



Pall Corporation



Pall® Kleen-Change® 100 Disposable filter assemblies

Filtration. Separation. Solution.™

PIKC100EN



Pall® Kleen-Change® 100

Disposable filter assemblies

The **Pall Kleen-Change** 100 Series assemblies are a range of completely enclosed, disposable filter units, specially designed to satisfy the very highest standards of filtration security, user convenience and safety.

This assembly range is available with either **Pall** polypropylene Profile® II, nylon **Profile** II, **Profile** Star, Ultipor GF Plus® and Ultipleat® **Profile** media.

Features and Benefits

- Cartridges are completely encapsulated:
Exposure to volatile, hazardous and corrosive fluids is significantly reduced
- Compact design enables easy handling of the unit:
Filter change outs are fast, efficient and safe
- All-polymeric construction:
Can be completely incinerated for safe, easy and economic disposal
- Available in a wide range of **Pall** medias and removal ratings:
Enables optimization of application requirements

Convenience to suit all needs

The **Kleen-Change** 100 Series assemblies are available in a range of sizes catering for a high degree of flexibility in batch size or flow rate requirements. Integral inlet and outlet connections in quick connect styles ensure ease of fitment and minimum downtime.

High Quality Standards

Every **Kleen-Change** 100 Series assembly is manufactured to the very highest standards of quality assurance and cleanliness, and in accordance with BSEN ISO 9001:2000. Total quality is the Pall objective - from product development right through to manufacturing, delivery, sales and service. The **Kleen-Change** 100 Series assembly reflects this philosophy and commitment.

Safety in Solvents

Pall have evaluated the solvents⁽¹⁾ in order to demonstrate that the **Kleen-Change** 100 Series assemblies are an effective and secure method of filtration within the limits of time, temperature and pressure.⁽²⁾

Users should also satisfy themselves that the **Kleen-Change** 100 Series assemblies meet their requirements in terms of process specifications and local Health and Safety Procedures.

⁽¹⁾Compatibility

Pall Kleen-Change 100 assemblies are validated for a wide range of process fluids.

Liquid	Common name
Acetic acid 2 – ethoxyether ester	Cellusolve acetate
Acetic acid – butyl ester	Butyl acetate
2 – Butanone	Methyl ethyl ketone (MEK)
Cyclohexanone	-
1,2 Dichloroethane	Ethylene dichloride
Dichloromethane	Methylene dichloride
Diethyl ether	-
Tetrahydrofuran	THF
Toluene	-
Xylene (mixed isomers)	-
Water	-



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(2) Specification

For fully compatible liquids (those which do not soften, swell or attack the filter assembly) and liquids mentioned on page 2⁽¹⁾. For other liquids please contact Pall.

Maximum allowable time of continuous use	7 days ⁽²⁾
Maximum allowable pressure	4 bar g (58.01psig)
Maximum allowable temperature	30°C (86°F)
Minimum allowable temperature	5°C (41°F)

⁽²⁾ If use is not continuous, maximum allowable time before disposal from start of first use is 7 days.

Warning of Electrostatic Charge Effects

Use of **Kleen-Change** 100 Series filter assemblies with pure hydrocarbon solvents which are flammable and of low electrical conductivity (<50pS/m) may constitute a hazard due to risk of vapour ignition by static electrical discharge. Please contact Pall for further guidance.

Flow Pressure Drop - Filter Cartridges only

Removal Rating	Profile Star mbar/lpm	psi/usgpm	Profile II Polypropylene mbar/lpm	psi/usgpm	Profile II Nylon mbar/lpm	psi/usgpm	Ultipor GF Plus mbar/lpm	psi/usgpm	Ultipleat Profile mbar/lpm	psi/usgpm
1µm	-	-	45.00	2.47	-	-	1.67	0.09	-	-
1.5µm	3.00	0.16	-	-	-	-	-	-	-	-
2µm	-	-	-	-	-	-	0.91	0.05	-	-
4.5µm	-	-	-	-	-	-	-	-	1.52	0.08
5µm	1.70	0.09	15.00	0.82	15.00	0.82	-	-	-	-
10µm	1.00	0.05	6.25	0.34	6.25	0.34	-	-	0.52	0.03
20µm	0.40	0.02	1.80	0.10	1.80	0.10	-	-	0.42	0.02
40µm	0.25	0.01	1.00	0.05	1.00	0.05	-	-	0.30	0.02
70µm	0.18	0.01	1.00	0.05	1.00	0.05	-	-	0.12	0.01
90µm	0.18	0.01	1.00	0.05	1.00	0.05	-	-	-	-
100µm	-	-	-	-	-	-	-	-	0.12	0.01
120µm	-	-	1.00	0.05	-	-	-	-	-	-
YM	-	-	0.50	0.03	-	-	-	-	-	-
YN	-	-	0.50	0.03	-	-	-	-	-	-

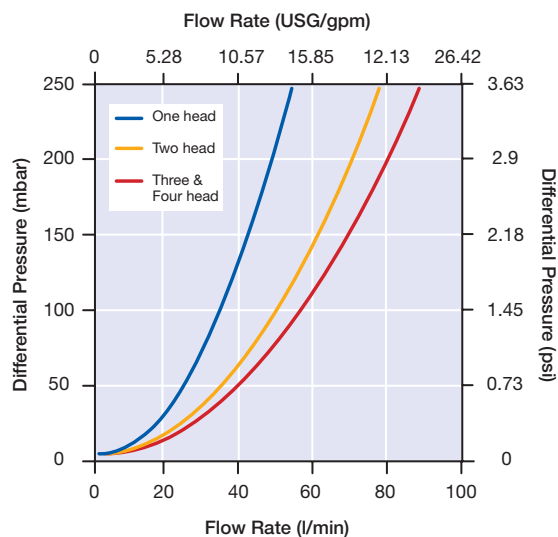
Clean Differential Pressures calculated at either a flow rate of one litre per minute or one USG per minute per 10" module at 1cP.

To obtain the total clean assembly pressure drop:-

- Multiply the pressure drop from the graph above by the same service fluid specific gravity
- Obtain the relevant filter element Δp from the table above
- Correct the filter element Δp for the viscosity of the service fluid and add it to the result from (a) above

Flow Pressure Drop - Assembly only

Test fluid specific gravity 1, viscosity 1cP



For example the total clean Δp for TAY11UY100B at 20 lpm and 1cP:

- Housing Δp , ie 30 mbar @ 20 lpm
- Filter Cartridge clean $\Delta p = 0.52 \text{ mbar} \times 20 \text{ lpm} = 10.4 \text{ mbar}$
- Therefore, the Assembly $\Delta p = 40.4 \text{ mbar}$

For example the total clean Δp for TAY11UY100B at 5.28 USG per minute and 1 cP:

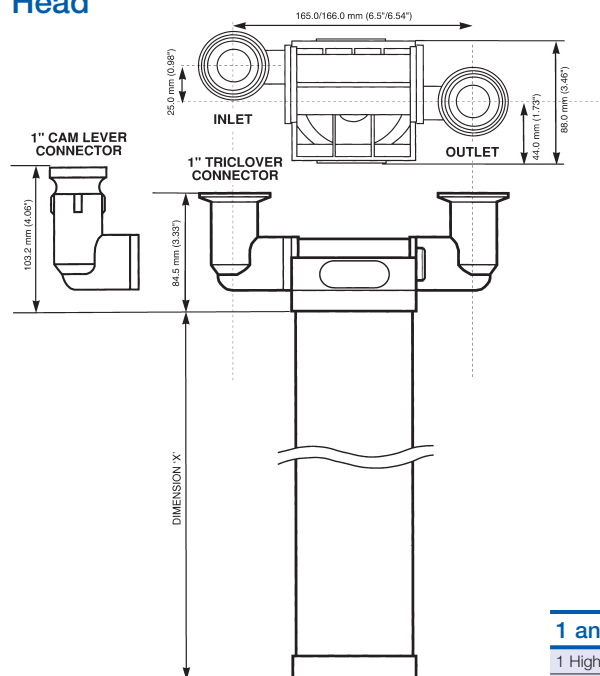
- Housing Δp , ie 0.044 psi @ 5.28 USG per minute
- Filter Cartridge clean $\Delta p = 0.03 \text{ psi} \times 5.28 \text{ USG per minute} = 0.16 \text{ psi}$
- Therefore, the Assembly $\Delta p = 0.59 \text{ psi}$



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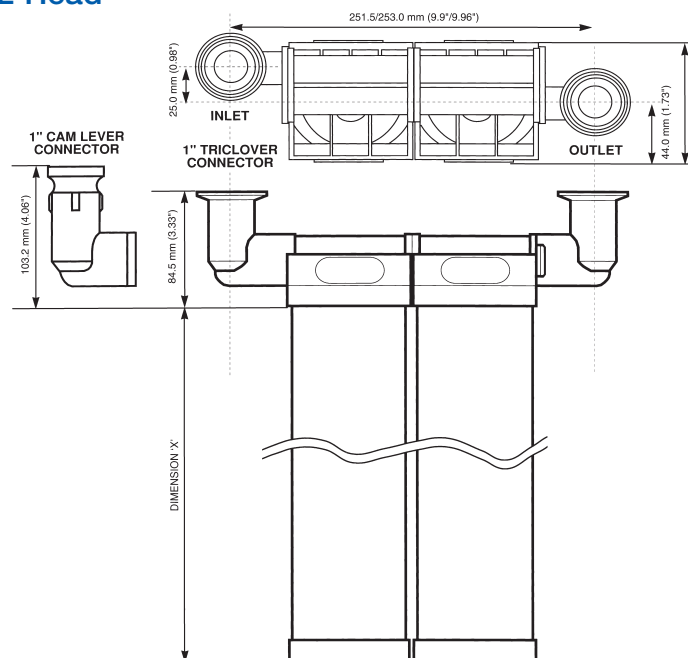
Disposable filter assemblies

1 Head



1 and 2 Head	Dimension 'X'
1 High	269.0/270.0mm (10.59/10.63\")
2 High	526.0/527.0mm (20.71/20.75\")
3 High	773.0/774.0mm (30.43/30.47\")
4 High	1019.0/1020.0mm (40.12/40.16\")

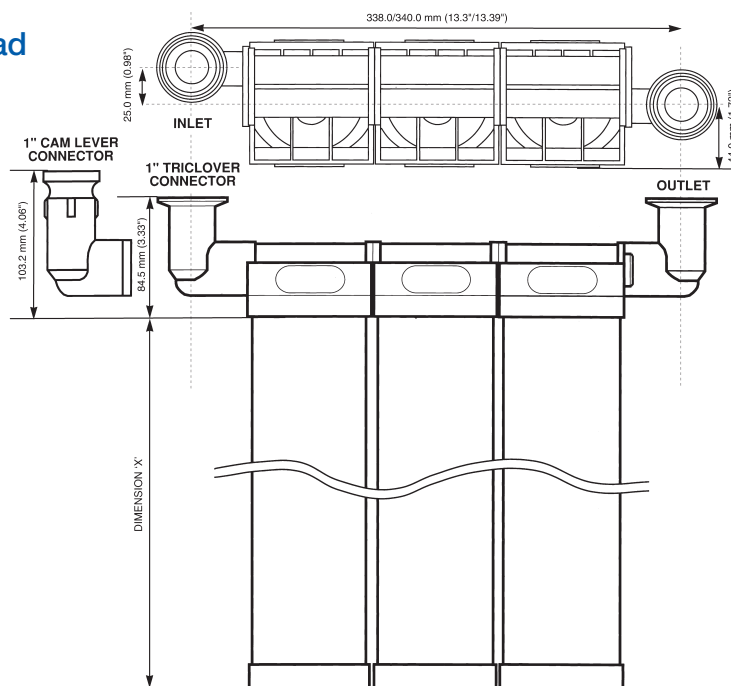
2 Head



Pall® Kleen-Change® 100

Disposable filter assemblies

3 Head

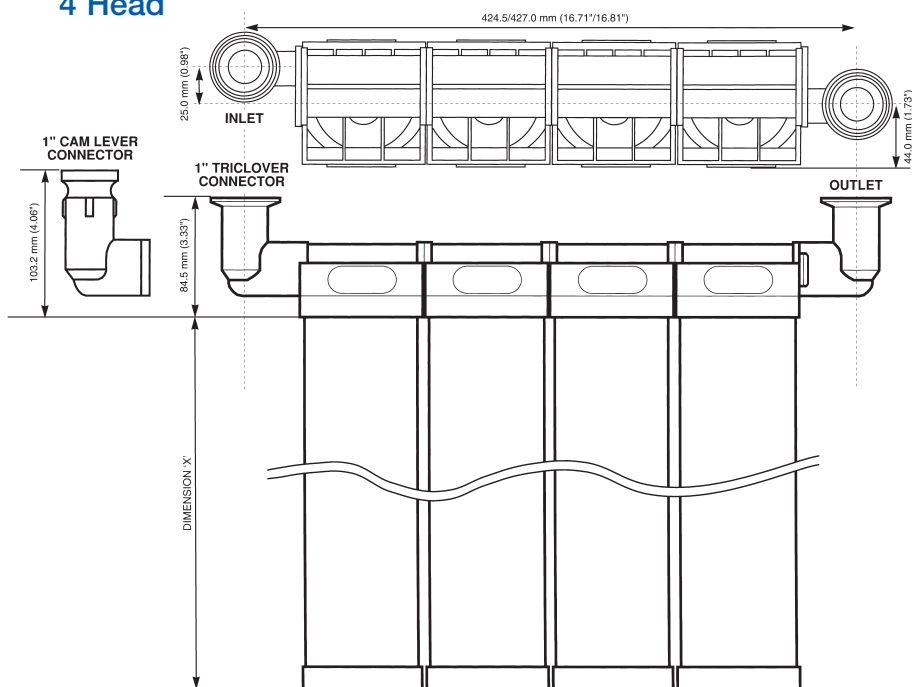


3 and 4 Head

Dimension 'X'

1 High	269.0/270.0mm (10.59/10.63")
2 High	526.0/527.0mm (20.71/20.75")
3 High	773.0/774.0mm (30.43/30.47")
4 High	1019.0/1020.0mm (40.12/40.16")

4 Head



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Disposable filter assemblies

Ordering Information

(This is a guide to the Part Numbering structure only. For specific options, please contact Pall)

Part Number:

TAY    

Note: The assembly is constructed of polypropylene

Example Part Number:

TAY 2 2 A015 B

See bold reference codes in tables

Table 1

Number of Heads
1
2
3
4

Table 2

Code	Nominal Length
1	355mm (13.98")
2	610mm (24.02")
3	860mm (33.86")
4	1105mm (43.50")

Table 3 - Media Code

Removal Rating	Profile Star	Profile II Polypropylene	Profile II Nylon	Ultipor GF Plus	Ultipleat Profile
1µm	-	Y010	-	U010Z	-
1.5µm	A015	-	-	U2-20Z	-
5µm	A050	Y050	N050	-	UY045
10µm	A100	Y100	N100	-	UY100
20µm	A200	Y200	N200	-	UY200
40µm	A400	Y400	N400	-	UY400
70µm	A700	Y700	N700	-	UY700
90µm	A900	Y900	N900	-	-
100µm	-	-	-	-	UY1000
120µm	-	Y1200	-	-	-
-	-	YM	-	-	-
-	-	YN	-	-	-

Table 4

Code	Connection
B	Camlever to MIL spec MIL-C-27487
D	1" Triclover



Pall Corporation

Pall Industrial

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Because of developments in technology these data or procedures may be subject to change. Consequently we advise users to review their continuing validity annually. Part numbers quoted above are protected by the Copyright of Pall Europe Limited.

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