

Removal and Disposal

⚠ WARNING

- **To reduce the risks associated with exposure to contaminants:**
 - Always use appropriate personal protective equipment (PPE) when installing or operating the 3M™ High Flow HFR Series Filter.
 - Ensure that all system pressure has been relieved and inlet/outlet valves are closed prior to opening the system to atmosphere.

⚠ CAUTION

- **To reduce the risk associated with exposure to contaminants:**
 - Dispose of used filter in accordance with federal, state, and local laws and regulations.
- **To reduce the risks associated with a broken handle or handle disengaging from top endcap:**
 - Do not use excessive force when removing the filter from the housing.

1. Close the inlet valve or turn off the pump to stop the flow through the housing. Slowly open the vent valve to relieve system pressure.
2. Open the drain valve and allow the housing to drain completely.
3. Open the housing cover.
4. Grasp the filter by the handle and pull to remove it.

Product Selection and Use

Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer

Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability

Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.



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Installation and Operation Instructions

3M™ High Flow HFR Series Filter

Safety Information

Please read, understand, and follow all safety information contained in these instructions prior to installation and use of the 3M™ High Flow HFR Series Filter. Retain these instructions for future reference.

Intended Use

The 3M™ High Flow HFR Series Filter is intended to remove particles and other contaminants from water based, general industrial and chemical fluids. All materials of construction are listed for food contact in the US FDA 21 CFR Parts 174-186. It is expected that all users be fully trained in the safe operation of the 3M High Flow HFR Series Filter. Use in any other application has not been evaluated by 3M and may lead to an unsafe condition.

Prohibited Use

The 3M™ High Flow HFR Series Filter has not been evaluated or certified for compliance to EU Food Contact Regulation 1935/2004, and is NOT intended for Food and Beverage applications in the European Union. The 3M High Flow HFR Series Filter has not been evaluated for use in pharmaceutical applications and may lead to an unsafe condition.

EXPLANATION OF SIGNAL WORD CONSEQUENCES

⚠ Warning	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury and/or property damage.
⚠ Caution	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage.
Notice	Indicates a potentially hazardous situation which, if not avoided, may result in property damage.

⚠ WARNING

- **To reduce the risks associated with fire or explosion:**
 - Removal of packaging used with this filter may produce static electrical charges or sparks, risking combustion of flammable or explosive materials, liquids, or gases. Only open packaging in an area free of flammable and explosive materials.
- **To reduce the risks associated with exposure to contaminants:**
 - Always use appropriate personal protective equipment (PPE) when installing or operating the 3M™ High Flow HFR Series Filter.
 - Ensure that all system pressure has been relieved and inlet/outlet valves are closed prior to opening the system to atmosphere.

⚠ CAUTION

- **To reduce the risks associated with hand pinching:**
 - Be careful to keep fingers and hands clear when installing the filter into the housing.
- **To reduce the risks associated with chemical exposure:**
 - Do not modify the filter or its components.
 - Do not use a filter that has been damaged or has damaged components.
- **To reduce the risk associated with exposure to contaminants:**
 - Dispose of used filter in accordance with federal, state, and local laws and regulations.
- **To reduce the risks associated with a broken handle or handle disengaging from top endcap:**
 - Ensure the housing fitting bore is not damaged or warped to promote proper sealing and to avoid excessive force when removing the filter from the housing.
 - Use the filter only for the intended applications described in these user instructions. Filters used for unintended applications may lead to an improper fit and a need for excessive force when removing the filter from the housing.
 - Do not use excessive force when removing the filter from the housing.

NOTICE

- **To reduce the risk associated with property damage:**
 - DO NOT exceed 70 °C (160 °F) of operating temperature.
- **To reduce the risk associated with product damage:**
 - DO NOT exceed 3.5 bar (50 psi) of differential pressure across the filter before changing it out.
 - Use this filter only in applications where the fluid is chemically compatible with the materials of construction of the 3M™ High Flow HFR Series Filter.
- **To reduce the risk associated with equipment damage:**
 - Always prime pumps before operation.
 - Check valve positions carefully.

Handling and Storage

The 3M™ High Flow HFR Series Filter should be stored in a dry, clean place, away from direct sunlight and from heat sources in the original packaging. Contact your 3M Representative or Technical Support with any concerns.

Installation Procedure

⚠ WARNING

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NOTICE

- **To reduce the risk associated with product damage:**
 - Use this filter only in applications where the fluid is chemically compatible with the materials of construction of the 3M™ High Flow HFR Series Filter.

1. Remove filter from packaging.
2. Wet the o-ring with water or the fluid to be filtered to ease installation. DO NOT use silicone or any other lubricant on the o-ring.
3. Close the inlet valve or turn off the pump to stop the flow through the housing. Slowly open the vent valve to relieve system pressure.
4. Open the drain valve and allow the housing to drain completely.
5. Open the housing cover.
6. Grasp the filter by the handle and insert the closed end cap side into the basket. Push the filter until the end cap with o-ring is fully seated in the housing bore.
7. Close the housing cover as per the housing instructions.

Operating Procedure

NOTICE

- **To reduce the risk associated with equipment damage:**
 - Always prime pumps before operation.
 - Check valve positions carefully.
- **To reduce the risk associated with property damage:**
 - DO NOT exceed 70 °C (160 °F) of operating temperature.
- **To reduce the risk associated with product damage:**
 - DO NOT exceed 3.5 bar (50 psi) differential pressure across the filter before changing it out.

1. Close the housing drain and outlet valves and open the vent valve.
2. Turn the pump on and slowly open the inlet valve to fill the housing to avoid a sudden surge of fluid or pressure shock to the filter.
3. After all of the trapped air has been removed and fluid begins to emerge, close the vent valve.
4. Slowly open the outlet valve to begin flowing through the filter.