

F/R-A One-Piece Air Filter Regulator

General:

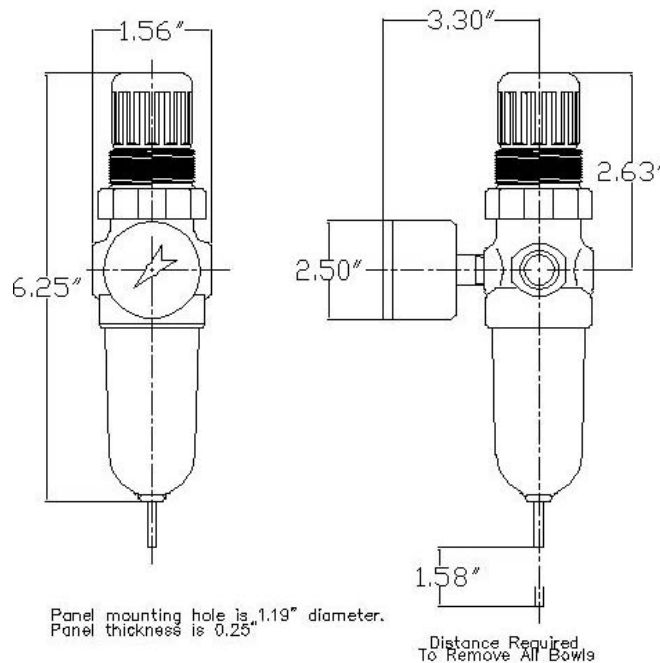
Chemline F/R-A is an effective 1-piece air filter/regulator with pressure gauge option. Its complement of features includes a GRP body; glass-filled Nylon or stainless steel valve components; Nitrile bushings/o-rings; polycarbonate filter bowl and polypropylene filter element; manual filter bowl drain valve. It is available with 2x 1/8" gauge ports so the gauge can be oriented correctly, regardless of airflow direction. The additional port is then capped with the supplied plug.



Operating Specs:

Body:	GRP	Inlet Pressure:	200 psi max.
Conduit Entries:	2x 1/4" NPT	Gauge Ports:	2x 1/8" NPT
Enclosure Rating:	NEMA 4, 4X	Media:	Compressed Air
Filter Cover:	Polycarbonate	Outlet Pressure:	0 to 125 psi
Filter Material:	Polypropylene	Seals:	Buna-N (Nitrile)
Filtration rating:	20 microns	Temperature rating:	-18°C to 52°C
Flow:	12 SCFM Max.	Weight:	0.313 lb.

Dimensions:



F/R-W One-Piece Air Filter Regulator cont.***Installation:***

Refer to the accompanying diagram and proceed as follows:

1. Air line piping should be the same size as filter/regulator ports. Install filter/regulator in air line as close as possible to the device being serviced, upstream of cycling directional control valves, with drain at the bottom and air flow in the direction of the arrow on the body. Connect piping to proper ports using pipe sealant on male threads only. Do not allow sealant to enter the interior of the filter/regulator. Only use new pipe/fittings between the filter/regulator and the equipment being protected.
2. On filter/regulators equipped with an automatic drain, slip ¼" ID flexible tube over the protrusion on the bottom of the bowl to pipe away expelled liquids. Avoid restrictions on drain line.
3. Connect a pressure gauge to one of the gauge ports. Gauge ports can also be used as additional outlets for regulated air. Plug unused gauge port.

Adjustment:

1. Before turning on the system air pressure, turn filter/regulator adjustment counterclockwise until all load is removed from the regulating spring.
2. Turn on the system air pressure.
3. Turn the filter/regulator adjustment clockwise until the desired outlet pressure is reached.
4. To avoid minor readjustment after making a change in the pressure setting, always approach the desired pressure from a lower pressure. When reducing from a higher to a lower setting, first reduce to a pressure less than that desired, then bring up to the desired pressure.
5. Push adjusting knob downward to lock the pressure setting; pull upward to release before attempting another adjustment. Pressure settings can be made tamper resistant by installing a thread-forming screw in the top center of the knob.

Servicing:

Drain filter/regulators with manual drain as frequently as necessary to keep accumulated liquids below the filter element, or replace the filter element when plugged.

Disassembly

1. Shut off inlet pressure and reduce pressure in inlet and outlet lines to zero.
2. Turn the filter/regulator adjustment counterclockwise until all load is removed from the regulating spring.
3. Filter/regulator can now be disassembled without removing from air supply line, in accordance with the exploded view.

F/R-W One-Piece Air Filter Regulator cont.**Cleaning**

1. Clean plastic bowls with warm water only. Clean other parts with warm soapy water.
2. Dry parts and blow out internal passages in body with clean dry compressed air. Blow air through filter element from inside to outside to dislodge any surface contaminants. Replace filter element if plugged or if pressure differential through the unit at its highest setting is 10psi or greater.
3. Inspect parts and replace those found to be damaged. If plastic bowl shows signs of cracking or cloudiness, replace with a metal bowl.

Reassembly

1. Lubricate the o-rings and the lip of the auto-drain valve with a light coat of good quality o-ring grease. Lubricate threads on metal bowls with a small amount of anti-seize compound.
2. Assemble the filter/regulator as seen in the exploded view.
3. Torque valve seat to 4 – 6 in-lbs. Diaphragm valve pin must slide freely through the valve seat after the seat is torqued to the body. Torque the bonnet to 65 – 75 in-lbs.
4. Torque the filter element and bowl to 5 – 10 in-lbs.

Warning:

This product is intended for use in industrial compressed air systems only. Do not use this product where pressures and temperatures can exceed those listed.

Polycarbonate plastic bowls can be damaged and possibly burst if exposed to such substances as certain solvents, strong alkalies, silicones, compressor oils containing ester-based additives or synthetic oils. Fumes of these substances in contact with the polycarbonate bowl, either externally or internally, can also result in damage. Clean with warm water only. Use a metal bowl in applications where a plastic bowl might be exposed to substances that are incompatible with polycarbonate. Water vapour can condense downstream of the filter/regulator. If dry air is a must, install an air dryer upstream of the filter/regulator.

If outlet pressure in excess of the filter/regulator pressure setting could cause downstream equipment to rupture or malfunction, install a pressure relief device downstream of the filter/regulator. The relief pressure and flow capacity of the relief device must satisfy the system requirements.

The accuracy of the indication of pressure gauges can change, both during shipment (despite care in packaging) and during its service life. If a pressure gauge is to be used with this product and if inaccurate indications may be hazardous to personnel or property, the gauge should be calibrated before initial installation and at regular intervals during use. For gauge standards, refer to ANSI B40.S.

Before using this product with fluids other than air, for non-industrial applications or for life-support, consult the factory.

F/R-W One-Piece Air Filter Regulator cont.

Exploded View:

