Inline Coalescing Filters

HIGH-CAPACITY Series, Flow to 465 scfm, Port Sizes 11/4 & 11/2



Thank You! You have just purchased a premium-quality ROSS® Air Preparation product. With care in its installation and maintenance, you can expect it to have a long and economical service life. Before you go any further, please take a few minutes to look over this information, then save it for future reference and for the useful service information it contains.

OPERATION

Float Drain Filter may be drained manually by turning Drain Stem clockwise until bowl drains. Return to full counter-clockwise position for automatic drain position. To install 3/16 flexible tubing, push tubing on the Stem. A tube clamp should be used to retain tubing on drain stem.

Manual Filter is drained by turning Draincock Knob clockwise.

Replace Coalescent Element when the pressure differential reaches 8 to 10 psid (0.55 to 0.69 bar).



INSTALLATION

Please read and make sure you understand all installation instructions before proceeding with the installation.

If you have any questions about installation or servicing your product, please contact ROSS or your authorized ROSS distributor, see contact information listed at the back of this document, or visit www.rosscontrols.com to find your distributor.

- 1. Depressurize and lockout air pressure.
- 2. Upstream pipes must be free of excessive dirt and liquids.
- A conventional Filter with standard 5-micron filter element should be installed immediately ahead of Coalescing Filters to maximize the life of the coalescing element.
- 4. Install the Coalescent Filter as near as possible to the device it is to serve.
- 5. Install the Coalescent Filter so that air flows from inlet to outlet as shown on the head.
- 6. The Coalescent Filter must be installed vertically with drain mechanism at the bottom.
- 7. Coalescent Filters should be installed upstream of any Regulators or Lubricators in the airline.

SERVICE

If you need to service your product, turn off any electrical power to the system, shut off the air supply, exhaust the air in the system, and lock-out all power sources before beginning any disassembly operation.

TO CLEAN OR REPAIR:

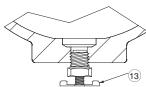
Depressurize and lockout air pressure. Remove Bowl Assembly by turning counter-clockwise. Remove Lower Baffle by turning the Wing Nut counter-clockwise. The Coalescent Element can now be removed. Do NOT clean elements, they must be replaced.

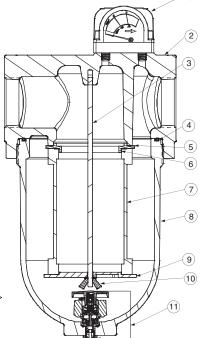
To service Float Drain, remove the Drain Nut by turning counter-clockwise. The Float Drain can now be removed from Bowl. The Float Drain and Bowl can now be cleaned.

When re-assembling, be sure all gaskets and O-rings are correctly located. Lubricate O-rings with Lithium grease. Torque Drain Nut 35-45 in-lbs. Torque Wing Nut finger tight. Torque Bowl to Head 90 to 110 Ft-Lb.

If the Filter cannot be repaired by cleaning with soap and water, the parts should be replaced.

KEY	DESCRIPTION		
1	Differential		
	Pressure Gauge		
2	Head		
3	Stud		
4	O-Ring		
5	Gasket		
6	Baffle		
7	Coalescent Filter Element		
8	Metal Bowl		
9	Lower Baffle		
10	Wing Nut		
11	Float Drain		
12	Drain Nut		
13	Drain Cock		





FLOW

STANDARD SPECIFICATIONS

Construction: Fiber.

Ambient/Media Temperature: 40° to 175°F (4° to 80°C).

Fluid Media: Compressed air.

Inlet Pressure:

Internal float drain model: 30 to 200 psig (2 to 14 bar). Manual drain model: 0 to 200 psig (0 to 14 bar).

Filter Element: 0.3-micron rated borosilicate-glass-fiber coalescing element;

optional 0.01-micron rated element.

Body: Aluminum.

Bowl: Aluminum bowl, or extended aluminum bowl.

V-Band: Stainless steel.

Seals: Nitrile.

IMPORTANT NOTE: Please read carefully and thoroughly all the CAUTIONS and WARNINGS on page 2.

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REPLACEMENT PARTS



Bowl Assembly	Drain Type	Part Number
Metal Bowl Assembly	Float	R-ABF6A106-48M
Metal Bowl	Manual	R-ABF106-48M

Filter Element	Bowl Type Part Number	
Filter Element	Standard	952K77
0.3-µm	Extended	953K77
Filter Element	Standard	R-A106-24E8
0.0-1µm	Extended	R-A106-24LE8

Description	Part Number
Float Drain Kit	R-A802-49
Manual Drain Cock	R-103-51SP
Differential Pressure Gauge	R-106-35
Seal Kit - Upper & Lower Baffle, Gasket, Bowl O-ring, and Wing Nut	R-A106-25

LUBRICANTS, POLYCARBONATE BOWL CAUTIONS

COMPATIBLE LUBRICANTS

Although air line lubrication is not required for most ROSS valves, other mechanisms in the system may need such lubrication. When a lubricator is used, it should be supplied only with oils which are compatible with the materials used in the valves for seals and poppets. Generally speaking, these are petroleum base oils with oxidation inhibitors, and aniline point between 180°F (82°C) and 220°F (104°C) and an ISO 32, or lighter, viscosity. Oils with phosphate type additives, such as zinc dithiophosphate, must be avoided because they can harm polyurethane valve components. The best oils to use in pneumatic systems are those specifically compounded for air line lubricator service.

CAUTIONS ON THE USE OF POLYCARBONATE BOWLS

Use Only with Compressed Air. Filters and lubricators with polycarbonate bowls are specifically designed for compressed air service, and their use with any other fluid (liquid or gas) is a misapplication. The use with or injection of certain hazardous fluids in the system (e.g., alcohol or liquefied petroleum gas) could be harmful to the polycarbonate bowl or result in a combustible condition or hazardous leakage. Before using with a fluid other than air, or for nonindustrial applications, or for life support systems, consult ROSS.

Use Metal Bowl Guard When Supplied. A metal bowl guard is supplied with all but the smallest bowls, and must always be used to minimize danger from fragmentation in the event of failure of a polycarbonate bowl.

Avoid Harmful Substances. Some compressor oils, chemical cleaners, solvents, paints, and fumes will attack polycarbonate bowls and can cause bowl failure. Do not use with or near these materials. When a bowl becomes dirty, replace the bowl or wipe it with a clean dry cloth. Immediately replace any polycarbonate bowl which is crazed, cracked, or deteriorated.

Substances HARMFUL to Polycarbonate Bowls

Acetaldehyde Benzyl alcohol Ethylene dichloride Milk of lime (CaOH) Sodium sulfide Cresol Ethylene glycol Acetic acid Brake fluids Cyclohexanol Nitric acid Styrene Sulfuric acid Acetone Bromobenzene Cyclohexanone Formic acid Nitrobenzene Freon (refrigerant & propellant) Acrylonitrile Butvric acid Cvclohexene Nitrocellulose lacquer Sulfural chloride Dimethyl formamide Gasoline (high aromatic) Perchlorethylene Tetrahydronaphthalen Ammonia Carbolic acid Ammonium fluoride Carbon disulfide Dioxane Hydrazine Phenol Thiophene Carbon tetrachloride Ethane tetrachloride Hvdrochloric acid Phosphorous hydroxyl chloride Ammonium sulfide Toluene Lacquer thinner Turpentine Anaerobic adhesives & sealants Caustic potash solution Ethyl acetate Phosphorous trichloride Antifreeze Caustic soda solution Ethyl ether Methyl alcohol Propionic acid Xylene Methylene chloride Benzene Chlorobenzene Ethylamine Pyridine Chloroform Ethylene chlorohydrin Methylene salicylate Sodium hydroxide Benzoic acid

TRADE NAMES OF SUBSTANCES HARMFUL TO POLYCARBONATE BOWLS

- Atlas Perma-Guard Buna N Cellulube #150 & #220 Crylex #5 cement Eastman 910 Garlock 98403 (polyurethane) Haskel 568-023
- Hilgard Company's hil phene Houghton & Co. oil 1120, 1130, 1055 Houtosafe 1000 Kano Kroil Keystone penetrating oil #2
- Loctite 271, 290, 601 Loctite Teflon sealant Marvel Mystery Oil Minn. Rubber 366Y National Compound N11 Nylock VC-3
- Parco 1306 Neoprene Permabond 910 Petron PD287 Prestone Pydraul AC Sears Regular Motor Oil Sinclair oil "Lily White"
- Stauffer Chemical FYRQUEL 150 Stillman SR 269-75 (polyurethane) Stillman SR 513-70 (neoprene) Tannergas Telar
- Tenneco anderol 495 & 500 oils Titon Vibra-tite Zerex

STANDARD WARRANTY

All products sold by ROSS CONTROLS are warranted for a one-year period [with the exception of all Filters, Regulators and Lubricators ("FRLs") which are warranted for a period of seven years] from the date of purchase to be free of defects in material and workmanship. ROSS' obligation

under this warranty is limited to repair or replacement of the product or refund of the purchase price paid solely at the discretion of ROSS and provided such product is returned to ROSS freight prepaid and upon examination by ROSS is found to be defective. This warranty becomes void in the event that product has been subject to misuse, misapplication, improper maintenance, modification or tampering.

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