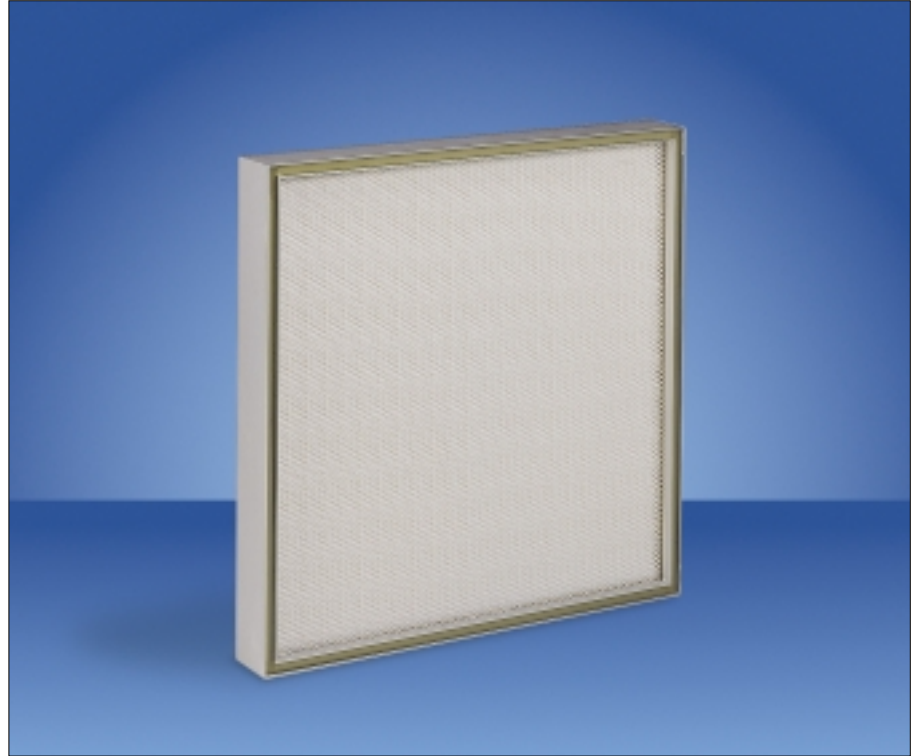


# AstroCel<sup>®</sup> II Fluid Seal

High Quality HEPA and ULPA Filters for Fluid Seal Applications

- Dedicated cleanroom filters
- Filter classes H14, U15, U16 and U17 to EN1822
- Lightweight and easy to install
- Integral fluid groove provides perfect seal
- Filters for ultra clean environments



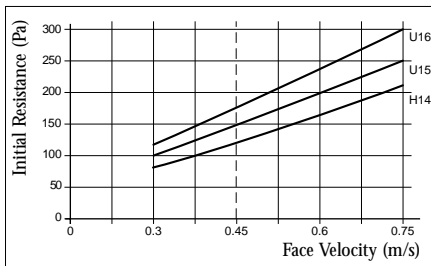
AstroCel II Fluid Seal filters feature an integral groove filled with gel at the air inlet side which ensures a perfect seal in housing systems. Available in classification ranges H14, U15, U16 and U17 in accordance with draft EN1822, these filters meet the stringent contamination control requirements of cleanrooms.

Like all AstroCel II type filters, they are compact, lightweight and easy to install - particularly in terminal hood and fan filter modules.

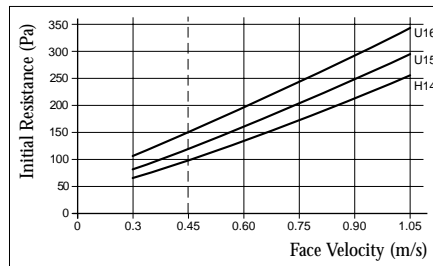
The filters offer the following benefits:

- Factory tested to meet the most stringent legal and industry requirements.
- High efficiency safeguards processes, products and people.
- Functional reliability: leak or scan tested.

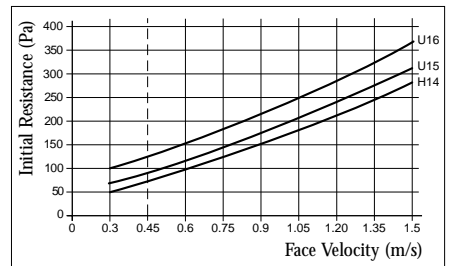
## Resistance vs Face Velocity



Filter depth 80 mm: 48 mm media pack

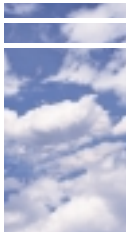


Filter depth 104 mm: 72 mm media pack



Filter depth 128 mm: 96 mm media pack





# AstroCel® II Fluid Seal

An AstroCel II Fluid Seal can be ordered using the following Component Code Definition System. Use the table to specify a product suitable to your application requirements.

## Selection Table

| Item | Component          | Component Code Definition*   |
|------|--------------------|--|
| A    | Media**            | <b>A = Waterproof glass fibre</b><br>E = Waterproof glass fibre<br>M = Waterproof glass fibre  |
| B    | Cell Sides         | <b>96 = Anodized aluminium extrusion with fluid seal</b>   |
| C    | Separators         | <b>C = Thermoplastic</b>   |
| D    | Bond               | <b>9 = Cold cured resin</b>  |
| E    | Gasket             | <b>B = Fluid seal trough</b>   |
| F    | Gasket Location    | <b>2 = One face</b>  |
| G    | Acceptance Level   | <b>R = H14 Min. 99.9995%, @ MPPS acc. to EN1822</b><br>M = U15 Min. 99.9995%, @ MPPS acc. to EN1822<br>N = U16 Min. 99.99995%, @ MPPS acc. to EN1822<br>T = U17 Min. 99.999995%, @ MPPS acc. to EN1822 |
| H    | Faceguard Location | 0 = No faceguard, maximum size 610 x 1220 mm or 762 x 915 mm<br>1 = Non-gasket side only, media pack non-gasket side   |
| I    | Options            | <b>4 = Both sides, media pack non-gasket side</b><br>Consult local sales office  |

\* **Bold typeface:** standard execution  
For Dry Seal or Knife-Edge execution consult specification sheets RA-4-702 and RA-4-742.

\*\* To be determined by AAF engineering.

## How to Order

Below a typical example of how to order a standard AstroCel II Fluid Seal filter using the Component Definition Code System.

| Item                 | A | B  | C | D | E | F | G | H | I |
|----------------------|---|----|---|---|---|---|---|---|---|
| Component Definition | A | 96 | C | 9 | B | 2 | R | 4 | - |

## Standard Sizes and Ratings

| Size in mm <sup>1)</sup> |      |     | Airflow at 0.45 m/s |                   |
|--------------------------|------|-----|---------------------|-------------------|
| H                        | W    | D   | m <sup>3</sup> /h   | m <sup>3</sup> /s |
| 610                      | 610  | 80  | 600                 | 0.16              |
| 610                      | 915  | 80  | 900                 | 0.25              |
| 610                      | 1220 | 80  | 1200                | 0.33              |
| 1220                     | 1220 | 80  | 2400                | 0.67              |
| 610                      | 610  | 104 | 600                 | 0.16              |
| 610                      | 915  | 104 | 900                 | 0.25              |
| 610                      | 1220 | 104 | 1200                | 0.33              |
| 1220                     | 1220 | 104 | 2400                | 0.67              |
| 610                      | 610  | 128 | 600                 | 0.16              |
| 610                      | 915  | 128 | 900                 | 0.25              |
| 610                      | 1220 | 128 | 1200                | 0.33              |
| 1220                     | 1220 | 128 | 2400                | 0.67              |

1) Other sizes available upon request.

### Note:

- Recommended final resistance 500 Pa.
- Temperature limit: 70°C

## Initial resistance table at nominal airflow

| Depth (mm) | Class |     |     |     |
|------------|-------|-----|-----|-----|
|            | H14   | U15 | U16 | U17 |
| 80         | 125   | 145 | 165 | -   |
| 104        | 90    | 105 | 125 | -   |
| 128        | 75    | 80  | 90  | 110 |

## Efficiency

| Efficiency | Efficiency EN1822 |            |
|------------|-------------------|------------|
| @ 0.3 µm   | @ MPPS            |            |
| 99.999%    | H14               | 99.995%    |
| @ 0.12 µm  | U15               | 99.9995%   |
| 99.9995%   | U16               | 99.99995%  |
| 99.99995%  | U17               | 99.999995% |

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