

3M™ Water Filtration Products

SPEC# _____

QUANTITY _____

application: **MULTIPLE EQUIPMENT**

models:

DF290-CL



3M™ Water Filtration Products Model DF290-CL dual flow water filtration system helps provide consistent high quality water for the multiple applications of cold beverages and ice at a combined flow rate of up to 7.66 gpm (29.0 lpm). Two separate streams exit the manifold. The first stream (STREAM ONE) supplies cold beverage applications. The second stream (STREAM TWO) supplies the ice machine.

- **STREAM ONE** combines cyst, bacteria¹, chloramine, chlorine taste and odor and sediment reduction for a total volume up to 25,000 gallons (94,635 liters) at a flow rate up to 2.66 gpm (10.1 lpm).
- **STREAM TWO** combines cyst, bacteria and sediment reduction at a flow rate up to 5 gpm (18.9 lpm), and the life is 25,000 gallons (94,635 liters). Chloramine and/or chlorine are not reduced from this stream to preserve their disinfectant properties. A scale inhibition medium is added to reduce the hard scale effects of calcium and magnesium ions.

PRODUCT BENEFITS

- One system for dedicated ice and cold beverage applications that simultaneously supplies high quality water for beverage dispensers and ice machines.
- Revolutionary **Integrated Membrane Pre-Activated Carbon Technology** ("IMPACT") dual-zone media cartridge construction combines a membrane in series with premium activated carbon to provide superior throughput and cartridge life for beverages (STREAM ONE).
- Certified by NSF to Standard 53 for cyst reduction.
- NSF Standard 42 and/or FDA CFR-21 compliant materials.
- Reduction of up to 99.99% of common water-borne bacteria¹ by membrane filtration as tested by CUNO (HF90-CL replacement cartridge).
- A dedicated non-carbon containing cartridge reduces cysts, bacteria and sediment and adds a scale inhibition medium for ice machines. The inlet water's chlorine/chloramine content is unaffected for the reduction of biofilm (STREAM TWO) in the ice machine.
- Sanitary Quick Change (SQC) encapsulated cartridge design allows for fast and easy cartridge change-outs with a 1/4 turn.
- 3/4" FNPT horizontal inlet and outlet ports allow direct or easily adaptable connections to existing plumbing lines.
- Manifold includes outlet check valves and vent valve.

PRODUCT SPECIFICATIONS

Model Number	Part Number	Reduction Claims	Nominal Micron Rating	Capacity	Service Flow Rate	Application	Replacement Cartridge	Sizing
DF290-CL	56236-01	Cysts, Bacteria ¹ , Sediment, Chloramine, Chlorine Taste and Odor, Scale ²	0.2 ³	Bev Stream: 25,000 gallons (94,635 liters) Ice Stream: 25,000 gallons ⁴ (94,635 liters)	Bev Stream: 2.66 gpm (10.1 lpm) Ice Stream: 5 gpm (18.9 lpm)	Most Standard Water	DF290-CL CARTPAK: 56138-07 (HF90-CL (QTY. 2) & HF90-S-SR5)	For simultaneous operation of carbonators and ice machines

¹As tested with either E.Coli ATCC (11229)

²Tested and verified by manufacturer's laboratory

³NSF Certified for Particulate, Class I

⁴Manufacturer's claim for scale reduction



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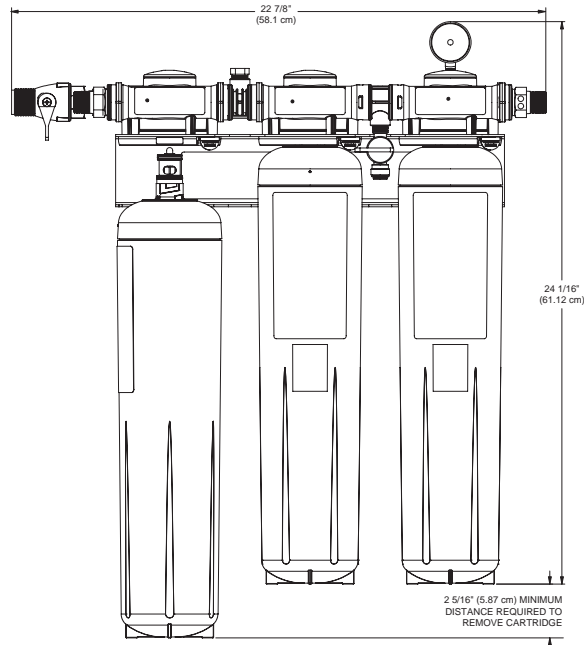
PHYSICAL SPECIFICATIONS

- System includes a three cartridge dual outlet port manifold with built-in pressure gauge, optional port for an inlet pressure gauge, inlet water shut-off valve, outlet check valve, mounting brackets and the cartridge filters.
- Inlet and outlet plumbing connections are 3/4" FNPT.
- Filter cartridges are o-ring seal type.
- System maximum operating pressure of 125 psi (862 kPa) and operating temperature of 100°F (37.8°C).
- Beverage filter cartridges incorporate a carbon block filtration medium (STREAM ONE). Ice filter cartridge includes a filter membrane and scale inhibition medium (STREAM TWO).
- System materials are NSF Standard 42 and/or FDA CFR-21 compliant.
- Cartridges are sanitary in design, requiring no contact with the filter media during cartridge change-out.
- Filter cartridges require no pre-activation.
- NSF Performance Data Sheet (PDS) is included.
- Shipping weight: 20 lbs. (9.1 kg).
- Operating weight: 38 lbs. (17 kg).

IMPORTANT: INSTALLATION TIPS

These installation tips are for informational purposes only and are not intended to be used as actual installation instructions. **CAUTION: To reduce the risk associated with property damage due to water leakage:**

- **Read and follow** Use Instructions before installation and use of this system.
- Installation and use **MUST** comply with all state and local plumbing codes.
- **Protect from freezing**, remove filter cartridge when temperatures are expected to drop below 40°F (4.4°C).
- **Do not install on hot water supply lines.** The maximum operating water temperature of this filter system is 100°F (37.8°C).
- **Do not install** if water pressure exceeds 125 psi (862 kPa). If your water pressure exceeds 80 psi (552 kPa), you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain how to check your water pressure.
- **Do not install** where water hammer conditions may occur. If water hammer conditions exist you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition.
- The disposable filter cartridge **MUST** be replaced every 12 months, at the rated capacity or if a noticeable reduction in flow rate occurs.



⚠ WARNING: To reduce the risk associated with the ingestion of contaminants:

- 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. EPA Establishment #070595-CT-001

CUNO Incorporated recommends regularly scheduled maintenance and replacement of the filter cartridge(s) in order for the product to perform as advertised/sold. CUNO shall not be liable for system failures due to improper maintenance.

LIMITED WARRANTY

CUNO Incorporated warrants this Product (excluding disposable filter cartridge(s)) to be free from defects in material and workmanship for five (5) years from the date of purchase. The disposable filter cartridge is warranted from defects in material and workmanship for a period of one (1) year from the date of purchase. This warranty does not cover failures resulting from abuse, misuse, alteration or damage not caused by CUNO or failure to follow installation and use instructions. If the Product is defective CUNO will replace the Product or refund your Product purchase price. CUNO will not be liable for any indirect, special, incidental, or consequential damages arising from the use of this Product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. To obtain warranty service, mail your request to Warranty Claims, CUNO Incorporated, 400 Research Parkway, Meriden, CT 06450. Proof of purchase (original sales receipt) must accompany the warranty claim, along with a complete description of the Product, model number and alleged defect. This warranty gives you specific legal rights and you may have other rights which vary from state to state, or country to country.

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Visit www.nsf.org for the claims associated with products that are NSF listed.

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