3M™ Water Filtration Products

SPEC# _____QUANTITY _____

SM 1 3M



application:

MULTIPLE EQUIPMENT

models:

DF290-CL

3M Purification Inc. 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).
- Tested and verified by manufacturer's laboratory 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 3M Purification (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)	Bev Stream: 2.66 gpm (10.1 lpm)	Most Standard Water	DF290-CL CARTPAK: 56138-07 (HF90-CL (QTY. 2) & HF90-S-SR5)	For simultaneous operation of carbonators and ice machines
				Ice Stream: 25,000 gallons ⁴ (94,635 liters)	Ice Stream: 5 gpm (18.9 lpm)			

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



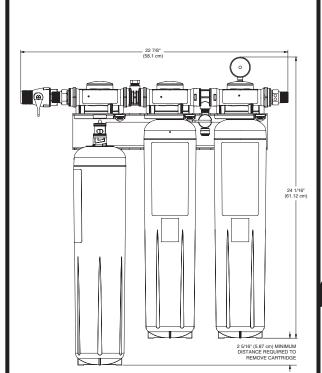
²Tested and verified by manufacturer's laboratory

³Tested and verified by manufacturer's laboratory for Particulate, Class I

⁴Manufacturer's claim for scale reduction

DF290-CL

SPEC#	
QUANTITY	
MODEL NUMBER .	
PART NUMBER	



 $\ensuremath{\Delta}$ 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

3M Purification Inc. recommends regularly scheduled maintenance and replacement of the filter cartridge(s) in order for the product to perform as advertised/sold. 3M Purification shall not be liable for system failures due to improper maintenance.

3M Purification Inc. Water Filtration Products

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.

LIMITED WARRANTY

3M Purification Inc. warrants this Product will be free from defects in material and manufacture for five (5) years from the date of purchase: The filter cartridge or filter membrane is warranted to be free from defects in material and manufacture for one (1) year. This warranty does not cover failures resulting from abuse, misuse, alteration or damage not caused by 3M Purification Inc. or failure to follow installation and use instructions. No warranty is given as to the service life of any filter cartridge or membrane as it will vary with local water conditions and water consumption. 3M PURIFICATION INC. MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY OR CONDITION ARISING OUT OF A COURSE OF DEALING, CUSTOMER OR USAGE OF TRADE. If the Product fails to satisfy this Limited Warranty during the warranty period, 3M Purification Inc. will replace the Product or refund your Product purchase price. This warranty does not cover labor. The remedy stated in this paragraph is Customer's sole remedy and 3M Purification Inc.'s exclusive obligation. For additional information, see the entire Limited Warranty located in the product Installation and Operating Instruction Manual.

Limitation of Liability: 3M Purification Inc. will not be liable for any loss or damage arising from this 3M Purification Inc. product, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.



