2	1 1/2
E	11 3/8	15 3/4	15 3/8
F	5 3/8	7 5/16	7 3/4
G	4 1/8	7 1/8	6 1/4
H	4 3/8	5 5/8	6 1/4
J	2 1/2	3	3
K*	1 1/2	3	4
L*	1 1/2	3	4 Male
M	2 1/4	7 3/16	7 3/16

\* N.P.T. FEMALE UNLESS OTHERWISE SPECIFIED  
ALL DIMENSIONS IN INCHES UNLESS STATED OTHERWISE STATED

### Limited Warranty

MASPORT warranties against defects in workmanship or parts for 12 months after delivery. The warranty does not cover damage that results from improper installation or for operation beyond capacities specified by MASPORT at date of shipment. Warranty is limited to repair or replacement of parts or components. It is further limited to exclude any contingent liabilities for damage resulting from product failure.

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