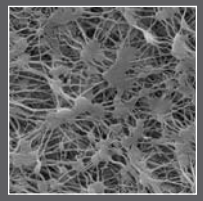
TETPOR LIQUID



- Integrity tested prior to despatch
- Comprehensive range of end cap configurations for retrofitting
- Validated to ASTM F838-83 methodology
- Superior chemical resistance of PTFE membrane combined with polypropylene hardware
- Available in sterilising, microbial and particulate grades

TETPOR LIQUID filters are particularly suitable for sterilisation and particulate removal from aggressive chemicals (including acids, bases and solvents) within a wide range of critical processing industries.

The superior performance, strength and durability of TETPOR LIQUID filters results from the use of a single layer, high security PTFE membrane. TETPOR LIQUID membrane has a high dirt holding capacity due to its high voids volume. This results in low pressure drops and long service life. High flow rates are achieved due to the optimised pleat pack density and the superior design construction of TETPOR LIQUID filters. TETPOR LIQUID filters may be repeatedly steam sterilised or autoclaved up to 135°C, providing the user with assured security of performance.

available formats

Technical Specifications

Materials of Construction

Filtration Membrane	:	PTFE
Upstream Support	:	Polypropylene
Downstream Support	:	Polypropylene
Inner Support Core	:	Polypropylene
Outer Protection Cage	:	Polypropylene
End Caps	:	Polypropylene
Endcap Insert	:	316 Stainless Steel
Standard o-rings/gaskets	:	Viton
Capsule Body	:	Polypropylene
Capsule Vent Seals	:	Silicone
Filling Bell	:	Polycarbonate
Syringe Filter Body	:	Polypropylene

Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177 and current USP Plastics Class VI - 121°C and ISO10993 equivalents.

Effective Filtration Area

Up to 0.75m² (8.1 ft²) per 250 mm (10¨ module).

Retention Characteristics

TETPOR LIQUID Sterilising Grade filters are validated by bacterial challenge testing to methods specified in ASTM F838-83 (10^7 organisms/cm² minimum) with typical in-house challenge levels being 10^{11} per 10 inch module.

Recommended Operating Conditions

Up to 70°C (158°F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature °C	Temperature °F	Maximum Forward dP (bar)	Maximum Forward dP (psi)
20	68	5.0	73
40	104	4.0	58
60	140	3.0	44
80	176	2.0	29
90	194	1.0	15
>100 (steam)	>212 (steam)	0.3	4

Capsules may be operated up to a temperature of 40°C (104°F) at line pressures up to 5.0 bar (72 psig) for liquids and 4.0 bar (58 psi) in air/gas.

Cleaning and Sterilisation

TETPOR LIQUID cartridges can be repeatedly steam sterilised in situ or autoclaved at up to 135°C (275°F). They can be sanitised with hot water at up to 90°C (194°F) and are compatible with a wide range of chemicals. Capsules can be repeatedly autoclaved up to 135°C (275°F).

For detailed operational procedures and advice on cleaning and sterilisation, please contact the Technical Support Group through your usual **domnick hunter** contact.

Integrity Test Data

All filters are flushed with purified water prior to despatch. They are integrity testable to the following limits.

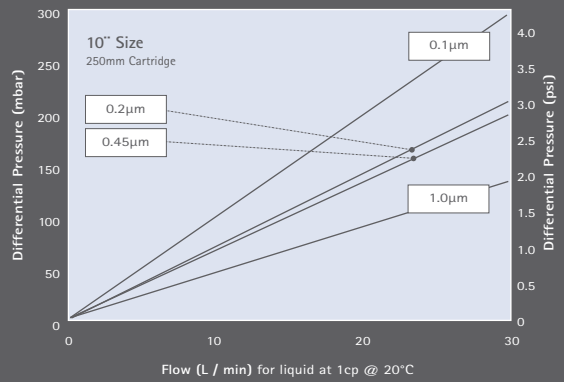
Micron Rating		0.1	0.2	0.45	1.0
Diffusional Flow Test Pressure	(barg)	1.0	0.8	0.6	+
	(psig)	14.5	11.6	8.7	+
Max Diffusional Flow	(ml/min) (10¨)	27.0	18.0	18.0	+
	(K)	12.7	8.5	8.5	+
	(A)	9.0	6.0	6.0	+
	(B)	4.5	6.0	3.0	+

Recommended Rinse Volume

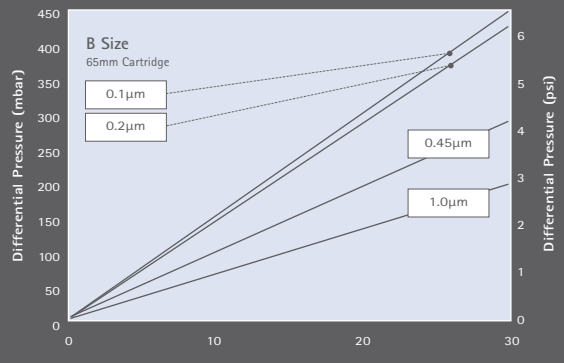
Prior to use - 3 litres per 10¨ cartridge.

Pharmaceutical Validation
A full validation guide is available upon request with Lab Services Group (LSG) support for specific individual requirements.

Cartridge Flow Rates



For K size for a given flow rate multiply 10" size differential pressure by 2



For A size for a given flow rate divide B size differential pressure by 2
For E size for a given flow rate multiply B size differential pressure by 2

Cartridges

ZCMT — [ ] — [ ] [ ] — [ ] [ ]

Code	Nominal Length (mm)	(inch)
B	65	2.5
A	125	5
K	125	5
1	250	10
2	500	20
3	750	30
4	1000	40

Code	Micron Rating
010	0.1
020	0.2
045	0.45
100	1.0

Code	End Cap
B	dh DOE
C	BF/226 bayonet
G	Recess/222
R	BF/222 bayonet
SK	Retrofit
T	TRUESEAL
Y	Dem Stub
Z	Demi A & B Std

Code	Variant
L	Liqud
E	Electronic
P	Pharmaceutical
S	Steam Sterilisable

Code	O-rings
E	EPDM
S	Silicone
V	Viton
P	PTFE

Capsules

ZEMT — [ ] — [ ] [ ] [ ] — [ ] [ ] [ ] — FB

Code	Nominal Length (mm)	(inch)
E	113	4.4
B	140	5.5
A	200	7.9

Code	Micron Rating
020	0.2
045	0.45
100	1.0

For additional micron ratings please contact domnick hunter

Code	Inlet Connection Type
T	1" Tri-Clamp
N	1/2" NPT Male
H	1/2" Hosebarb
G	Stepped Hosebarb
M	1/4" NPT Male
Q	Walther QC
R	Grommel / QC
V	3/8" NPT Male

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T	1" Tri-Clamp
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V	3/8" NPT Male

Code	Variant
P	Pharmaceutical
E	Electronic

Code	Grade
N	Non-sterile

Code	Accessory
FB	Filling Bell*

*with G, H styles only

Code	Specification
3	Pack of 3
X	Polypropylene Conponentry (PROPOR PES)

Syringe Filters

ZSMT — [ ] — [ ] [ ] [ ] [ ] [ ] [ ] [ ]

Code	Diameter
050	050

Code	Micron Rating
010	0.1
020	0.2
045	0.45
100	1.0

Code	Inlet / Outlet Connection
G	Stepped 6mm - 10mm Hosebarb
L	1/8" NPT Male

Code	Variant
P	Pharmaceutical

Code	Grade
N	Non-sterile

Code	Options
S	Standard

Code	Qty in box
025	25 per pack

Discs

ZDMT — [ ] — [ ] A [ ]

Code	Diameter (mm)
013	13
025	25
045	47
090	90
142	142

Code	Micron Rating
020	0.2
045	0.45
100	1.0

Code	Qty in box
X	25
Y	50
Z	100

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