

# NanoSHIELD™ Hollow Fiber Series Filter Capsules

## Installation Instructions for NanoSHIELD™ Filter Capsules

### Intended Use

The NanoSHIELD hollow fiber series disposable capsules are intended for use in filtering process fluids in an industrial and electronics environment and have not been evaluated for other uses. This product must be installed according to these installation instructions. It is the end user's responsibility to ensure process fluids are compatible with the materials of construction and can be safely used.

#### ⚠ Explanation of Signal Word Consequences

##### ⚠ 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.

#### ⚠ Caution

##### To reduce the risk associated with exposure to contaminants:

- Dispose of used filter product in accordance with federal, state, and local laws and regulations.
- Ensure that all system pressure has been relieved and inlet/outlet valves are closed prior to opening the system to atmosphere.
- Use filter for liquid service only. Not for continuous gas service. Use of compressed gas is permissible to clear filter of liquid. Limit pressure to clear liquid to 58 psig at 77° F (4 bars at 25°C).
- Do not use a capsule that has been damaged or has damaged components.
- Do not modify the capsules or its components.
- Always use appropriate personal protective equipment (PPE) when installing or operating 3M NanoSHIELD capsule.

#### Notice

##### To reduce the risk of property damage associated with improper flaring:

- Do not use a flaring tool that has been damaged or has damaged components.
- Do not use the incorrect attachments for the intended tubing.
- Use the flaring tool for appropriately sized Flowell® fittings only.

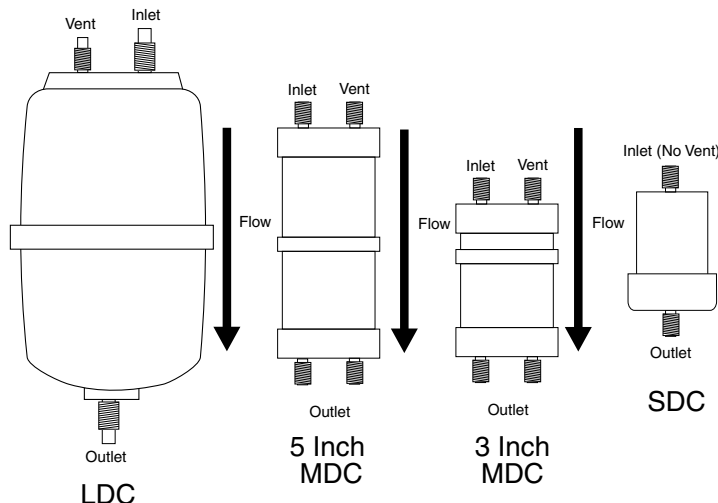
### Filter Packaging

NanoSHIELD™ hollow fiber series filter capsules are double-bagged for cleanroom service and should remain packaged until installation. Inspect, but do not remove the filter from the protective bags unless you are in a clean environment. Contact your 3M Purification Representative or Technical Support with any concerns.

#### ⚠ Caution

##### To reduce the risk associated with exposure to contaminants:

- Use filter for liquid service only. Not for continuous gas service.



## Warning

### To reduce the risk associated with exposure to contaminants:

- Always use appropriate personal protective equipment (PPE) when installing or operating the NanoSHIELD hollow fiber series capsule.

## Installation

1. Verify that the filter you have selected is appropriate for the application.
2. Remove the filter from the box and carry into the gray area.
3. Remove the outer protective bag and discard.
4. Carry the filter (sealed in the inner bag) into the clean area.
5. Remove the inner protective bag and discard.  
NOTE: NanoSHIELD™ hollow fiber series filters MAY REQUIRE pre-wetting when used with fluids that have a surface tension equal to or greater than 30 Dynes/cm.
6. Connect the filter capsule to the inlet and outlet lines, ensuring that the flow direction arrow on the capsule is in the correct orientation. Use appropriate fittings. DO NOT OVER TIGHTEN!  
NOTE: Leave a gap of  $\geq$  (equal to or greater than 2mm) between the fitting and the SDC capsule body.  
NOTE: The 3" and 5" MDC inlet and vent ports are interchangeable. In addition, the 3" and 5" MDC outlet and drain ports are also interchangeable. After connecting the inlet/outlet lines, install caps or valve assemblies to the remaining port. NanoSHIELD hollow fiber series SDC filter capsules do not have a vent/drain ports.
7. Verify that all connections are leak tight.
8. Orient the capsule filter so that the vent valve is at the highest point to allow for optimum venting of trapped air.
9. Start the fluid flow and fill the filter.
10. Loosen the vent valve and vent the upstream side of the filter.
11. After all trapped air has been removed re-tighten the vent valve.
12. The filter is now ready for use.

## Warning

### To reduce the risk associated with exposure to contaminants:

- Dispose of used filter cartridge in accordance with federal, state, and local laws and regulations.

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