



## PHOTOPEX™ NYLON FILTERS

### HYDROPHILIC NYLON 6,6 FILTERS FOR EFFICIENT PARTICLE REMOVAL IN SEMICONDUCTOR PHOTORESISTS AND SOLVENTS

With high flow rate performance, excellent retention capabilities and cleanliness, Cobetter Photopex™ Nylon 6,6 Filter Cartridges are well suited for filtering photoresists, solvents and other chemicals in semiconductor processes.

Photopex Nylon 6,6 Filter Cartridges use a pure unmodified hydrophilic nylon membrane with guaranteed levels of metal extractable and particle cleanliness. The filter's cleanliness reduces chemical waste and time to process after installation.

Cobetter Photopex Nylon 6,6 filters are available in a wide variety of sizes and configurations to meet all your requirements.

FEATURE	BENEFIT
<b>Cobetter nylon 6,6 membrane</b>	Naturally hydrophilic media wets out easily with most fluids
	Adsorptive properties effective in removing certain contaminants
	High particle removal efficiency
<b>HDPE or PP supports and structure</b>	High chemical compatibility
	High cleanliness, including low metal extractables
<b>Cartridge length to 20 inches</b>	High flow and longer service life for photochemical manufacturing
<b>Wide range of capsule sizes and industry fittings</b>	Easy installation and replacement of competitive capsules
<b>Higher initial cleanliness</b>	Reduces pre-process time and chemical waste
<b>100% integrity tested</b>	Chance of abnormal particle passage is eliminated



#### Typical Applications

- Photoresist Filtration
- Solvent Filtration
- Photochemical Filtration

#### SPECIFICATIONS

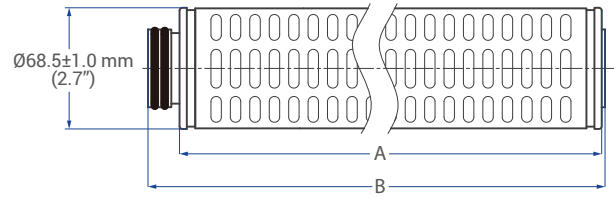
<b>Filter media</b>	Nylon 66	
<b>Supports/core/cage/end caps</b>	HDPE/PP	<b>Shell (disposables only)</b> HDPE/PP
<b>O-rings (cartridge only)</b>	TEV or EPDM	
<b>Max. operating temperature</b>	Cartridge: 50°C; Capsule: 38°C	

**Max. operating pressure** Capsule: 0.34 MPa (3.4 bar, 49 psi) at 25°C

**Cartridge max. differential pressure**  
 Forward: 0.34 MPa (3.4 bar, 49 psi) at 25°C  
 Reverse: 0.24 MPa (2.4 bar, 35 psi) at 25°C

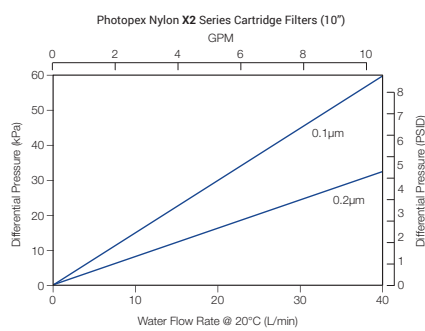
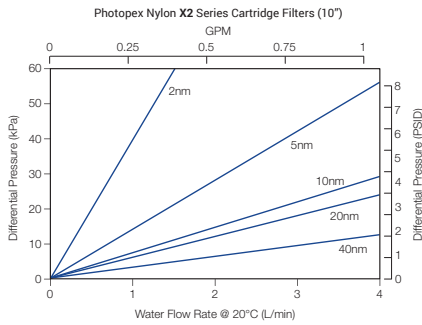
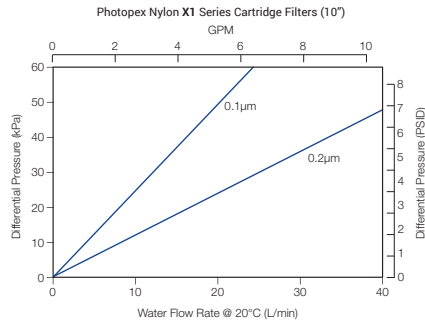
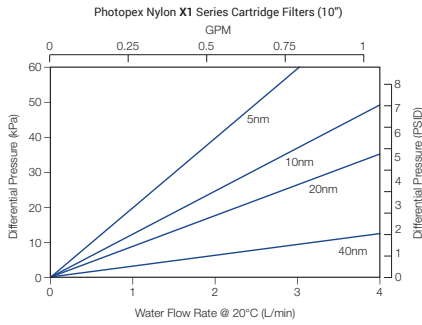
Effective filtration area (10")	X1 (ø68mm) 1.3m <sup>2</sup> (14.0ft <sup>2</sup> )	X2 (ø68mm) 1.8m <sup>2</sup> (19.4ft <sup>2</sup> )
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**PHOTOPEX NYLON CARTRIDGE FILTERS**



Length Code	A	B
<b>04</b>	102.0 ±1 mm (4.0")	122.0 ±1 mm (4.8")
<b>10</b>	242.5 ±2 mm (9.5")	262.5 ±2 mm (10.3")
<b>20</b>	488.0 ±3 mm (19.2")	508.0 ±3 mm (20.0")

**PHOTOPEX NYLON CARTRIDGE FLOW RATES**



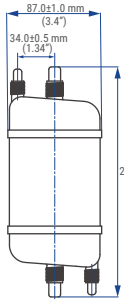
**PHOTOPEX NYLON CARTRIDGE ORDERING INFORMATION**

EXAMPLE: **PPNX100100TC20EUD** = HDPE supports/core, 68 mm diameter, 0.1 µm, 20" length, EPDM O-ring, < 5 µg/device cleanliness, dry

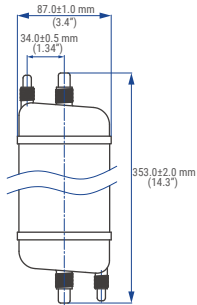
**PPN**    **OTC**    **D**

- Support/Core**  
 \_ = HDPE  
 P = PP
- Cartridge Diameter**  
 X1 = ø68 mm  
 X2 = ø68 mm
- Removal Rating**  
 NM02 = 2 nm    0010 = 0.1 µm  
 NM05 = 5 nm    0020 = 0.2 µm  
 NM10 = 10 nm   0045 = 0.45 µm  
 NM20 = 20 nm   0065 = 0.65 µm  
 NM40 = 40 nm   0100 = 1.0 µm  
                   0300 = 3.0 µm  
                   0500 = 5.0 µm
- Seal Material**  
 P = TEV  
 E = EPDM
- Nominal Length**  
 04 = 4"  
 10 = 10"  
 20 = 20"
- Cleanliness**  
 UU = < 1 µg/device  
 UH = < 3 µg/device  
 U = < 5 µg/device  
 E = Electronic grade

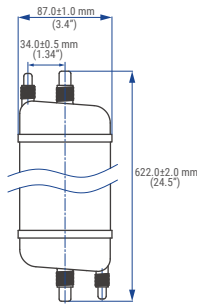
**PHOTOPEX NYLON CAPSULE FILTERS**



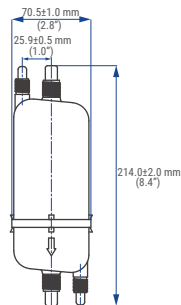
**BFL64-4**



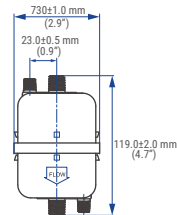
**BFL64-10**



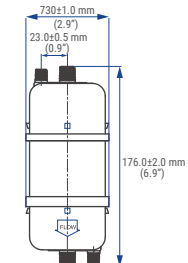
**BFL64-20**



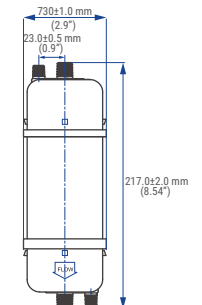
**FL64**



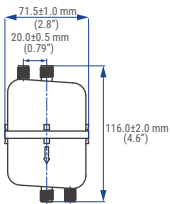
**NPT42**



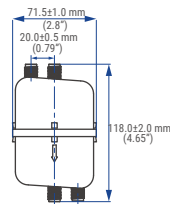
**NPT742**



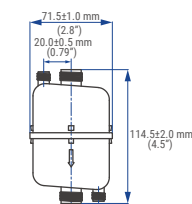
**NPT942**



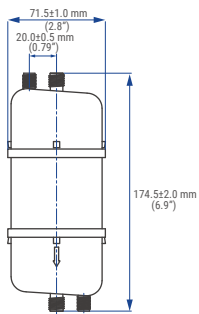
**SW43**



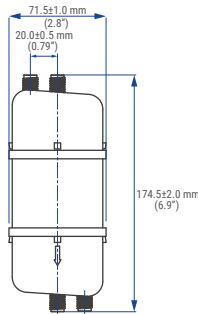
**SW44**



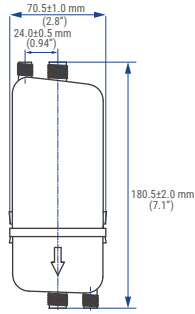
**SW84**



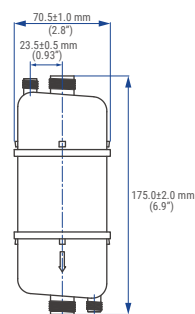
**SW743**



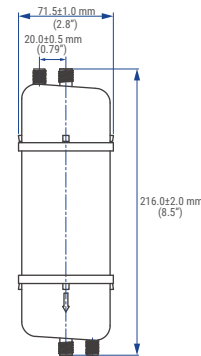
**SW744**



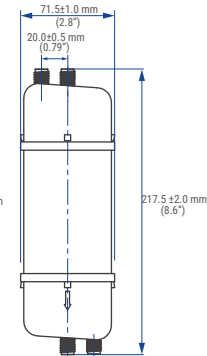
**SW764**



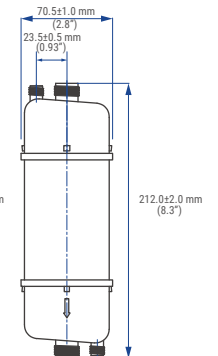
**SW784**



**SW943**



**SW944**



**SW984**

## PHOTOPEX NYLON CAPSULE ORDERING INFORMATION

EXAMPLE: **PPNP0010PL54LED** = Polypropylene, 0.1 um, flaretype 8 mm, 4 mm, electronic grade,, dry

**PPN**



**Support/Core**

\_ = HDPE  
P = PP



**Removal Rating**

NM02 = 2 nm  
NM05 = 5 nm  
NM10 = 10 nm  
NM20 = 20 nm  
NM40 = 40 nm  
0010 = 0.1 µm  
0020 = 0.2 µm  
0045 = 0.45 µm  
0065 = 0.65 µm  
0100 = 1.0 µm  
0300 = 3.0 µm  
0500 = 5.0 µm



**Connection Type**

*HDPE Filters:*

SW43E = Compression  
SW44E = Compression  
SW984E = Compression  
NPT42E = NPT  
FL64E = Flare Type

*PP Filters:*

BFL64-4 = Flare Type  
BFL64-10 = Flare Type  
BFL64-20 = Flare Type  
FL64 = Flare Type  
NPT42 = NPT  
NPT742 = NPT  
NPT942 = NPT  
SW43 = Compression  
SW743 = Compression  
SW943 = Compression  
SW44 = Compression  
SW744 = Compression  
SW944 = Compression  
SW84 = Compression  
SW784 = Compression  
SW984 = Compression  
SW764 = Compression



**Cleanliness**

UU = < 1 µg/device  
UH = < 3 µg/device  
U = < 5 µg/device  
E = Electronic grade

**D**

**Inlet/Outlet**

**Vent/Drain**

**Lengths**

Connection Type	Inlet/Outlet	Vent/Drain	Lengths
SW43E = Compression	1/4"	4 mm	120 mm (4.7")
SW44E = Compression	1/4"	1/4"	120 mm (4.7")
SW984E = Compression	1/2"	1/4"	212 mm (8.3")
NPT42E = NPT	1/4"	1/8"	119 mm (4.7")
FL64E = Flare Type	3/8"	1/4"	214 mm (8.4")
BFL64-4 = Flare Type	3/8"	1/4"	211 mm (8.3")
BFL64-10 = Flare Type	3/8"	1/4"	363 mm (14.3")
BFL64-20 = Flare Type	3/8"	1/4"	622 mm (24.5")
FL64 = Flare Type	3/8"	1/4"	214 mm (8.4")
NPT42 = NPT	1/4"	1/8"	119 mm (4.7")
NPT742 = NPT	1/4"	1/8"	176 mm (6.9")
NPT942 = NPT	1/4"	1/8"	217 mm (8.5")
SW43 = Compression	1/4"	4 mm	116 mm (4.6")
SW743 = Compression	1/4"	4 mm	174.5 mm (6.9")
SW943 = Compression	1/4"	4 mm	216 mm (8.5")
SW44 = Compression	1/4"	1/4"	118mm (4.6")
SW744 = Compression	1/4"	1/4"	174.5 mm (6.9")
SW944 = Compression	1/4"	1/4"	217.5 mm (8.6")
SW84 = Compression	1/2"	1/4"	114.5 mm (4.5")
SW784 = Compression	1/2"	1/4"	175 mm (6.9")
SW984 = Compression	1/2"	1/4"	212 mm (8.3")
SW764 = Compression	3/8"	1/4"	180.5 mm (7.1")



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