

# FILTER ELEMENT – ALUP

## Alternative filter elements for ALUP

### Series: Multibrand F

### DESCRIPTION

Alup F filter elements have been developed for high efficient removal of solid particles, oil aerosols, water, hydrocarbons, vapours and odours from compressed air.



### FILTER ELEMENT RATING ACCORDING TO ISO 8573-1

| Filtration grade | Solid particles class | Water class | Oil class |
|------------------|-----------------------|-------------|-----------|
| P                | 3                     | /           | 3         |
| G-S              | 2                     | /           | 2         |
| C-D              | 1                     | /           | 1         |
| V                | 1*                    | /           | 0/1       |

Validated according to ISO12500-1, ISO12500-2 and ISO12500-3

### TECHNICAL SPECIFICATION

|  | P                           | G-S                         | C-D                         | V                           |
|--|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Operating temperature                      | 1,5 - 65 °C/<br>35 - 149 °F | 1,5 - 65 °C/<br>35 - 149 °F | 1,5 - 65 °C/<br>35 - 149 °F | 1,5 - 45 °C/<br>35 - 113 °F |
| Operating pressure                         | 0 - 20 barg/<br>0 - 290 psi |
| Differential pressure (dry)                | 20 mbar/<br>0,290 psi       | 50 mbar/<br>0,725 psi       | 80 mbar/<br>1,160 psi       | 60 mbar/<br>0,870 psi       |
| Differential pressure (wet)                | 40 mbar/<br>0,580 psi       | 120 mbar/<br>1,740 psi      | 190 mbar/<br>2,756 psi      | /                           |
| Particle retention (nominal)               | 99,9999%<br>(1 µm)          | 99,9999%<br>(0,1 µm)        | 99,9999%<br>(0,01 µm)       | /                           |
| Particle retention rate ISO <sup>(3)</sup> | 99,8 %                      | 99,98 %                     | 99,998 %                    | /                           |
| Residual oil content <sup>(4)</sup>        | /                           | < 0,1mg/m <sup>3</sup>      | < 0,01mg/m <sup>3</sup>     | < 0,005mg/m <sup>3</sup>    |
| Flow Direction                             | INSIDE to OUTSIDE           | INSIDE to OUTSIDE           | INSIDE to OUTSIDE           | INSIDE to OUTSIDE           |
| Capacity (ISO12500-2) <sup>(5)</sup>       | /                           | /                           | /                           | 20 min                      |

<sup>(3)</sup>Tested according to ISO12500-3, 1bar(a), nominal flow, 06050 R, M, S, MPPS-(0,3µm)

<sup>(4)</sup>Tested according to ISO12500-1, 06050 M, S Oil aerosol viscosity 32mm<sup>2</sup>/s, inlet concentration 10mg/m<sup>3</sup>

<sup>(5)</sup>Tested according to ISO12500-2, 06050 A, tested with n-Hexane, test concentration 100mg/kg, 80% Saturation

### CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s). CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C<sub>OP</sub>

### OPERATING PRESSURE

|                 |      |     |      |      |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| [bar]           | 2    | 3   | 4    | 5    | 6    | 7   | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |
| [psi]           | 29   | 44  | 58   | 72   | 87   | 100 | 115  | 130  | 145  | 160  | 174  | 189  | 203  | 218  | 232  | 247  | 261  | 276  | 290  |
| C <sub>OP</sub> | 0,38 | 0,5 | 0,63 | 0,75 | 0,88 | 1   | 1,13 | 1,25 | 1,38 | 1,50 | 1,63 | 1,75 | 1,88 | 2,00 | 2,13 | 2,25 | 2,38 | 2,50 | 2,63 |

## MATERIALS

|                       | P                         | G-S                       | C-D                       | V                          |
|-----------------------|---------------------------|---------------------------|---------------------------|----------------------------|
| Filter media          | Borosilicate micro fibers | Borosilicate micro fibers | Borosilicate micro fibers | Borosilicate micro fibers  |
| Protection media      | Polyester fleece          | Polyester fleece          | Polyester fleece          | Polyester fleece           |
| Drainage media        | Polyester needle felt     | Polyester needle felt     | Polyester needle felt     | /                          |
| Adsorption media      | /                         | /                         | /                         | Activated carbon granulate |
| Support (inner-outer) | Stainless steel 1.4301    | Stainless steel 1.4301    | Stainless steel 1.4301    | Stainless steel 1.4301     |
| Bonding               | Polyurethane              | Polyurethane              | Polyurethane              | Polyurethane               |
| Endcaps               | PA6 with 30% glass fibers  |
| Sealing               | NBR                       | NBR                       | NBR                       | NBR                        |

## SIZES

| Model*  | Diameter [mm] | Height [mm] | Flow Capacity [Nm <sup>3</sup> /h] | Flow Capacity [scfm] | Fits into filter housing |
|---------|---------------|-------------|------------------------------------|----------------------|--------------------------|
| ALU F1  | 28            | 59,5        | 10                                 | 6                    | F_ - 1                   |
| ALU F2  | 28            | 59,5        | 25                                 | 15                   | F_ - 2                   |
| ALU F3  | 38,5          | 80,5        | 42                                 | 25                   | F_ - 3                   |
| ALU F4  | 38,5          | 80,5        | 54                                 | 32                   | F_ - 4                   |
| ALU F5  | 38,5          | 123         | 85                                 | 50                   | F_ - 5                   |
| ALU F6  | 65            | 120,5       | 119                                | 70                   | F_ - 6                   |
| ALU F7  | 65            | 120,5       | 144                                | 85                   | F_ - 7                   |
| ALU F8  | 65            | 120,5       | 178                                | 105                  | F_ - 8                   |
| ALU F9  | 65            | 205,5       | 212                                | 125                  | F_ - 9                   |
| ALU F10 | 65            | 205,5       | 297                                | 175                  | F_ - 10                  |
| ALU F11 | 72            | 305         | 476                                | 280                  | F_ - 11                  |
| ALU F12 | 72            | 305         | 680                                | 400                  | F_ - 12                  |
| ALU F13 | 83            | 307         | 765                                | 450                  | F_ - 13                  |
| ALU F14 | 83            | 509         | 1189                               | 700                  | F_ - 14                  |
| ALU F15 | 130           | 497         | 1444                               | 850                  | F_ - 15                  |
| ALU F16 | 130           | 497         | 1529                               | 900                  | F_ - 16                  |
| ALU F17 | 130           | 619         | 2125                               | 1250                 | F_ - 17                  |
| ALU F18 | 130           | 769         | 2550                               | 1500                 | F_ - 18                  |

\*Filter cartridge names consist of cartridge size and filtration grade. Place filtration grade designation after filter size (e.g. ALU F1 P).

## MAINTENANCE

P, G-S, C-D - Replace filter element at least once per year or when pressure drop reaches 350mbar V - Replace filter element at least every 6 months



## Strength

- We export to almost 100 countries.
- We have more than 2000 global customers.
- We can provide a total filtration solution.

- Filter-Online & Nordic Filtration offers a wide selection of filtration products for Domestic and Industrial Application.

- You can buy our products on our websites or by contacting us by phone or e-mail. Information about our products as well as brochures and manuals can be found on our websites:

[www.filter-online.com](http://www.filter-online.com) for Domestic Products

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We distribute many of our products from our stock in Denmark. Some products are shipped from remote stock.



Filter-Online & Nordic Filtration ApS  
Glasvænget 6  
5492 Vissenbjerg  
Denmark

**Filter-Online**  
+45 70 40 42 22  
[info@filter-online.com](mailto:info@filter-online.com)  
[www.filter-online.com](http://www.filter-online.com)

**Nordic Filtration**  
+45 72 25 10 00  
[info@nordicfiltration.com](mailto:info@nordicfiltration.com)  
[nordicfiltration.com](http://nordicfiltration.com)