

Pegasus™ Protect

VIRUS PREFILTER MEMBRANES IN MICRODISC CAPSULES

Protecting critical virus filtration

Pegasus™ Protect virus prefiltration combines with Pegasus Prime virus filtration to deliver one of the first gamma-sterilized prefilter and virus filter combinations. Together, they simplify process development, validation and operations, while saving time and delivering process economy.

Process developers can quickly deliver a robust, scalable virus filtration process using a low sample volume, and achieve their virus validation successfully. This choice supports clinical manufacturing with a solution that is easy to use and versatile to work alone or with integrated and automated single-use systems.

Both gamma-irradiated and non-irradiated Microdisc capsules containing Pegasus Protect prefilters are optimized for the confirmation and validation of performance at a small scale, using low volumes of process fluid.

Performance established during small-scale trials can be easily scaled as both Pegasus Protect prefilters and Pegasus Prime virus filters are available in a range of optimized capsule and filter formats which maintain a constant area ratio between prefiltration and virus filtration at all scales.



Fig 1. Pegasus Protect membrane in Microdisc capsule.

Features and benefits

Features	Benefits
Removes filter plugging substances	Reduce plugging of Pegasus Prime virus filters
	Smaller virus filter sizing
	Low cost of goods
	Short processing times
	Robustness to natural process fluid variation
The scale-up range provides a consistent prefilter to virus filter area ratio at all scales	Consistent performance
	Controlling scaling risks
	Fast, simple scale-up and viral validation
Fully disposable capsule with luer lok connections	Easy-to-use, ready-to-use

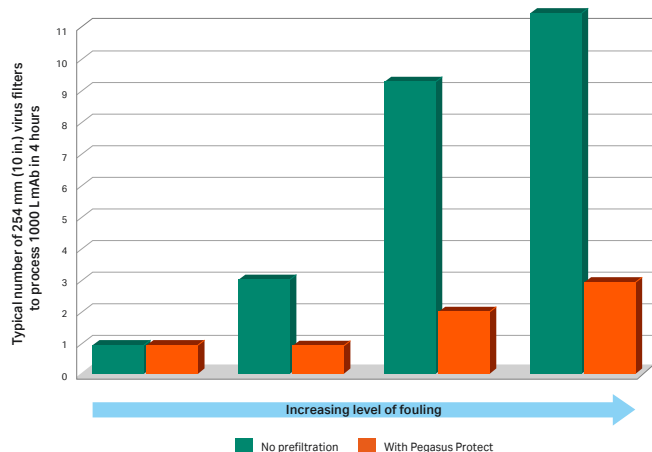




Fig 2. Impact of Pegasus Protect prefiltration on required virus filters per batch.

Scalable solutions

Prefiltration area and flow rate are critical variables that may affect the performance of Pegasus Protect prefiltration and Pegasus Prime virus removal filters when used in combination.

To control these variables, Pegasus Protect prefilters are available in a range of formats, designed to maintain a consistent prefilter to virus-filter ratio. This control ensures predictable and consistent performance at all scales, from the initial Microdisc scale trials to clinical manufacturing.

	Area	Microdisc capsules	Area	Kleenpak™ / Mini Kleenpak capsules
Pegasus Protect prefiltration	3.9 cm ²		286 cm ²	
Pegasus Prime virus filter	2.8 cm ²		204 cm ²	
Area ratio	1.4 : 1		1.4 : 1	

Technical specifications

Materials of construction

Filter membrane	Nylon
Housing, vent plug and support	Polypropylene

Retention ratings

Pore size	0.2 µm nominal
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Effective filtration area (EFA) (nominal)

3.9 cm ²

Operating parameters

Maximum temperature	40°C
Maximum pressure	3.1 bar (45 psi, 0.31 MPa) ⁽¹⁾
Maximum differential pressure	3.1 bar (45 psi, 0.31 MPa) ⁽¹⁾

⁽¹⁾ Up to 12 h at 25°C; up to 6 h at 40°C

Recommended operating conditions

35 mbard (0.5 psid) or 2 mL/min water at 20°C ⁽²⁾
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⁽²⁾ When used with Pegasus Prime Microdisc capsules

Typical hold-up volume (with air purge)

< 125 µL

Dimensions (nominal)

Length	2.0 cm (0.8 in.)
Diameter	3.0 cm (1.2 in.)

Connection type

Female luer lock inlet, male slip luer outlet

Ordering information

Product	Pkg	Product code
Microdisc capsules with Pegasus Protect filter membrane	4 per box	4MCFPRT4
Microdisc capsules with Pegasus Protect filter membrane	12 per box (4 × 3 lots)	4MCFPRT12
Microdisc capsules with Pegasus Protect filter membrane, gamma-irradiated	4 per box	4MCFPRT4R
Microdisc capsules with Pegasus Protect filter membrane, gamma-irradiated	12 per box (4 × 3 lots)	4MCFPRT12R

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