



PolyPro[®] XL

Disposable Filter Capsules & Mini Cartridges



PolyPro XL capsule and mini cartridge filters are designed for critical, small volume filter applications in the pharmaceutical, bioprocess, fine chemical, and microelectronics markets. They contain pleated, graded density, absolute-rated, polypropylene filter media providing excellent retention of particles at fast flow rates. The all-polypropylene construction offers superior chemical resistance and durability in demanding process applications.

Constructed with the innovative Advanced Pleat Technology™ (APT) combining high filter surface area with graded-density filter media structure, PolyPro XL capsule and mini cartridge filters flow faster and last longer than competitive filters.

CUNO PolyPro XL mini cartridges can be installed in existing competitor housings or in the CUNO Mini Cartridge housing. PolyPro XL mini cartridges provide significant flow advantages compared to competitive offerings resulting in greater batch capacity and reduced filter change-outs.

Benefits

- Advanced Pleat Technology™ construction for fast flow rates with high contaminant retention
- Absolute retention ratings provide consistent performance
- Sanitary capsule vent and drain valves ease use
- Steam sterilisable mini cartridges
- Manufactured in ISO 9001 certified facility
- Meets USP Class VI Biological Tests for Plastics
- Constructed with FDA 21 CFR listed materials
- Non-pyrogenic per USP Bacterial Endotoxins Test (<0.25 EU/ml)
- Conductivity and Total Organic Carbon (TOC) - Meets requirements of USP Purified Water after flushing.
- Meets USP Particulates in Injectables limits, non-fibre releasing filter per 21 CFR
- Individual Certificate of Quality
- Regulatory Support File (RSF) available

Operating Conditions		
Maximum Capsule Operating Pressure	75 psig	
Maximum Differential Pressure	Forward: Capsules & Mini Ctgs. : 4.1 bar (60 psid) @ 40 °C (104 °F) Mini Ctgs. : 2.4 bar (35 psid) @ 80 °C (176 °F) Reverse: 2.4 bar (35 psid) @ 25 °C (75 °F)	
Recommended Change-out Differential Pressure	2.4 bar (35 psid)	
Maximum Operating Temperature	Mini Cartridges: 80 °C (176 °F) Capsules: 40 °C (104 °F) - DO NOT INSITU STEAM	
Surface Area by Grade	2.5" length (m ²)	5" length (m ²)
020 (0.2 µm)	0.13 m ² (1.4 ft ²)	0.27 m ² (2.9 ft ²)
060 (0.6 µm)	0.14 m ² (1.5 ft ²)	0.30 m ² (3.2 ft ²)
120 (1.2 µm)	0.14 m ² (1.5 ft ²)	0.30 m ² (3.2 ft ²)
250 (2.5 µm)	0.14 m ² (1.5 ft ²)	0.30 m ² (3.2 ft ²)
500 (5.0 µm)	0.13 m ² (1.4 ft ²)	0.28 m ² (3.0 ft ²)
10C (10 µm)	0.08 m ² (0.9 ft ²)	0.18 m ² (1.9 m ²)

Materials of Construction	
Filter Media & Support Layers	Polypropylene
Capsule Body	Polypropylene
Mini Ctg Cage, Core & End Caps	Polypropylene
Capsule Vent/Drain O-rings	See ordering guide



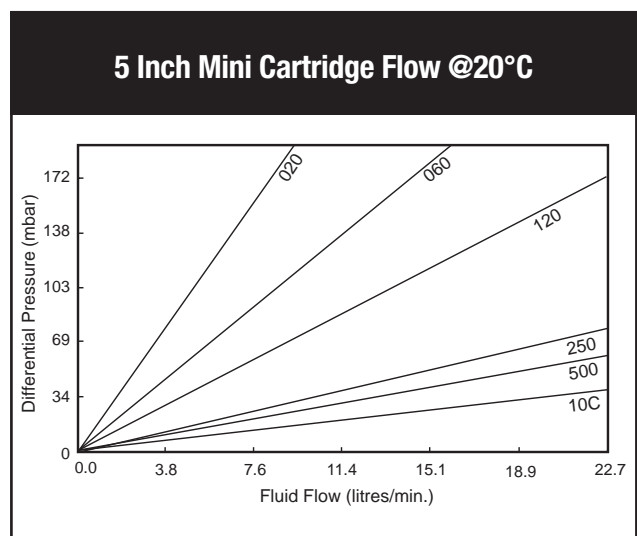
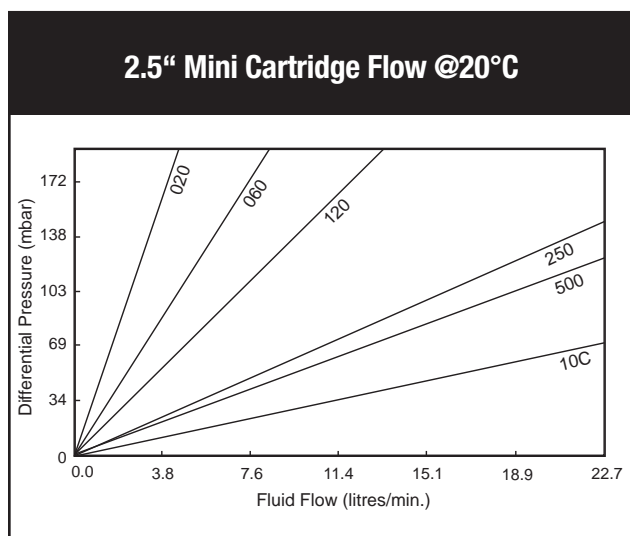
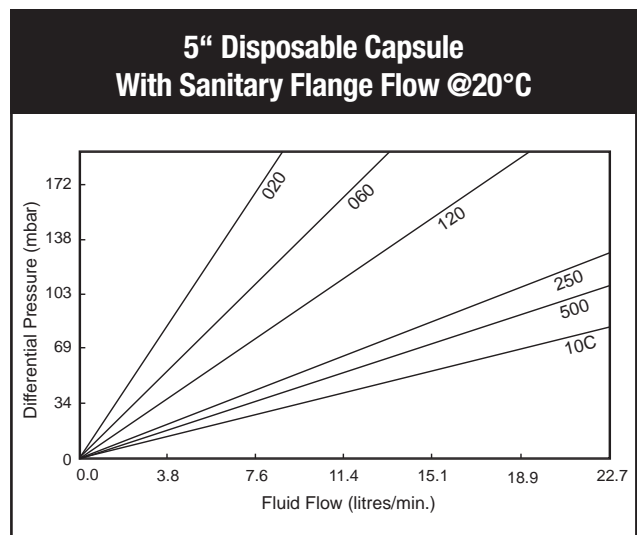
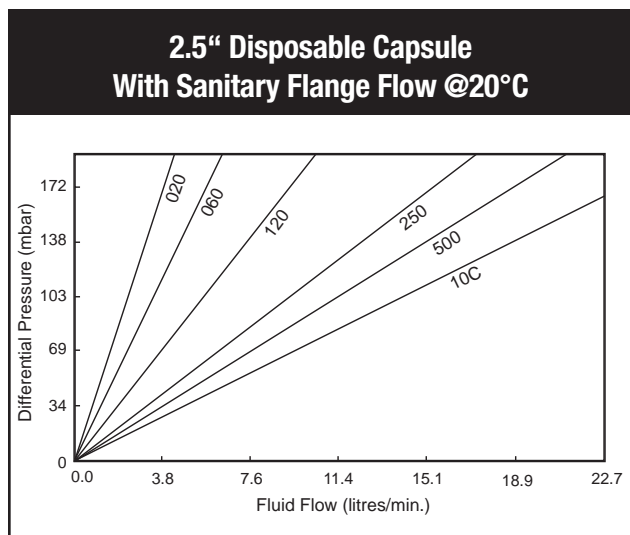


Flow Rates

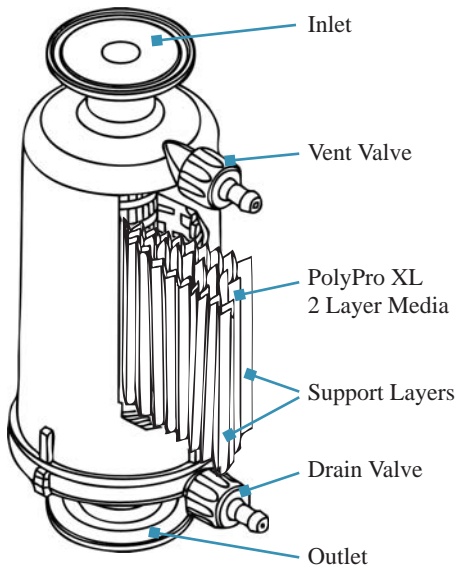
The following are typical water flow rates for PolyPro XL capsules with 1 1/2" sanitary flange connections or in the mini cartridge configuration. Other end connections will effect maximum flow rates (see table).

Maximum Recommended Capsule Flow by End Connection		
	Maximum Recommended Flow Rate (litres/min.)	Housing Pressure Loss (mbar)*
1 1/2" Sanitary Flange	22.7	69
3/8" FNPT	22.7	69
1/2" Hose Barb	11.4	103
1/4" MNPT	5.7	165
Tapered Hose Barb	1.9	152

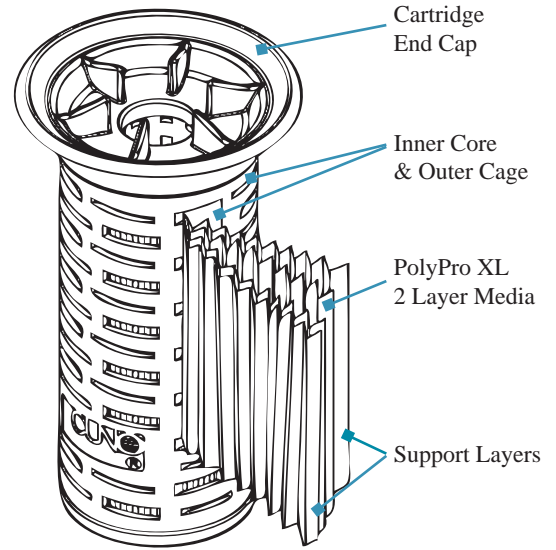
* At maximum recommended Flow Rate



Capsule Construction



Mini Cartridge Construction



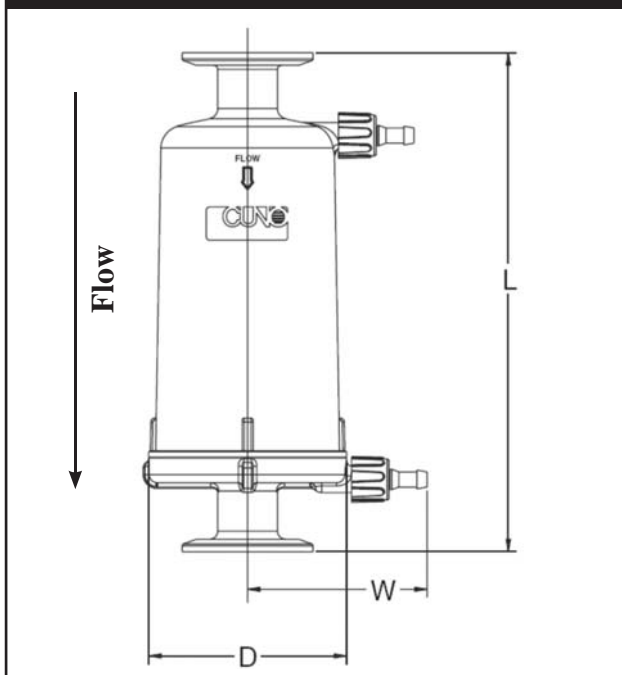
Nominal Capsule Dimensions

Dimensions (See Figure below)	Nominal Length (See Ordering Guide)	With End Connections* (inches)				
		A	B	C	D	E
Length (L)	01	5	5 1/2	5	5	5 1/4
	02	7 1/2	8	7 1/2	7 1/2	7 3/4
Diameter (D)	01	3				
	02					
Width to Vent (W)	01	2 3/4				
	02					

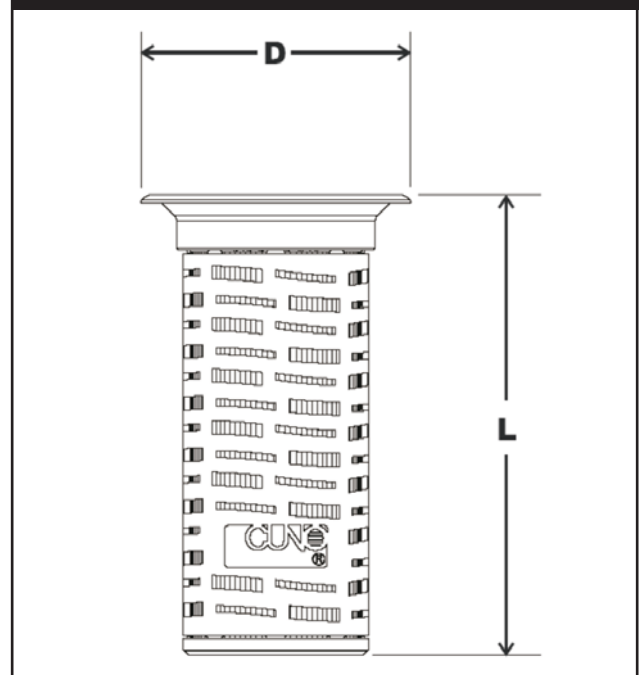
Nominal Mini Cartridge Dimensions

Dimensions (See Figure below)	2.5" Mini Cartridge	5" Mini Cartridge
Length (L)	3 1/8	5 1/2
Diameter (D)	3 1/4	

Drawing Capsule



Drawing Mini Cartridge





PolyPro XL Filter Capsule Ordering Guide

Cartridge Type	Removal Rating	Configuration	Nominal Length	End Connection	Vent O-ring Option	Packaging Code Option
PPG	020 – 0.2 µm 060 – 0.6 µm 120 – 1.2 µm 250 – 2.5 µm 500 – 5.0 µm 10C – 10 µm	C - Capsule	01 – 1 ½" 02 – 5"	A – 1 ½ " sanitary flange B – ½ " (14 mm) hose barb C – ¼ " MNPT D – ¾ " FNPT E – ¼ " - 5/16 " - 3/8 " tapered hose barb	A – Silicone B – Fluorocarbon C – EPR	01 – single pack 02 – 3 pack 03 – 20 pack

PolyPro XL Mini Cartridge Ordering Guide

Cartridge Type	Removal Rating	Configuration	Nominal Length	End Connection	Vent O-ring Option	Packaging Code Option
PPG	020 – 0.2 µm 060 – 0.6 µm 120 – 1.2 µm 250 – 2.5 µm 500 – 5.0 µm 10C – 10 µm	M -Mini Cartridge	01 – 1 ½" 02 – 5"	A – Standard	N – None	06 – 6 pack

WARRANTY

Seller warrants its equipment against defects in workmanship and material for a period of 12 months from date of shipment from the factory under normal use and service and otherwise when such equipment is used in accordance with instructions furnished by Seller and for purposes disclosed in writing at the time of purchase, if any. Any unauthorized alteration or modification of the equipment by Buyer will void this warranty. Seller's liability under this warranty shall be limited to the replacement or repair, F.O.B. point of manufacture, of any defective equipment or part which, having been returned to the factory, transportation charges prepaid, has been inspected and determined by the Seller to be defective. THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EITHER EXPRESSED OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR USE, OR ANY OTHER MATTER. Under no circumstances shall Seller be liable to Buyer or any third party for any loss of profits or other direct or indirect costs, expenses, losses or consequential damages arising out of or as a result of any defects in or failure of its products or any part or parts thereof or arising out of or as a result of parts or components in incorporated in Seller's equipment but not supplied by the Seller.

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