

CHEMPHOBIC™ ULTRAPURE CHEMICAL FILTERS

ALL-PTFE FILTRATION SOLUTIONS FOR ADVANCED WET ETCH & CLEAN PROCESSES WITH BROAD CHEMICAL COMPATIBILITY, HIGH FLOW, AND SUPERIOR CLEANLINESS

Chemphobic™ Filter Series are especially designed and ideally suited for high temperature and corrosive chemicals including hot H₂SO₄, H₃PO₄, and HNO₃, SPM, SC1, and SC2. The PTFE membrane ensures excellent chemical compatibility with consistent particle removal in a wide range of acids, bases and other process chemicals. All fluorine construction minimizes metal extractables and other contaminants. High membrane surface area options provide high flow rates and extended service life to meet demanding process tool and availability requirements.



FEATURE	BENEFIT
Robust all-fluoropolymer construction	Excellent chemical compatibility and ultra-low metal extractables
High membrane surface area option	High flow rate and longer life
Industry standard connections on disposables	Ease of installation and replacement
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Higher cleanliness options	Meets stringent process requirements for metals, anions, and organic contaminants
Prewet option	Provides convenience and decreases the chances of product contamination

Typical Applications

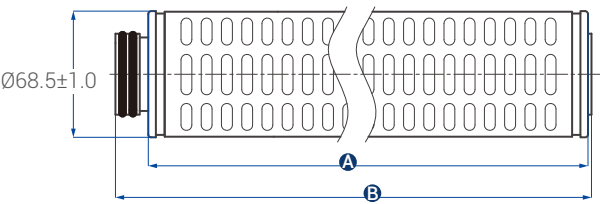
- Semiconductor
- Wet Etch and Clean
- Bulk Chemicals and Solvents
- BEOL Organic Solvent Resist Strip

SPECIFICATION

	Cartridge	Disposable	Small In-line Type
Filter Media	Hydrophobic PTFE		
Core/Cage/End Caps	PFA	PFA	PFA
O-ring (Cartridge only)	TEV or FFKM	—	—
Shell (Disposable only)	—	PFA	PFA
Max. Operating Temperature	180°C	180°C	95°C
Max. Operating Pressure	—	0.58 MPa @25°C 0.097 MPa @180°C	0.4 MPa @25°C
Max. FWD Differential Pressure	0.49 MPa @25°C	—	—
Max. BWD Differential Pressure	0.39 MPa @25°C	—	—
Filter Areas	X1 (Ø68mm) : 0.91 m ² /10" X2 (Ø68mm) : 1.21 m ² /10"	Z1 (Ø83mm) : 1.3 m ² /10" Z2 (Ø83mm) : 2.2 m ² /10" Z3 (Ø83mm) : 3.0 m ² /10"	Y1 (Ø36mm) : 0.13 m ² /3" X1 (Ø68mm) : 0.32 m ² /4" X2 (Ø68mm) : 0.42 m ² /4"

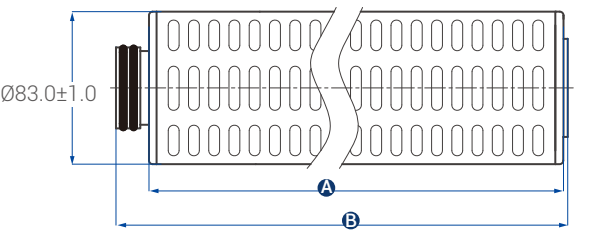
DIMENSIONS (CARTRIDGE)

Chemphobic X1/X2
(Connection: TC)



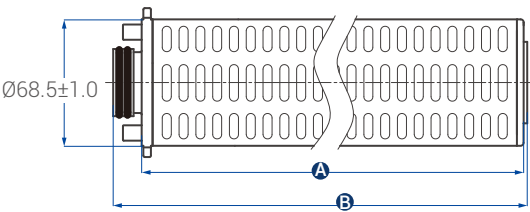
Length Code	A (mm)	B (mm)
03	74.0	96.0
04	105.0	127.0
10	237.5	259.5
20	476.0	498.0
30	714.5	736.5

Chemphobic Z1/Z2/Z3 Cartridge Filters
(Connection: TC)



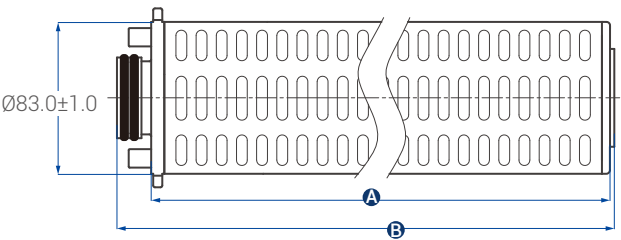
Length Code	A (mm)	B (mm)
10	225.5	246.5
20	452.5	471.0
30	675.5	696.5

(Connection: CLTC)



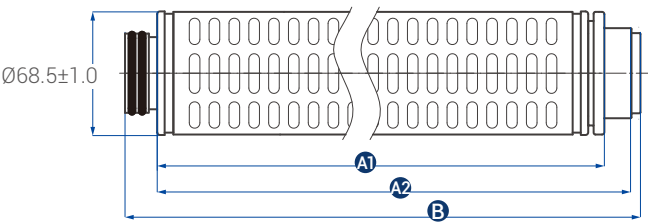
Length Code	A (mm)	B (mm)
10	238.0	260.0
20	471.5	493.5

(Connection: CLTC)



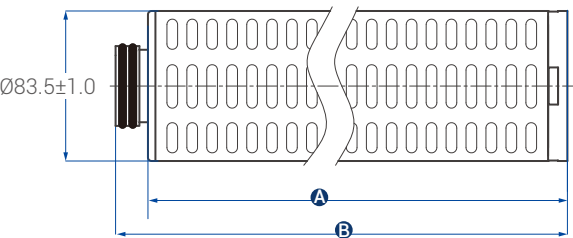
Length Code	A (mm)	B (mm)
10	217.0	238.0
20	447.0	468.0

(Connection: TPCJ)



Length Code	A1 (mm)	A2 (mm)	B (mm)
10	245.0	260.0	284.0
20	506.0	521.0	545.0

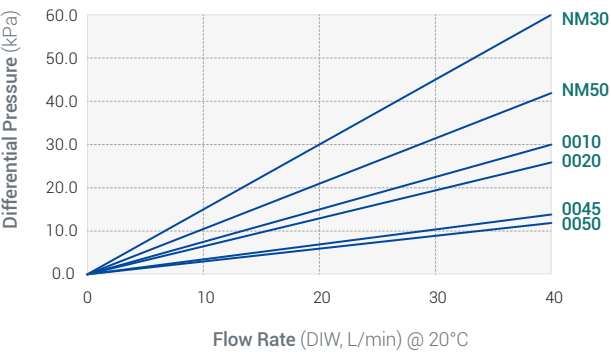
(Connection: ETC)



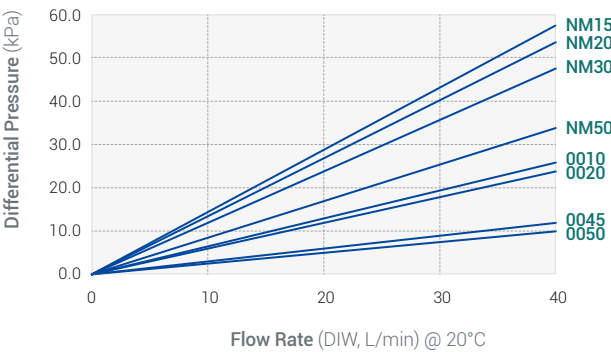
Length Code	A (mm)	B (mm)
10	231.0	250.0
10P	228.0	247.0

FLOW RATE (CARTRIDGE)

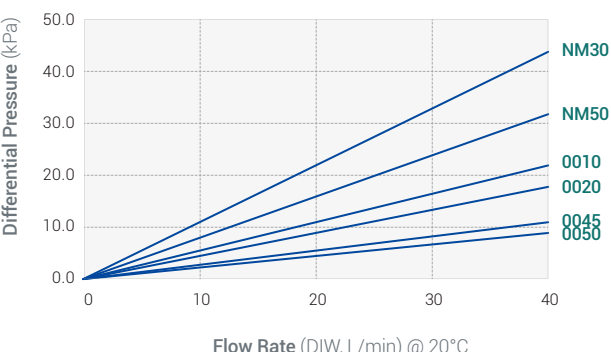
Chemphobic X1 Series 10" Cartridge Filters



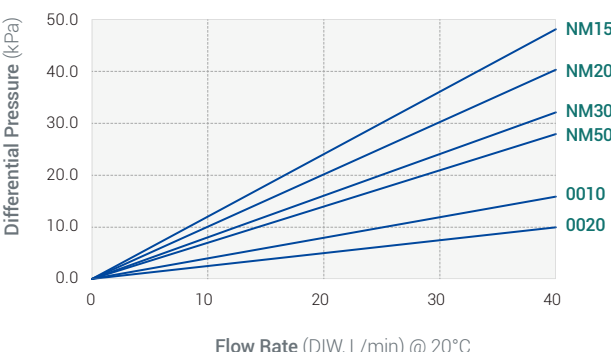
Chemphobic X2 Series 10" Cartridge Filters



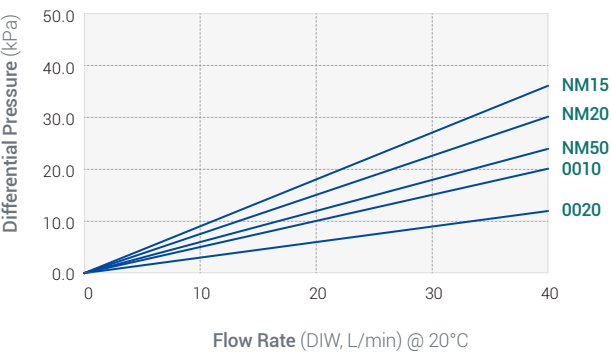
Chemphobic Z1 Series 10" Cartridge Filters



Chemphobic Z2 Series 10" Cartridge Filters



Chemphobic Z3 Series 10" Cartridge Filters



ORDER INFORMATION (CARTRIDGE)

CHT **1 2 3 4 5 6 7**

Block 1

Code	Diameter
X1	Ø68mm
X2	
Z1	Ø83mm
Z2	
Z3	

Block 4

Code	Length	
03	3"	Only for Ø68mm TC type
04	4"	
10P	10"	Only for ETC type
10	10"	All types
20	20"	Except ETC type
30	30"	TC type

Block 7

Code	Package
D	Dry
W	Prewet,UPW

Block 2

Code	Removal Rating
NM10	10nm
NM15	15nm
NM20	20nm
NM30	30nm
NM50	50nm
0010	0.1µm
0020	0.2µm
0045	0.45µm
0050	0.5µm
0100	1µm
0300	3µm
0500	5µm
1000	10µm

Block 5

Code	O-ring Material
P	TEV
K	FFKM

Block 6

Code	Cleanliness	
XXS	<0.5µg/device	
XS	<1µg/device	10nm
S	<3µg/device	
L	<10µg/device	10/15/20/30nm
LV	Metal<10µg/device, low anion	
M	<25µg/device	
H	<40µg/device	≥50nm
E	Electronic Grade	

Block 3

Code	Connection	
TC	Standard	Ø68mm/
CLTC	For Codetter PFA Housing	Ø83mm
ETC	For E PFA Housing	Ø83mm
TPCJ	For P PFA Housing	Ø68mm

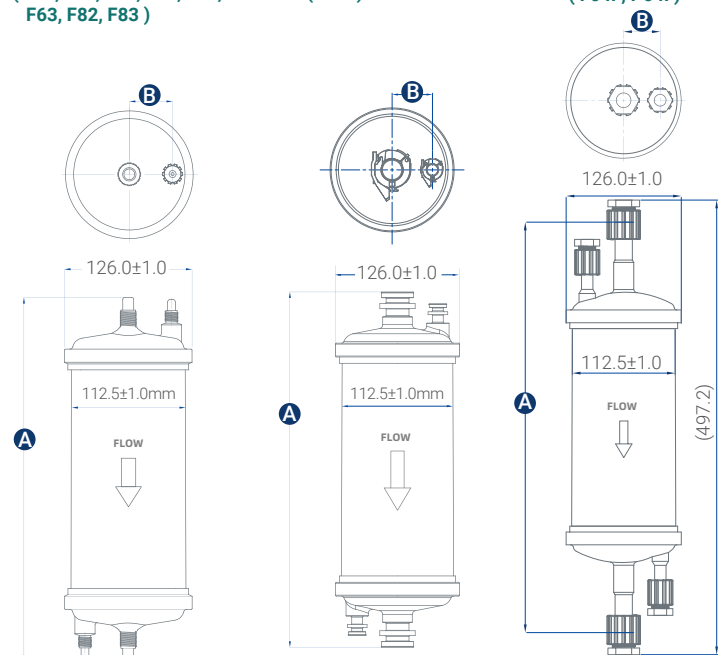
DIMENSIONS (DISPOSABLE) I

Chemphobic in-line disposable

N type Flare series
(F32, F33, F42, F43, F62,
F63, F82, F83)

N type Nanolink series
(N84)

N type Female series
(F64F, P64F)

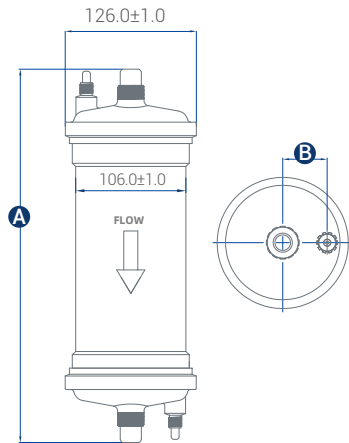


Code	Inlet/Outlet	Length	A (mm)	B (mm)
N-05-F32	In-line (N type F32)	5"	240.0	42.7
N-05-F33	In-line (N type F33)	5"	240.0	42.7
N-05-F42	In-line (N type F42)	5"	240.0	42.7
N-05-F43	In-line (N type F43)	5"	240.0	42.7
N-05-F62	In-line (N type F62)	5"	240.0	42.7
N-05-F63	In-line (N type F63)	5"	240.0	42.7
N-05-F82	In-line (N type F82)	5"	240.0	42.7
N-05-F83	In-line (N type F83)	5"	257.0	42.7
N-05-N84	In-line (N type N84)	5"	284.0	41.0
N-10-F32	In-line (N type F32)	10"	359.0	42.7
N-10-F33	In-line (N type F33)	10"	359.0	42.7
N-10-F42	In-line (N type F42)	10"	359.0	42.7
N-10-F43	In-line (N type F43)	10"	359.0	42.7
N-10-F62	In-line (N type F62)	10"	359.0	42.7
N-10-F63	In-line (N type F63)	10"	359.0	42.7
N-10-F82	In-line (N type F82)	10"	376.0	42.7
N-10-F83	In-line (N type F83)	10"	376.0	42.7
N-10-N84	In-line (N type N84)	10"	403.0	41.0
N-10-F64F	In-line (N type F64F)	10"	497.2	40.0
N-10-P64F	In-line (N type P64F)	10"	487.0	40.0
N-10-HS82	In-line (N type HS82)	10"	360.0	42.0
N-10-HS84	In-line (N type HS84)	10"	360.0	42.0

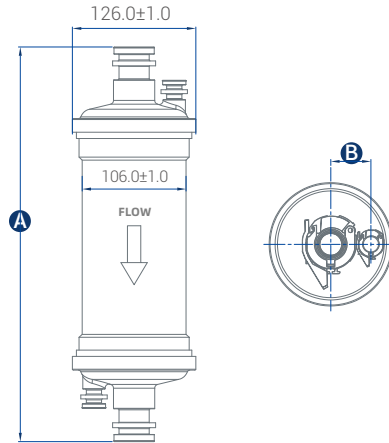
DIMENSIONS (DISPOSABLE) II

Chemphobic in-line disposable

NP type Flare series
(F32, F33, F42, F43, F62, F63, F82, F83)

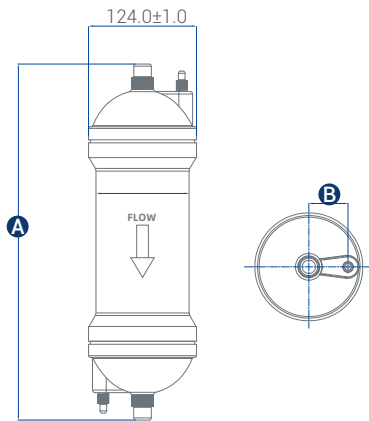


NP type Nanolink series
(N84)

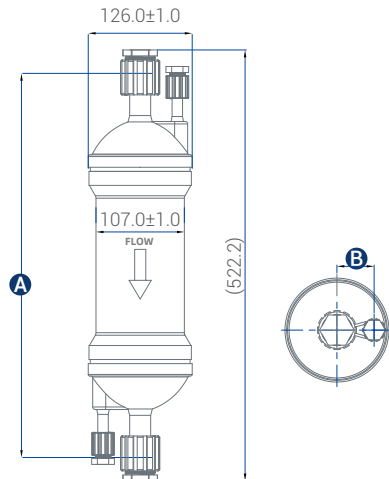


Code	Inlet/Outlet	Length	A (mm)	B (mm)
NP-10-F32	In-line (NP type F32)	10"	359.0	42.7
NP-10-F33	In-line (NP type F33)	10"	359.0	42.7
NP-10-F42	In-line (NP type F42)	10"	359.0	42.7
NP-10-F43	In-line (NP type F43)	10"	359.0	42.7
NP-10-F62	In-line (NP type F62)	10"	359.0	42.7
NP-10-F63	In-line (NP type F63)	10"	359.0	42.7
NP-10-F82	In-line (NP type F82)	10"	376.0	42.7
NP-10-F83	In-line (NP type F83)	10"	376.0	42.7
NP-10-N84	In-line (NP type N84)	10"	403.0	41.0

NK type Flare series
(F62, F82)



NK type Female series
(F84F, P84F)

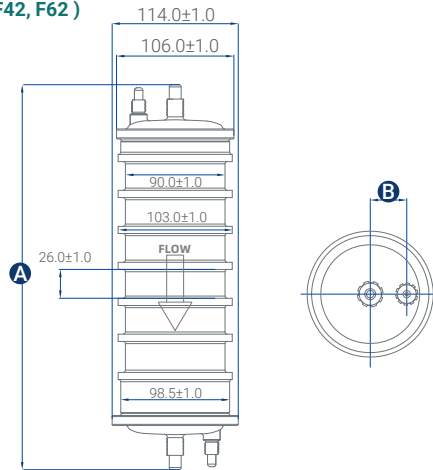


Code	Inlet/Outlet	Length	A (mm)	B (mm)
NK-10-F62	In-line (NK type F62)	10"	409.0	45.0
NK-10-F82	In-line (NK type F82)	10"	435.0	45.0
NK-10-F84F	In-line (NK type F84F)	10"	522.2	45.0
NK-10-P84F	In-line (NK type P84F)	10"	507.4	45.0

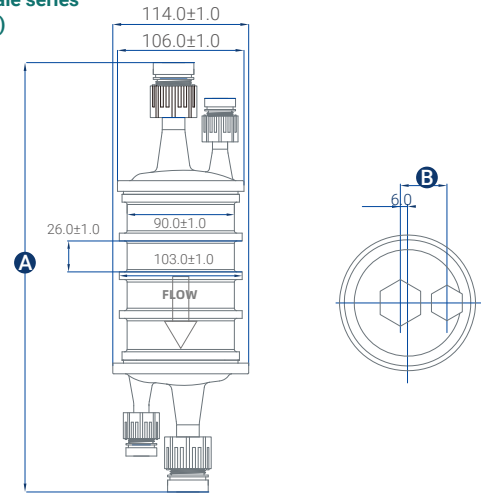
DIMENSIONS (DISPOSABLE) III

Chemphobic in-line disposable

XQ type Flare series (F32, F42, F62)



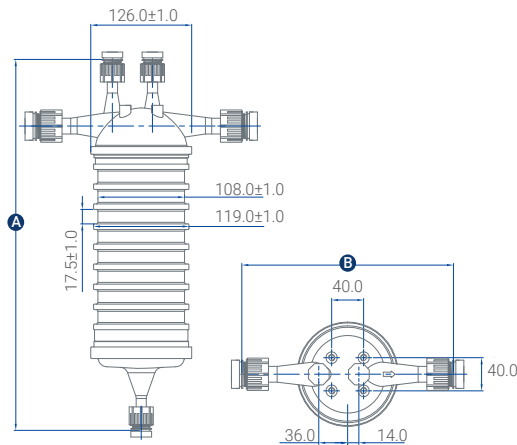
XQ type Female series (F64F, P64F)



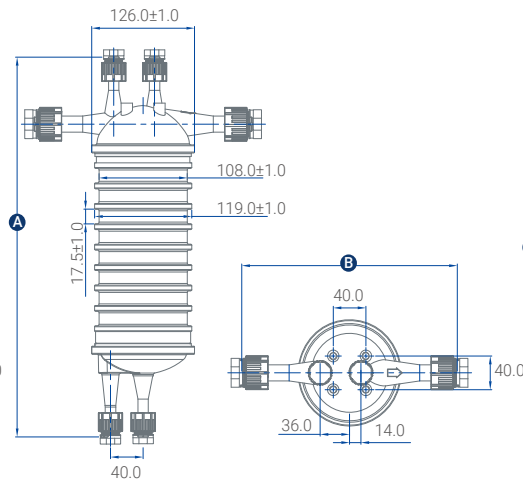
Code	Disposable type	Length	A (mm)	B (mm)
XQ-05-F32	In-line (XQ type F32)	5"	242.0	33.0
XQ-05-F42	In-line (XQ type F42)	5"	242.0	33.0
XQ-05-F62	In-line (XQ type F62)	5"	250.0	33.0
XQ-05-F64F	In-line (XQ type F64F)	5"	366.2	39.0
XQ-05-P64F	In-line (XQ type P64F)	5"	366.0	39.0
XQ-10-F32	In-line (XQ type F32)	10"	348.0	33.0
XQ-10-F42	In-line (XQ type F42)	10"	348.0	33.0
XQ-10-F62	In-line (XQ type F62)	10"	348.0	33.0
XQ-10-F64F	In-line (XQ type F64F)	10"	472.2	39.0
XQ-10-P64F	In-line (XQ type P64F)	10"	472.0	39.0

Chemphobic T-line disposable

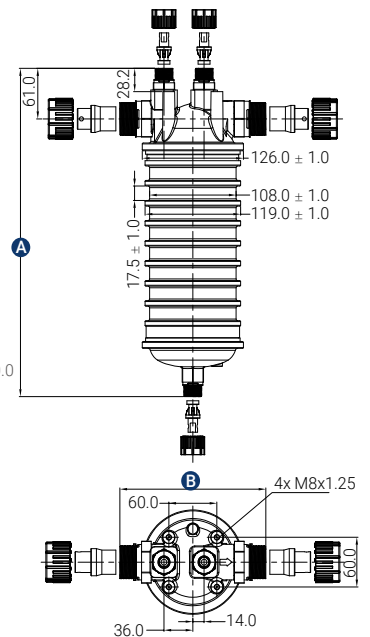
T type Female series



TV type Female series



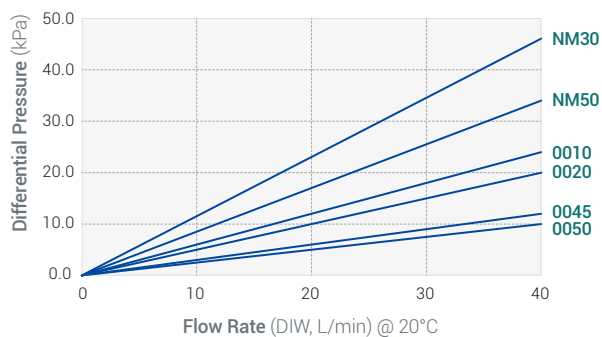
T/TV type male series



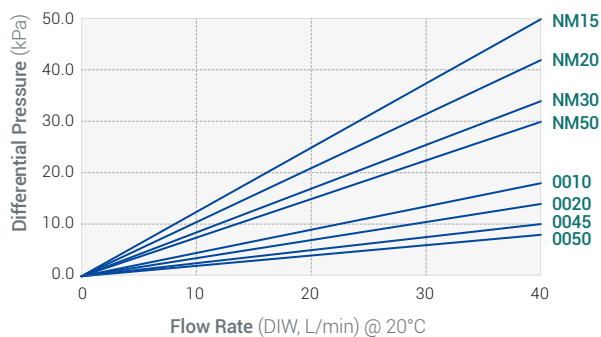
Code	Inlet/Outlet	Length	A (mm)	B (mm)
T-10-F64F	T-line (T-type F64F)	10"	432.2	249.0
T-10-P64F	T-line (T-type P64F)	10"	447.4	267.0
T-10-HS84	T-line (T-type HS84)	10"	396.4	182.0
TV-10-F64F	T-line (TV type F64F)	10"	435.4	249.0
TV-10-P64F	T-line (TV type P64F)	10"	450.6	267.0
TV-10-HS84	T-line (TV type HS84)	10"	392.3	182.0

FLOW RATE (DISPOSABLE)

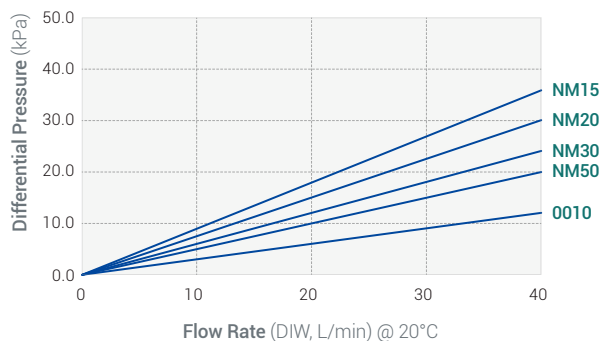
Chemphobic Z1 Series 10" Disposable with 1" Fitting



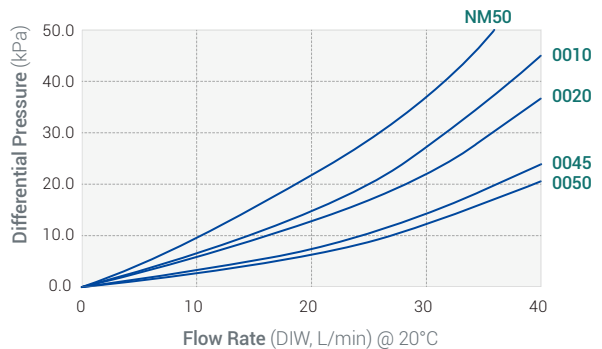
Chemphobic Z2 Series 10" Disposable with 1" Fitting



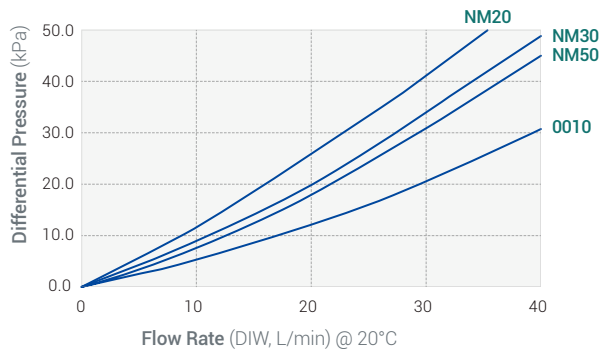
Chemphobic Z3 Series 10" Disposable with 1" Fitting



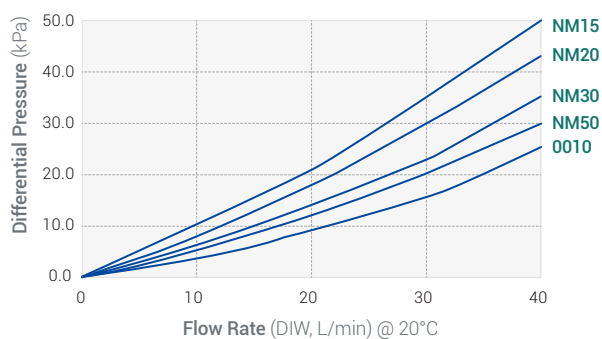
Chemphobic Z1 Series 10" Disposable with 3/4" Fitting



Chemphobic Z2 Series 10" Disposable with 3/4" Fitting



Chemphobic Z3 Series 10" Disposable with 3/4" Fitting



ORDER INFORMATION (DISPOSABLE)

CHT **1** **2** **3** **4** **5** **6** **7**

Block 1

Code	Diameter
X1	Ø68mm (only for XQ type)
X2	
Z1	Ø83mm
Z2	
Z3	

Block 2

Code	Flow Type
N	In-line
NP	In-line
NK	In-line
XQ	In-line
T	T-line
TV	T-line with core vent

Block 3

Code	Removal Rating
NM10	10nm
NM15	15nm
NM20	20nm
NM30	30nm
NM50	50nm
0010	0.1µm
0020	0.2µm
0045	0.45µm
0050	0.5µm
0100	1µm
0300	3µm
0500	5µm
1000	10µm

Block 4

Code	Length
05	5" (only for N type)
10	10"

Block 5

Code	Connection Type	Inlet/Outlet	Vent/Drain (head)	Vent/Drain (bowl)	Disposable Type
F32	Flare type	3/8"male	1/4"male	1/4"male	N/NP type
F33	Flare type	3/8"male	3/8"male	3/8"male	
F42	Flare type	1/2"male	1/4"male	1/4"male	
F43	Flare type	1/2"male	3/8"male	3/8"male	
F62	Flare type	3/4"male	1/4"male	1/4"male	
F63	Flare type	3/4"male	3/8"male	3/8"male	
F82	Flare type	1"male	1/4"male	1/4"male	
F83	Flare type	1"male	3/8"male	3/8"male	
N84	Nanalink type	1"male	1/2"male	1/2"male	
HS82	1" Super Pillar S300	1"male	1/4"male	1/4"male	
HS84	1" Super Pillar S300	1"male	1/2"male	1/2"male	
F64F	Flare female	3/4"female	1/2"female	1/2"female	NP type
P64F	Pillar type female	3/4"female	1/2"female	1/2"female	
F62	Flare type	3/4"male	1/4"male	1/4"male	NK type
F82	Flare type	1"male	1/4"male	1/4"male	
F84F	Flare female	1"female	1/2"female	1/2"female	
P84F	Pillar type female	1"female	1/2"female	1/2"female	
F32	Flare type	3/8"male	1/4"male	1/4"male	XQ type
F42	Flare type	1/2"male	1/4"male	1/4"male	
F62	Flare type	3/4"male	1/4"male	1/4"male	
F64F	Flare female	3/4"female	1/2"female	1/2"female	
P64F	Pillar type female	3/4"female	1/2"female	1/2"female	
F64F	Flare female	3/4"female	1/2"female	1/2"female	T/TV type
P64F	Pillar type female	3/4"female	1/2"female	1/2"female	
HS84	Super Pillar S300	1"female	1/2"male	1/2"male	

Block 6

Code	Cleanliness
XXS	<0.5µg/device
XS	<1µg/device 10nm
S	<3µg/device
L	<10µg/device
M	<25µg/device ≥15nm
H	<40µg/device
E	Electronic Grade

Block 7

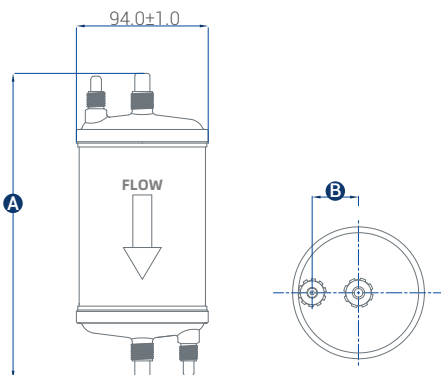
Code	Package
D	Dry
W	Prewet, UPW

For more retention ratings, configuration options, or additional IPA clean to reduce initial shedding particle, please contact your Codetier sales or local representative to confirm part numbers.

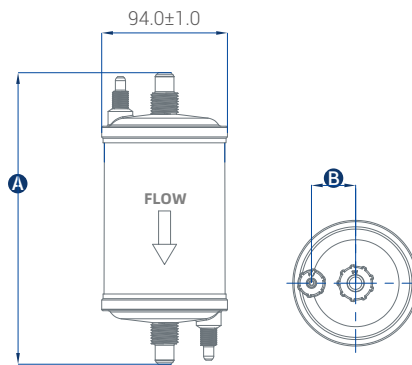
DIMENSIONS (SMALL IN-LINE DISPOSABLE)

Chemphobic small in-line disposable

X type Flare series (F32, F42, F62)

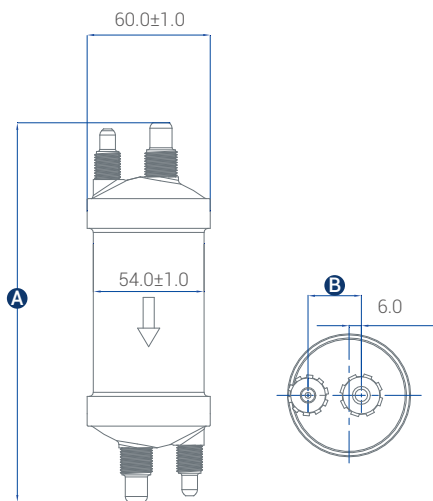


X type Follwell series (F32, F42, F62)

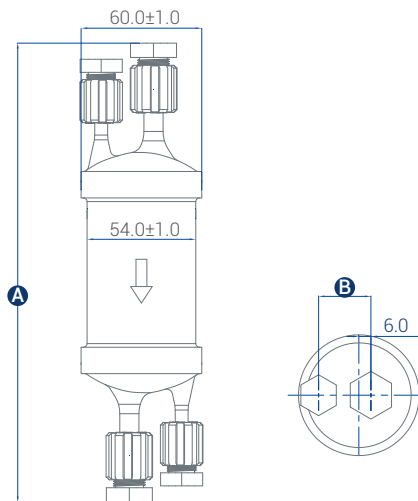


Code	Disposable type	Length	A (mm)	B (mm)
X-02-F32	In-line (X type F32)	2"	155.8	33.0
X-02-F42	In-line (X type F42)	2"	155.8	33.0
X-02-F62W42	In-line (X type F60W42)	2"	155.8	33.0
X-04-F32	In-line (X type F32)	4"	218.0	33.0
X-04-F42	In-line (X type F42)	4"	218.0	33.0
X-04-F62W42	In-line (X type F60W42)	4"	218.0	33.0

SX type Flare series (F32)



SX type Female series (F32F, FW32F, P32F)



Code	Disposable type	Length	A (mm)	B (mm)
SX-03-F32	In-line (SX type F32)	3"	185.0	26.0
SX-03-F32F	In-line (SX type F32F)	3"	201.0	26.0
SX-03-FW32F	In-line (SX type FW32F)	3"	203.0	26.0
SX-03-P32F	In-line (SX type P32F)	3"	212.0	26.0

ORDER INFORMATION (SMALL IN-LINE DISPOSABLE)

CHT 1 2 3 4 5 6 7

Block 1	
Code	Available Type
X1	X
X2	
Y1	SX

Block 2	
Code	Flow Type
X	X in-line
SX	SX inline

Block 3	
Code	Removal Rating
NM10	10nm
NM15	15nm
NM20	20nm
NM30	30nm
NM50	50nm
0010	0.1µm
0020	0.2µm
0045	0.45µm
0050	0.5µm

Block 4		
Code	Nominal Length	
02	2"	X in-line only
03	3"	SX in-line only
04	4"	X in-line only

Block 5					
Code	Connection Type	Inlet/Outlet	Vent/Drain (head)	Vent/Drain (bowl)	Disposable Type
F32	Flare type	3/8"male	1/4"male	1/4"male	X in-line type
F42	Flare type	1/2"male	1/4"male	1/4"male	
F62	Flare type	3/4"male	1/4"male	1/4"male	
F32	Flare type	3/8"male	1/4"male	1/4"male	SX in-line type
F32F	Flare type	3/8"female	1/4"male	1/4"male	
FW32F	Flowell type	3/8"female	1/4"male	1/4"male	
P32F	Pillar type female	3/8"female	1/4"male	1/4"male	

Block 6		
Code	Cleanliness	
XXS	<0.5µg/device	
XS	<1µg/device	10nm
S	<3µg/device	
L	<10µg/device	≥15nm
M	<25µg/device	

Block 7	
Code	Package
D	Dry
W	Prewet, UPW



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