



CHEMPHOBIC™ FILTERS

ALL-FLUOROPOLYMER FILTRATION PROVIDES HIGH CHEMICAL AND TEMPERATURE COMPATIBILITY

Chemphobic™ Filter Series are especially designed and ideally suited for high temperature and corrosive chemicals including hot H₂SO₄, H₃PO₄, and HNO₃. The PTFE membrane ensures excellent chemical compatibility with consistent particle removal in a wide range of acids, bases and solvents. Ultra-clean all-fluoropolymer construction minimizes metal extractables and other contaminants.

High membrane surface area options provide high flow rates and extended service life to meet demanding process and tool availability requirements.

Industry standard ultra-clean connections and the prewet option reduce equipment set up time. Its one-piece structural design and available T, L and In-line configurations make new installations and replacements easy.



FEATURE

BENEFIT

All fluoropolymer construction

Excellent chemical compatibility
Ultra-low metal extractables

High membrane surface area

High flow rate and longer life

Industry standard connections

Ease of installation and replacement

Higher cleanliness option

Meets stringent process requirements for metals, anions, and organic contaminants

Prewet option

Provides convenience and decreases the chances of product contamination

Typical Applications

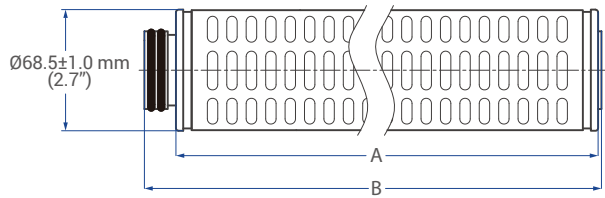
- Semiconductor
- Wet Etch and Clean
- Bulk Chemicals and Solvents
- BEOL Organic Solvent Resist Strip

SPECIFICATIONS

Filter media	PTFE							
Supports/core/cage/ end caps	PFA							
O-rings (cartridge only)	TEV or FFKM							
Shell (disposable only)	PFA							
Max. operating temperature	Cartridge and Disposable: 180°C Small In-Line X Type Disposable: 95°C							
Disposable max. operating pressure	Disposables: 0.58 MPa (5.8 bar, 84 psi) at 25°C; 0.097 MPa (0.97 bar, 14 psi) at 170°C Small In-Line X Type Disposable: 0.40 MPa (4.0 bar, 58 psi) at 25°C							
Cartridge max. differential pressure	Forward: 0.49 MPa (4.9 bar, 71 psi) at 25°C; Reverse: 0.39 MPa (3.9 bar, 57 psi) at 25°C							
Effective filtration area	X1	X2	X4 High Temp (>120°C)	Z1	Z2	Z3	Z4 High Temp (>120°C)	Z5 High Temp (>120°C)
3"	0.27m ² (2.9ft ²)	0.36m ² (3.9ft ²)						
4"	0.36m ² (3 9ft ²)	0.5m ² (5.4ft ²)						
5"				0.65m ² (7.0ft ²)	1.1m ² (11.8ft ²)	1.5m ² (16.1ft ²)	1.1m ² (11.8ft ²)	1.5 ² (16.1ft ²)
10"	0.91m ² (9.8ft ²)	1.21m ² (13ft ²)	1.21m ² (13ft ²)	1.3m ² (14.0ft ²)	2.2m ² (23.7ft ²)	3.0m ² (32.3ft ²)	2.2m ² (23.7ft ²)	3.0m ² (32.3ft ²)
20"	1.82m ² (19.6ft ²)	2.42m ² (26ft ²)		2.6m ² (21.0ft ²)	4.4m ² (47.4ft ²)	6.0m ² (64.6ft ²)	4.4m ² (47.4ft ²)	6.0m ² (64.6ft ²)
30"	2.73m ² (29.4ft ²)	3.63m ² (39ft ²)						

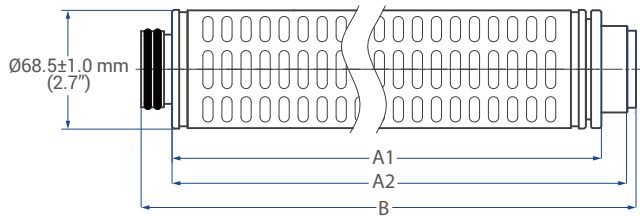
CHEMPHOBIC X1, X2, X4 CARTRIDGE FILTERS

CONNECTION: TC (2-222/FLAT)



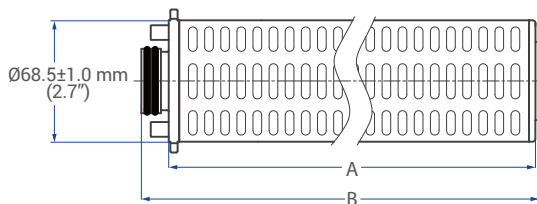
Length Code	A	B
03	74.0 ±1 mm (2.9")	96.0 ±1 mm (3.8")
04	105.0 ±1 mm (4.1")	127.0 ±1 mm (5.0")
10	237.5 ±2 mm (9.4")	259.5 ±2 mm (10.2")
20	476.0 ±3 mm (18.8")	498.0 ±3 mm (19.6")
30	714.5 ±3 mm (29.1")	736.5 ±1 mm (30.0")

CONNECTION TPCJ (2-222/FLAT)



Length Code	A1	A2	A2
10	244.0 ±2 mm (9.6")	259.0 ±2 mm (10.2")	284.0 ±2 mm (11.2")
20	506.0 ±3 mm (19.9")	521.0 ±3 mm (20.5")	545.0 ±3 mm (21.5")

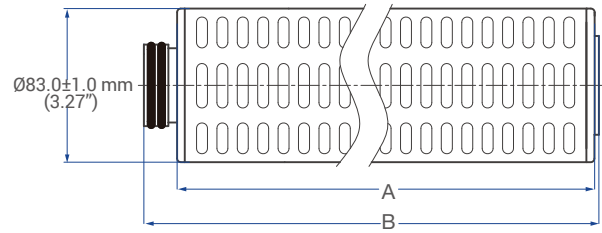
CONNECTION CLTC³ (2-222/FLAT)



Length Code	A	B
10	237.5 ±2 mm (9.4")	259.0 ±2 mm (10.2")

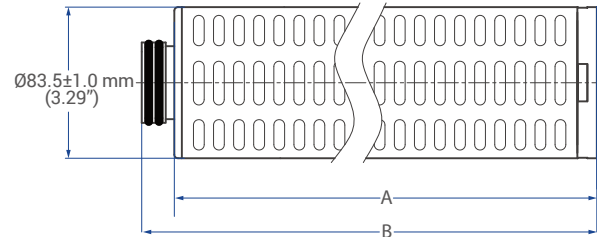
CHEMPHOBIC Z1, Z2, Z3, Z4, Z5 CARTRIDGE FILTERS

CONNECTION: TC (2-222/FLAT)



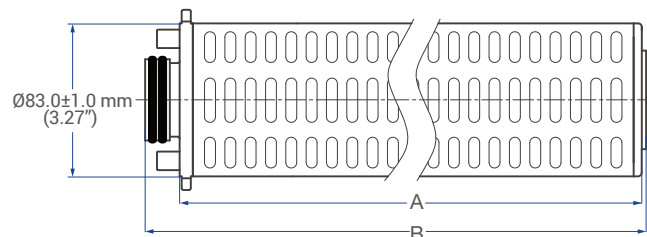
Length Code	A	B
10	225.0 ±2 mm (8.9")	247.0 ±2 mm (9.7")
20	452.0 ±3 mm (17.8")	472.0 ±3 mm (18.6")

CONNECTION ETC (2-222/FLAT)



Length Code	A	B
10	231.0 ±2 mm (9.1")	250.0 ±2 mm (9.8")
10P	227.0 ±1.5 mm (8.9")	247.0 ±1.5 mm (9.7")

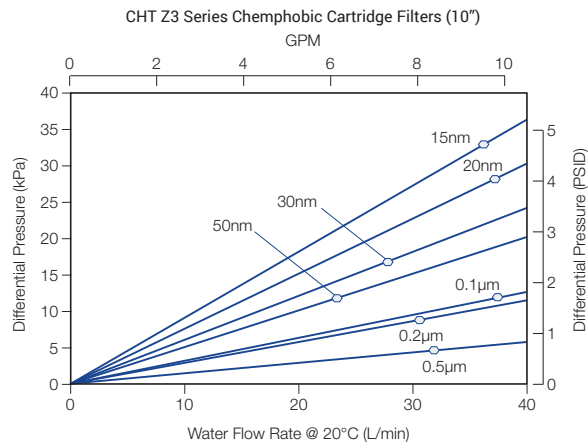
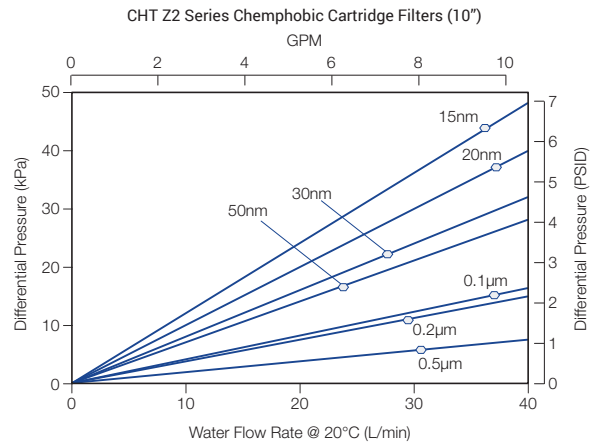
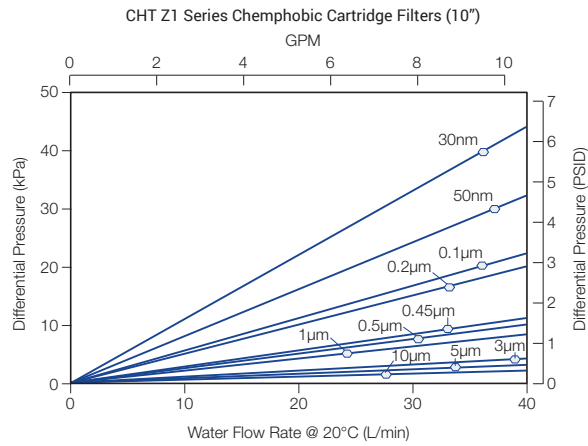
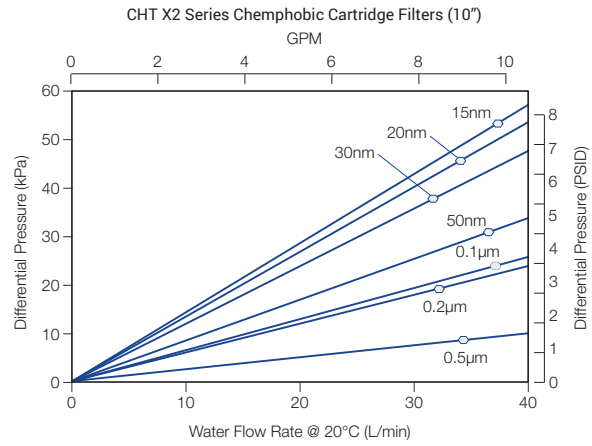
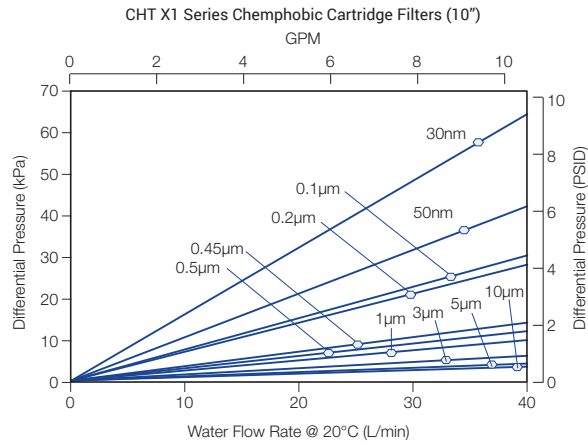
CONNECTION CLTC³ (2-222/FLAT)



Length Code	A	B
10	217.0 ±2 mm (8.5")	237.9 ±2 mm (9.3")

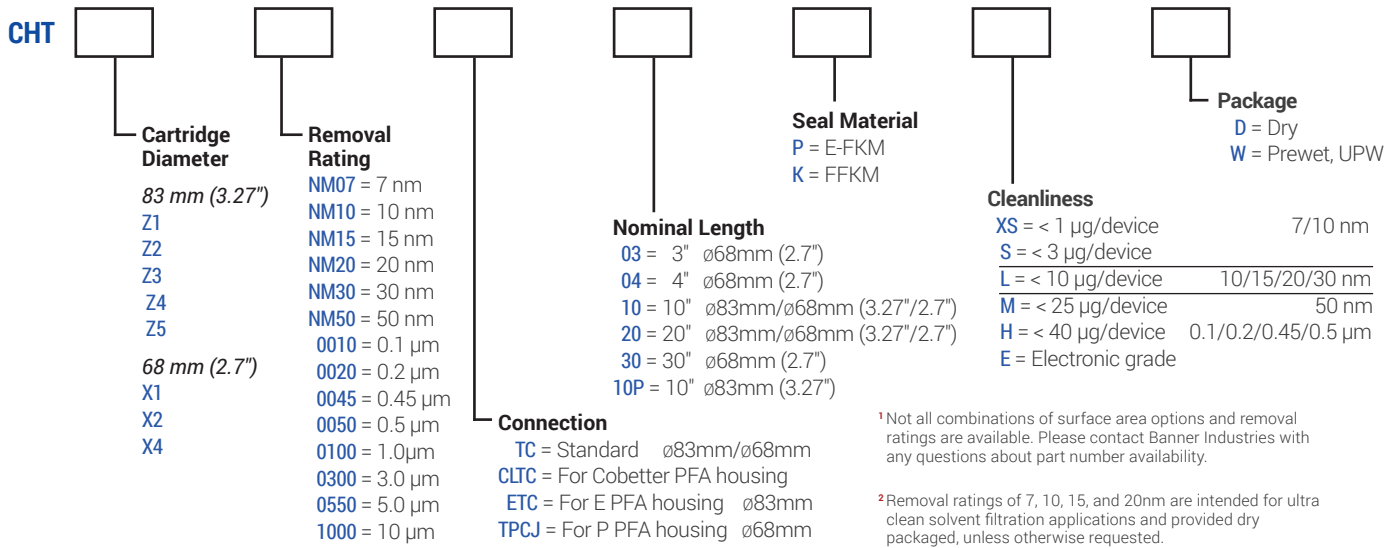
³ Cobetter's CLTC connection is a locking type designed to be used with Cobetter's Fluorolink PFA housing locking feature.

CARTRIDGE FLOW RATES



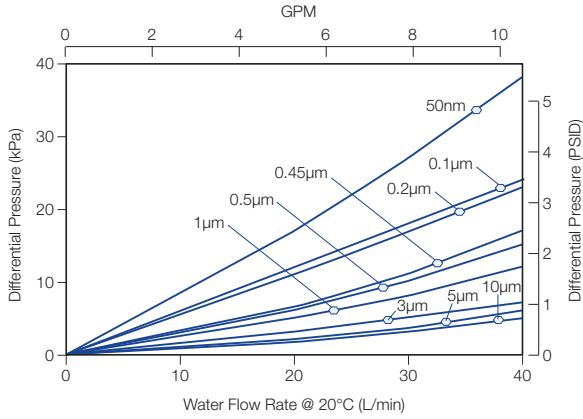
CARTRIDGE ORDERING INFORMATION^{1,2}

EXAMPLE: **CHTZ1NM10CLTC10PLW** = 83 mm, 10 nm, for Cobetter PFA housing, 10", E-FKM seals, < 10 µg/device, prewet

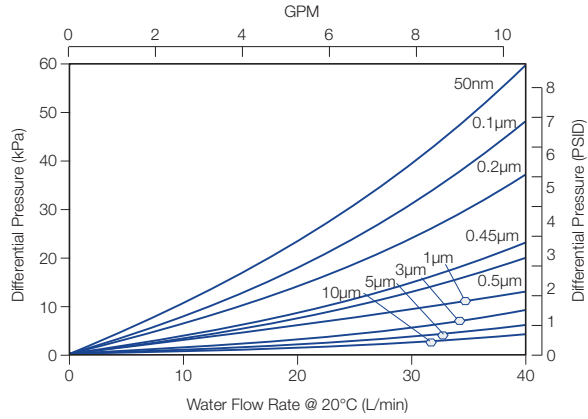


DISPOSABLES FLOW RATES

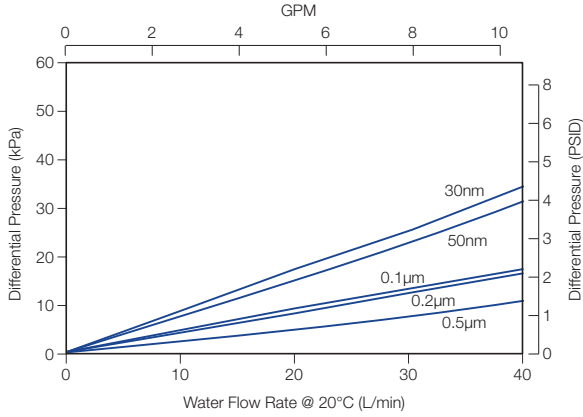
CHT Z1 Chemphobic Disposable with 1" Fitting (10")



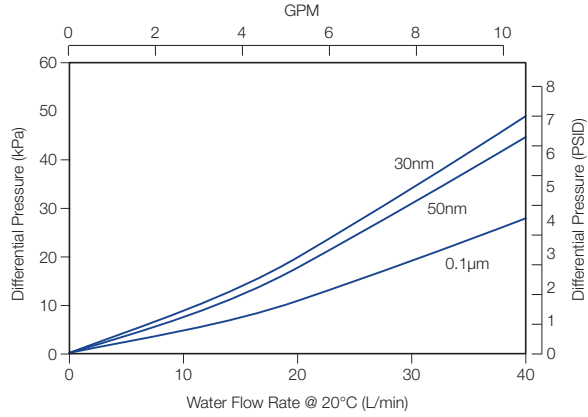
CHT Z1 Chemphobic Disposable with 3/4" Fittings (10")



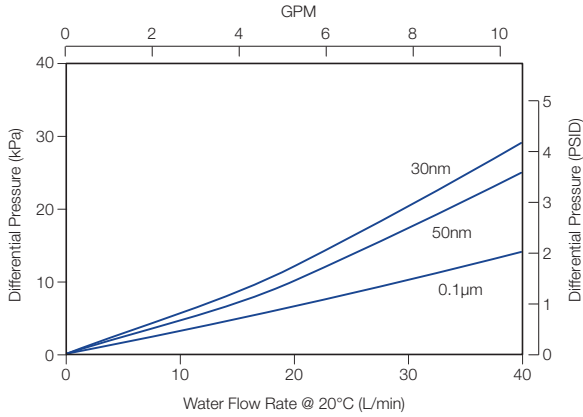
CHT Z2 Chemphobic Disposable with 1" Fitting (10")



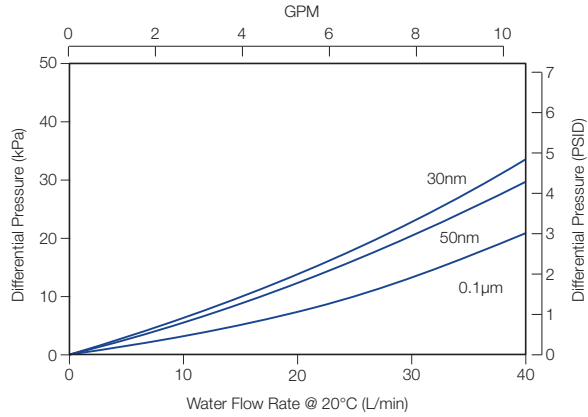
CHT Z2 Chemphobic Disposable with 3/4" Fittings (10")



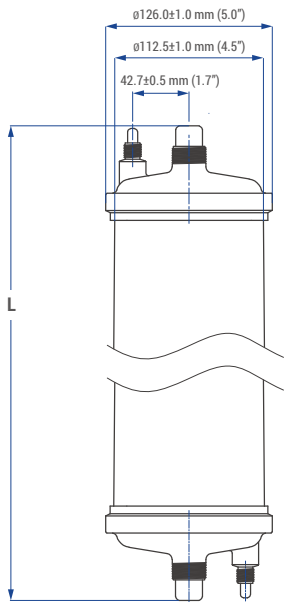
CHT Z3 Chemphobic Disposable with 1" Fitting (10")



CHT Z3 Chemphobic Disposable with 3/4" Fittings (10")



CHEMPHOBIC IN-LINE DISPOSABLE FILTERS



FLARE CONNECTION TYPE NOMINAL DIMENSIONS

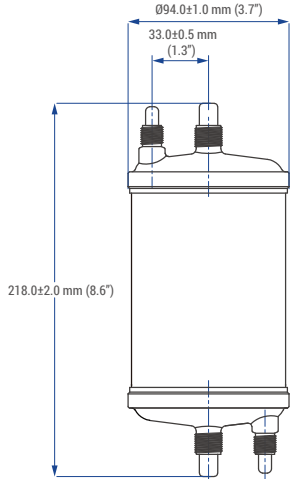
Code	Inlet/Outlet	Vent/Drain	5" Filter L	10" Filter L
F32	3/8"	1/4"	240.0±2.0 mm (9.5")	359.0±3.0 mm (14.1")
F42	1/2"	1/4"	240.0±2.0 mm (9.5")	359.0±3.0 mm (14.1")
F62	3/4"	1/4"	240.0±2.0 mm (9.5")	359.0±3.0 mm (14.1")
F82	1"	1/4"	257.0±2.0 mm (10.2")	376.0±3.0 mm (14.8")

DISPOSABLES ORDERING INFORMATION

EXAMPLE: **CHTZ1N001010F62HW** = Z1 1.3m², in-line, 0.1µm, 10", 3/4" flare, <40ug/device, prewet

CHT	N				W
Cartridge Diameter	Flow Type N = In-line		Nominal Length 05 = 5" In-line only 10 = 10"	Connection F32 F42 F62 F82	W = Prewet
83 mm (3.27"): Z1 Z2 Z3 Z4 Z5		Removal Rating NM30 = 30 nm NM50 = 50 nm 0010 = 0.1 µm 0020 = 0.2 µm 0045 = 0.45 µm 0050 = 0.5 µm 0100 = 1.0 µm 0300 = 3.0 µm 0500 = 5.0 µm 1000 = 10 µm			Cleanliness XS = < 1 µg/device 7/10 nm S = < 3 µg/device L = < 10 µg/device 10/15/20/30 nm M = < 25 µg/device 50 nm H = < 40 µg/device 0.1/0.2/0.45/0.5 µm E = Electronic grade
68 mm (2.7"): X1 X2					

CHEMPHOBIC SMALL IN-LINE X-TYPE DISPOSABLE FILTERS



FLARE CONNECTION TYPE CONNECTIONS

Code	Inlet/Outlet	Vent/Drain
F32	3/8" male	1/4" male
F42	1/2" male	1/4" male

SMALL IN-LINE X-TYPE DISPOSABLES ORDERING INFORMATION

EXAMPLE: **CHTX1XNM5004F42MW** = 50nm, F42 flare, < 25ug/device, prewet

CHT **X** **04** **W**

Filter Area
X1 = 0.42m² (4.5ft²)

Removal Rating
NM30 = 30 nm
NM50 = 50 nm
0010 = 0.1 μm
0020 = 0.2 μm
0045 = 0.45 μm
0050 = 0.5 μm

Connection
Flare:
F32
F42

Cleanliness
XS = < 1 μg/device 7/10 nm
S = < 3 μg/device
L = < 10 μg/device 10/15/20/30 nm
M = < 25 μg/device 50 nm
H = < 40 μg/device 0.1/0.2/0.45/0.5 μm
E = Electronic grade

W = Prewet



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