

Performance Data Sheet

Model: High Flow Series/HF90, HF90-S, HF90-M, HF90-AU

Use Replacement Cartridge: **HF90, HF90-S, HF90-M, HF90-AU**

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, 401 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, 401 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
Chlorine Taste & Odor	2.0 mg/L	2.0 mg/L $\pm$ 10%	96.7%	< 0.05 mg/L	N/A	$\geq$ 50%	J-00499077
Nominal Particulate Reduction Class 1, $\geq$ 0.5 to <1.0 μ	3,000,000	At least 10,000 particles/mL	99.9%	830 particles/mL	N/A	$\geq$ 85%	A-00440647
Microplastics	3,000,000	At least 10,000 particles/mL	99.9%	830 particles/mL	N/A	$\geq$ 85%	A-00440647
Live Cyst	130,000	Minimum 50,000 Cyst/L $\pm$	>99.99%	2 cyst/L	N/A	>99.95%	J-00500177

* 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

*** The term 'bacteriostatic' indicates that the system limits the passage or growth of bacteria that may already exist in the incoming water. It does not mean that water leaving the system is safer to drink than water entering the system.

Application Guidelines/Water Supply Parameters	
Service Flow	5 gpm (18.92 lpm)
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: 54,000 Gallons (204,412 Liters)

Important: Before use, flush according to the table on page 3
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. Periodically, sanitize the plumbing system with an appropriate disinfectant to maintain the cleanliness of the plumbing lines downstream of the filter.

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

3M

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 WARNING

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.

- DO NOT use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.
- 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.
- DO NOT use product if it has been hit, dropped, or damaged.
- 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.
- 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.

NOTICE

Read entire product manual. Failure to follow all product instructions could cause property damage due to water leakage or flooding:

- System installation and use must comply with all state and local regulations and plumbing codes.
- If your water supply pressure is higher than 80 psi, you must install a pressure reducing valve before installing system.
- Protect from freezing. Remove filter cartridge if temperature may drop below 40° F (4.4° C).
- 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.

Performance Data Sheet
Model: High Flow Series/HF90 and HF90-S
 Use Replacement Cartridge HF90 or HF90-S

HF90 and HF90-S Flow and Capacity Information

Head & Manifold	# of Cartridges	Flow Rate	Flush Instructions	Capacity
NH3 Series Head	1	5 gpm (18.92 lpm)	Flush 10.0 gals through cartridge(s) before use (flush approx. 2 mins.)	54,000 gallons (204,412 liters)
VH3 Series Head	1	5 gpm (18.92 lpm)	Flush 10.0 gals through cartridge(s) before use (flush approx. 2 mins.)	54,000 gallons (204,412 liters)
High Flow Series Twin 2XX Manifold	2	10 gpm (37.85 lpm)	Flush 20.0 gals through cartridge(s) before use (flush approx. 2 mins.)	108,000 gallons (408,825 liters)
High Flow Series Triple 3XX Manifold	3	15 gpm (56.77 lpm)	Flush 30.0 gals through cartridge(s) before use (flush approx. 2 mins.)	162,000 gallons (613,236 liters)
High Flow Series Single DF1XX Manifold	1	5 gpm (18.92 lpm)	Flush 10.0 gals through cartridge(s) before use (flush approx. 2 mins.)	54,000 gallons (204,412 liters)
High Flow Series Twin DF2XX Manifold	2	10 gpm (37.85 lpm)	Flush 20.0 gals through cartridge(s) before use (flush approx. 2 mins.)	108,000 gallons (408,825 liters)
High Flow Series Single DP1XX Manifold	1	5 gpm (18.92 lpm)	Flush 10.0 gals through cartridge(s) before use (flush approx. 2 mins.)	54,000 gallons (204,412 liters)
High Flow Series Twin DP2XX Manifold	2	10 gpm (37.85 lpm)	Flush 20.0 gals through cartridge(s) before use (flush approx. 2 mins.)	108,000 gallons (408,825 liters)
High Flow Series Triple DP3XX Manifold	3	15 gpm (56.77 lpm)	Flush 30.0 gals through cartridge(s) before use (flush approx. 2 mins.)	162,000 gallons (613,236 liters)
High Flow Series Single SF1XX Manifold	1	5 gpm (18.92 lpm)	Flush 10.0 gals through cartridge(s) before use (flush approx. 2 mins.)	54,000 gallons (204,412 liters)
High Flow Series D1DF2XX Manifold	2	10 gpm (37.85 lpm)	Flush 20.0 gals through cartridge(s) before use (flush approx. 2 mins.)	108,000 gallons (408,825 liters)

Treatment and Tests – Table

System is WaterMark certified to the requirements of drinking water treatment system Standard AS 3497 for the following water treatment category/categories.



Treatment type	Description	Category	Pass
Microbiological status			
Bacteriostatic	Will stop bacteria increasing but will not remove them unless Category II(a) is passed	I	✓
Microbiological treatment			N/A
Bacteria removal	Will remove or inactivate bacteria	II(a)	N/A
Virus removal	Will remove or inactivate viruses	II(b)	N/A
Protozoa removal	Will remove or inactivate <i>Cryptosporidium</i> and <i>Giardia</i> . Will not remove or inactivate bacteria or viruses unless Category II(a) and Category II(b) are passed	II(c)	✓
Aesthetic effects			
Turbidity and particulate removal	Reduces cloudiness	III	✓
Taste and Odour reduction	Reduces tastes and odours	IV	✓
Chemical treatment			
Chemical contaminant reduction	Will decrease chlorine Will decrease microplastics	V	✓
Other			
Other treatment types not captured in Categories I to V	-	VI	N/A

Legend ✓ = Pass Test N/A = Not Applicable