

User Guide

Polygard® and Clarigard® Cartridges

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Cartridge Installation

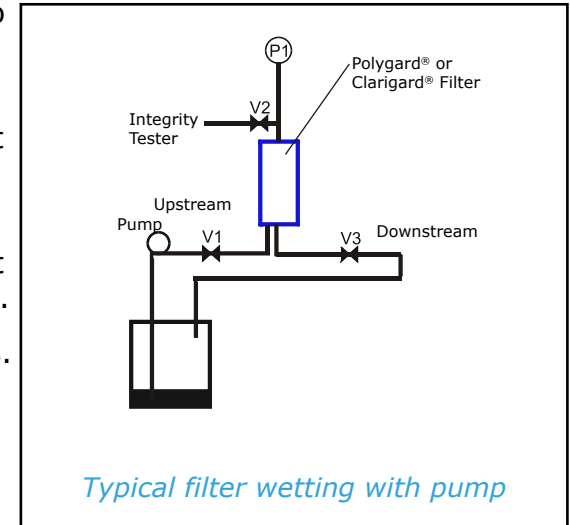
Refer to the appropriate cartridge housing user guide for installation instructions. Our Series 3000 Housing User Guide is available from your local representative.

Cartridge Wetting

Wetting with a Pump

Using a pump can allow for recirculating purified ambient temperature water through the filtration system and can reduce the volume of water required for wetting. Do not exceed the maximum pressure rating for the pump tubing.

1. Set up the filtration system as shown here to meet the maximum pressure rating for the tubing and close all V1, V2 and V3.
2. Set the pump at the correct setting and start the system.
3. Gradually open the upstream valve (V1) and vent the filter housing from the highest point (V2) until all upstream air has been released.
4. Allow fluid to flow through V2 for 20 seconds.
5. Partially close V2 and maintain the pressure for at least one minute to dissolve and evacuate any residual gas within the filter and to ensure complete membrane wetting.



NOTE The vent valve (V2) must be kept partially open to allow continuous venting and ensure the filter remains fully wetted.

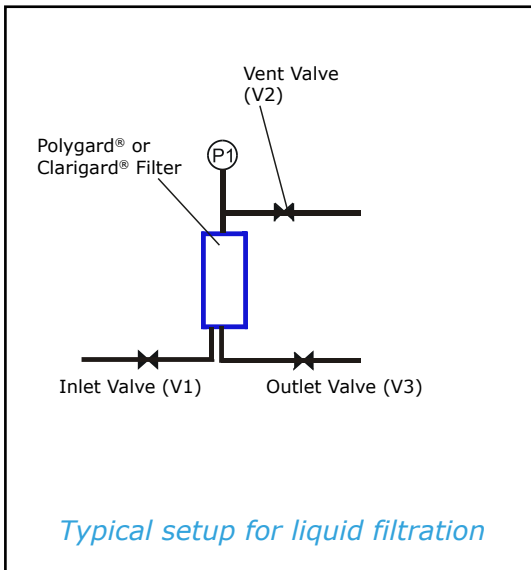
6. After one minute, close V2 and gradually open the downstream valve (V3).
7. Throttle V1 and V3 to the back pressure, differential pressure and flow rate listed below. Flow until the pressure or flow rate is stable for 10 minutes.

Water Wetting Parameters

Filter Length cm (inch)	Differential Pressure bar (psi)	Back Pressure bar (psi)	Flow Rate (LPM)	Flow Time (min.)
25 (10)	≤ 0.2 (≤ 3)	3.1 (45)	6	10
50 (20)	≤ 0.2 (≤ 3)	3.1 (45)	12	10
75 (30)	≤ 0.2 (≤ 3)	3.1 (45)	18	10
100 (40)	≤ 0.2 (≤ 3)	3.1 (45)	24	10

Liquid Filtration

1. Connect the inlet to the filter housing. Ensure that the cartridge flow direction matches the process flow direction.
2. Open the inlet valve to allow the fluid to flow into the cartridge.
3. Open the housing vent valve (V2) and close outlet valve (V3). When fluid emerges from the vent valve, close V2 and open V3.
4. Set the pump to the targeted flow rate and operating pressure.
Do not exceed the cartridge filter and filter housing operating parameters.



WARNING

Ensure that the filter housing pressure is released before opening and drain the housing by slowly opening the vent valve.

Warranty

The applicable warranty for the products listed in this publication may be found at www.millipore.com/terms (within the "Terms and Conditions of Sale" applicable to your purchase transaction).

Cartridge	Polygard CN		Polygard CR		Clarigard	
Maximum Differential Pressure at 20 °C (68 °F)	4.8 bar (70 psid)		3.9 bar (56.5 psid)		3.9 bar (56.5 psid)	
Maximum Operating Temperature	80 °C (176 °F)		60 °C (140 °F)		60 °C (140 °F)	
Differential Pressure at 10 gpm at 20 °C (68 °F), per 10 in. element (psid)	CN03	13.0	CRK1	30.0	D002	13
	CN06	5.4	CRK3	10.0	D003	7.6
	CN12	4.0	CRA5	3.6	D005	8.6
	CN25	2.7	CR01	2.4	D010	4.7
	CN50	2.4	CR03	1.6	D030	1.9
	CN1H	2.4	CR05	1.4		
	CN3H	2.4	CR10	1.0		
			CR25	1.0		
			CR50	1.0		
			CR75	1.0		
		CR99	1.0			

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