

DM-55FR0 & DM-600FR0 • Filter-Regulator

Installation, Operating & Maintenance Instructions

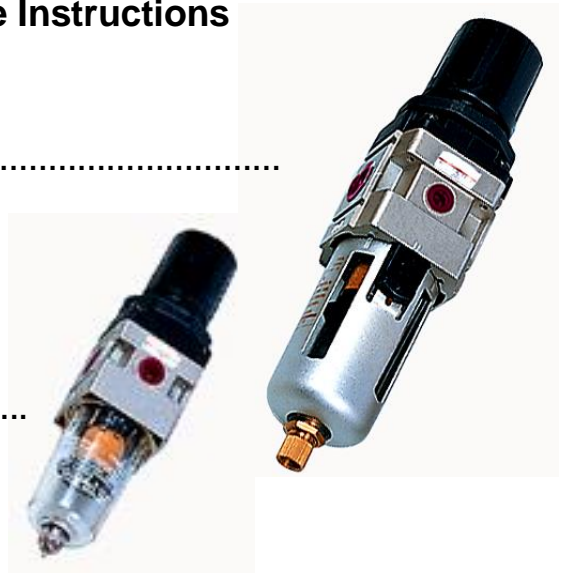
Specifications:

DM-600FR - Combination Filter-Regulator

Port size: 1/2" Npt (in-flow/out-flow), **Air flow/SCFM:** 140Cfm
Pressure Range: 7- 125 Psi, **Max. Pressure:** 150 Psi
Temp. Range: 40F° -140F°, **Filtration:** 5 micron
Bowl type: polycarbonate, **Body:** die-cast aluminum
Regulator type: relieving type, **Filter drain:** manual

DM-55FR - Combination Filter-Regulator

Port size: 1/4" Npt (in-flow/out-flow), **Air flow/SCFM:** 70 Cfm
Pressure Range: 7- 125 Psi, **Max. Pressure:** 150 Psi
Temp. Range: 40F° -140F°, **Filtration:** 5 micron
Bowl type: polycarbonate, **Body:** die-cast aluminum
Regulator type: relieving type, **Filter drain:** manual



Regulator & Lubricator Installation

The following safety and engineering precautions must be taken:

1. Install in a clean, acid free atmosphere.
2. Before installation, check all settings are as per specification, especially the port and fittings size to be used on the unit.
3. Flush all fittings and airline for dirt, dust, rust and other contamination.
4. **Follow the arrow mark on the top of the housing indicating the airflow direction.** Connect the supply pressure to intake port and outflow to the outlet port. (If the unit is connected in the reverse direction the air will continuously flow through the bonnet and the setting of the pressure is not possible.) Use liquid thread sealant for all NPT connections NOT Teflon tape.
5. Set the pressure in the Regulator below the maximum specified pressure capacity. Otherwise the spring may break.
6. Tighten fittings, airline and nipples to the housing ports using appropriate tools. Do not apply excess torque when tightening.
7. Please ensure foreign particles, do not enter any fittings, airline or openings during assembly.

Regulator Operating & Maintenance Instructions

- a) To set the Regulator, pull the regulating knob till the **Colored Indicator Ring** is visible.
- b) To increase the pressure, turn the regulating knob in clockwise direction.
- c) To reduce pressure, turn the regulating knob counter-clockwise. Always set regulator from a lower to higher pressure setting.
- d) **Drain condensate water from the filter reservoir bowl everyday** by pressing the drain valve button. Ensure let water level does not cross the **Maximum Level** mark on the bowl guard.
- e) Before dismantling the unit for maintenance, check for any leaking or restricted flow, then completely exhaust the air line.
- f) Dismantle components and clean them in neutral detergent and blow with compressed air to clean the filter element and bowl.
- g) To remove the bowl guard, pull down the locking piece, turn the bowl guard 45 °, pull bowl guard down and off.
- h) Clean the bowl only with soap water or neutral detergent. Do not use thinner, kerosene, petrol, synthetic oil, trichloroethylene or other aromatic hydrocarbons. (Polycarbonate bowl may get damaged and possibly fail if exposed to these solvents)
- i) Check for damage to o-rings and sealing areas in the housing etc. Replace seals if needed, then clean and reassemble.



Ask for literature on DRUM-MATES® drum & IBC mixers, drum tumblers, drum & IBC pumps & hand nozzles.
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Filter-Regulator Safety Guidelines

Filter-Regulator, Compressed Air Control for Pneumatic Equipment

Warning - Safety First! Compressed air is a source of considerable energy. To prevent accidents, follow these safety instructions! Failure to do so may result in accidents, equipment malfunctioning, serious personal injury or loss of life.



Safety Instructions

1. Do not assemble or service machinery/equipment or attempt to remove any component until all safety aspects have been considered and confirmed. Human hands or any parts of a human body should not block compressed air. Compressed air should not be allowed to impinge on any portion of the human body.
2. Assembly, handling, maintenance or repair of pneumatic systems should be performed only by trained and experienced operators after confirmation that both compressed air and electrical supply have been positively disconnected and all residual compressed air in the system has been completely exhausted to the atmosphere. Before connecting any pneumatic equipment to the compressed air supply, all mounted fittings, piping assemblies and electrical connections should be checked for security. All plastic plugs in the equipment used for protection during shipping should be removed.
3. No piping alterations, removal of fittings, repairing of equipment etc. Should be attempted with air supplies connected. Air and electrical supplies must be disconnected before beginning any adjustment, maintenance or dismantling of equipment.
4. The maximum allowable operating pressures, temperature, flows etc. must be strictly observed. Failure to do so might result in catastrophic failure of equipment, and result in serious personal injury and/ or death. Refer to individual catalogs for this information, and any other operating or application limitations.

Compatibility of Pneumatic Equipment

Ensuring the compatibility of this FRL equipment is the responsibility of the person who designs the pneumatic system and specifications. This should be based on specifications or analysis or tests to meet specific pneumatic requirements.

1. Air Filter Safety

Standard Filters incorporate a polycarbonate bowl and/or observation windows. Do not use filter components in an environment containing synthetic fluids, organic solvents, corrosive chemicals, cutting lubricants, thread sealant or similar materials. Make sure that water condensate is periodically drained when using manual drain valves on Filters.

2. Regulator Safety

Safety devices shall be placed to prevent secondary (output) pressure from rising past the set pressure. This will ensure that damage to the components on the secondary side will be minimized in the event of a malfunction.

In a standard regulator, when the supply pressure is removed or disconnected, either of the following may happen:

- The residual pressure will remain on the secondary side of the regulator.
- The pressure on the secondary side of the regulator will exhaust.

The designer should add components to the circuit to compensate for any of the above conditions. Regulator operation may be affected when used in Balanced or Secondary sealed circuits. Please consult pneumatic expert regarding these applications.

Warranty

DRUM-MATES® products are warranted to be free of defects in design, material or workmanship under proper use, installation, application & maintenance in accordance with DRUM-MATES® written specifications and Safety Instructions for a period of 12 months from the date of shipment. DRUM-MATES® warrants that all the Products are suitable for their intended purposes only. DRUM-MATES® obligation under this warranty is limited to repair or replacement of the product at the discretion of DRUM-MATES® and provided such product is returned to DRUM-MATES® freight prepaid and after examination is found to be defective. In no event will DRUM-MATES® be liable for business interruptions, loss of profits, personal injury, cost of delay or far any other indirect, incidental or consequential losses, cost or damages.

Not covered under DRUM-MATES® warranty:

- Normal wear or deterioration of components and product.
- Product(s) not used or installed as designed or intended.
- Product is not installed or maintained as described according to installation and operations guidelines.
- Product is fitted non-original OEM parts, or was previously repaired or serviced by an unauthorized distributor or repair facility.