

## Performance Data Sheet

Model: High Flow Series

Use Replacement Cartridge: **HF90-CLX**

**Important Notice:** Read this Performance Data Sheet to understand this system's capabilities and confirm whether it meets your water treatment needs. Check your incoming water quality and determine your treatment needs by getting your water tested and/or contacting your local water authority.



This system has been tested and certified by NSF International against NSF/ANSI Standard 42, 53, and CSA B483.1 for the reduction of the substances listed below

The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42, 53 and CSA B483.1.

Substance	Avg Incoming Challenge Water Concentration from NSF Test	NSF specified Challenge Concentration	Avg % Reduction*	Avg Product Water Outgoing Concentration*	Max Permissible Product Water Concentration	NSF Reduction Requirements	NSF Test Report
Particulate Class I, $\geq 0.5$ to $< 1.0$ $\mu\text{m}$	3,200,000 pts/mL	At least 10,000 particles/mL	99.5%	16,667 pts/mL	N/A	$\geq 85\%$	J-00304397
Chlorine Taste & Odor	1.9 mg/L	2.0 mg/L $\pm$ 10%	97.3%	0.05 mg/L	N/A	$\geq 50\%$	J-00271534
Cyst Reduction**	192,500 cysts/L	Minimum 50,000 cysts/L	99.99%	1 cyst/L	N/A	$\geq 99.95\%$	J-00304396
Chloramine	3.0 mg/L	3.0 mg/L $\pm$ 10%	96.6%	0.1 mg/L	N/A	$\leq 0.5$ mg/L	J-00390762

\* Substance reduction results determined by NSF testing, under standard laboratory conditions. Actual performance may vary.

\*\* Based on the use of Cryptosporidium parvum oocysts for testing

Application Guidelines/Water Supply Parameters	
Service Flow	See the Chart on Page 3
Water Supply	Public or private drinking water supply systems
Water Pressure	25 -125 psi (172 – 862 kPa)
Water Temperature	40° F - 100° F (4.4° C – 37.8° C)

**Capacity:** See the Chart on Page 3

**Important:** Before use, flush at least **10** gallons (37,9 liters) of water through cartridge (approximately **2** minutes).  
FOR COMMERCIAL USE ONLY.


It is essential that all product instructions including filter replacement requirements be followed for product to perform as advertised. See Product Manual for Warranty information. The substances listed are not necessarily in your water supply.

For estimated costs of replacement elements, product manuals, parts or service, please call 3M at 866.990.9785 or visit our website at [www.3M.com/waterquality](http://www.3M.com/waterquality)



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 <b>WARNING</b>
<p><b>Read entire product manual. Failure to follow all product instructions could cause personal injury from exposure to contaminants and/or property damage due to water leakage or flooding.</b></p> <ul style="list-style-type: none"> <li>• DO NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before and after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.</li> <li>• This system does not remove all substances that could be present in drinking water. Test your incoming water quality to identify your treatment needs. After installation, test outgoing filtered water quality regularly to ensure system is installed correctly and meeting your treatment needs, especially if your filter's incoming water or plumbing system may have high contaminant levels.</li> <li>• DO NOT use product if it has been hit, dropped, or damaged.</li> <li>• Before using a new filter cartridge, or whenever system has not been used for more than 72 hours, flush the cartridge with water according to this Performance Data Sheet.</li> <li>• REPLACE FILTER CARTRIDGE no later than every 12 months. If the rated gallon capacity is reached or a noticeable reduction in flow rate, change in odor or taste occurs before 12 months of use, then replace filter promptly. Failure to replace filter cartridge according to these instructions may result in failure of filter to reduce contaminants as designed AND/OR property damage due to water leakage or flooding.</li> </ul>
<b>NOTICE</b>
<p><b>Read entire product manual. Failure to follow all product instructions could cause property damage due to water leakage or flooding:</b></p> <ul style="list-style-type: none"> <li>• System installation and use must comply with all state and local regulations and plumbing codes.</li> <li>• If your water supply pressure is higher than 80 psi, you must install a pressure reducing valve before installing system.</li> <li>• Protect from freezing. Remove filter cartridge if temperature may drop below 40° F (4.4° C).</li> <li>• REPLACE FILTER CARTRIDGE no later than every 12 months or sooner. Failure to replace the filter cartridge at the required time may lead to property damage due to water leakage or flooding.</li> </ul>

1.0 General Use Instructions

**3M™ High Flow Series Systems**

*Reduces Particulate, Chloramines, Chlorine Taste & Odor*

2.0 Exchange Steps

**Step 1**

For NH3 heads and manifolds, turn upstream or inlet shut-off valve to the "OFF" position. Open water line downstream to depressurize **system**. VH3 heads have a shutoff valve within the head that will shut off automatically when the cartridge is removed.

**Step 2**

Cartridge is heavy when full of water. For NH3 heads and manifolds, push the locking tab to release cartridge locking mechanism while simultaneously rotating the cartridge to the left. For VH3 heads, simply rotate the cartridge to the left.

**Step 3**

Using both hands and holding the cartridge from the bottom, rotate the cartridge a 1.4 turn to the left and gently pull down.

**Step 4**

Remove sanitary cap from new cartridge. Push cartridge into head and turn cartridge to the right. For NH3 heads and manifolds, turn until the locking button clicks.

**Step 5**

Turn upstream or inlet shut-off valve to "ON" position. Flush per the cartridge flush instructions shown in the table below. System is now ready for use.

## Performance Data Sheet

### Model: High Flow Series

Use Replacement Cartridge HF90-CLX

### HF90-CLX Cartridge Flow and Capacity Information

Head and Manifold	# of Cartridges	Flush Instructions	Capacity
NH3 Series Head	1	Flush for 10 gallons through cartridges before use	35,000 gallons (132,489 liters) @ 5.0 gpm (18.9 lpm) for CTO, Cyst, Particulate Class I 14,000 gallons (52,995 liters) @ 1.67 gpm (6.32 lpm) for chloramines, Cyst, Particulate Class I
VH3 Series Head	1	Flush for 10 gallons through cartridges before use	35,000 gallons (132,489 liters) @ 5.0 gpm (18.9 lpm) for CTO, Cyst, Particulate Class I 14,000 gallons (52,995 liters) @ 1.67 gpm (6.32 lpm) for chloramines, Cyst, Particulate Class I
High Flow Series Twin 2XX Manifold	2	Flush for 20 gallons through cartridges before use	70,000 gallons (264,978 liters) @ 10.0 gpm (37.9 lpm) for CTO, Cyst, Particulate Class I 28,000 gallons (105,991 liters) @ 3.34 gpm (12.6 lpm) for chloramines, Cyst, Particulate Class I
High Flow Series Twin 3XX Manifold	3	Flush for 30 gallons through cartridges before use	105,000 gallons (397,468 liters) @ 15.0 gpm (56.8 lpm) for CTO, Cyst, Particulate Class I 42,000 gallons (158,987 liters) @ 5.0 gpm (18.9 lpm) for chloramines, Cyst, Particulate Class I
High Flow Series Single DF1XX Manifold	1	Flush for 10 gallons through cartridges before use	35,000 gallons (132,489 liters) @ 5.0 gpm (18.9 lpm) for CTO, Cyst, Particulate Class I 14,000 gallons (52,995 liters) @ 1.67 gpm (6.32 lpm) for chloramines, Cyst, Particulate Class I
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High Flow Series Single DP1XX Manifold	1	Flush for 10 gallons through cartridges before use	35,000 gallons (132,489 liters) @ 5.0 gpm (18.9 lpm) for CTO, Cyst, Particulate Class I 14,000 gallons (52,995 liters) @ 1.67 gpm (6.32 lpm) for chloramines, Cyst, Particulate Class I
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High Flow Series Triple DP3XX Manifold	3	Flush for 30 gallons through cartridges before use	105,000 gallons (397,468 liters) @ 15.0 gpm (56.8 lpm) for CTO, Cyst, Particulate Class I 42,000 gallons (158,987 liters) @ 5.0 gpm (18.9 lpm) for chloramines, Cyst, Particulate Class I
High Flow Series Single SF1XX Manifold	1	Flush for 10 gallons through cartridges before use	35,000 gallons (132,489 liters) @ 5.0 gpm (18.9 lpm) for CTO, Cyst, Particulate Class I 14,000 gallons (52,995 liters) @ 1.67 gpm (6.32 lpm) for chloramines, Cyst, Particulate Class I
High Flow Series DIDF2XX Manifold	2	Flush for 20 gallons through cartridges before use	70,000 gallons (264,978 liters) @ 10.0 gpm (37.9 lpm) for CTO, Cyst, Particulate Class I 28,000 gallons (105,991 liters) @ 3.34 gpm (12.6 lpm) for chloramines, Cyst, Particulate Class I