



## ENHANCED PORTFOLIO

# Ahlstrom-Munksjö FilteV<sup>®</sup> Cabin

High performance filtration materials for Electric Vehicles

**Cabin air quality is an increasingly important factor in the design of the new generations of vehicles. By filtering particles, microorganisms and harmful gases, air filters create a healthier cabin environment and improve the driving comfort.**

Ahlstrom-Munksjö provides a reliable range of high performance media for cabin air filters in electric vehicles, which meet up to the most demanding requirements:

- Particulate portfolio protecting against coarse, fine and ultrafine particles, including bacteria and viruses.
- Carbon portfolio combining removal of particles and gases for an increased level of protection.

### Benefits

- ✔ **Enhanced particulate efficiency** – delivering the highest protection against ultrafine particles and microorganisms
- ✔ **Better protection of passengers** – through removal of a wider range of gases, with improved adsorption efficiencies
- ✔ **Excellent pleatability** – delivering highest converting efficiency and best quality filter
- ✔ **Blue media** – newly developed solution for antibacterial and antifungal functionality

## Ahlstrom-Munksjö FilteV® Particulate Cabin

Particulate Cabin portfolio for electric vehicles has been designed to offer the highest protection against ultrafine particles and microorganisms, optimizing the pressure drop and the lifetime of the filter. All filter media have a flame retardant feature (according to FMV55302) for higher safety in use.

**LAT0875** series is a dual layer solution combining a white layer delivering an EPA particulate efficiency with a blue layer providing an excellent pleatability along with an antimicrobial functionality (tested according to ISO846 A & C and JIS L 1902). Two levels of efficiency are available, each of them characterized by a very high permeability.

**KH3212** is an ePTFE membrane based media representing a new generation of cabin air filtration media for electric vehicles which delivers a consistent H13-EN1822 particulate efficiency during the whole life of the filter for the highest protection of the passengers.

| Grades                | Basis weight<br>g/m <sup>2</sup> | Thickness<br>µm | Air Permeability<br>L/m <sup>2</sup> /s @200 Pa | MD Stiffness<br>mg | DIN71460-1, 0.2 m/s                               |                                      |
|-----------------------|----------------------------------|-----------------|---|--------------------|---|--------------------------------------|
|                       |                                  |                 |   |                    | NaCl Initial Fractional Efficiency<br>% at 0.5 µm | Dust Holding Capacity<br>g at 200 Pa |
| <b>LAT0875105NW20</b> | 105                              | 870             | 730   | 600                | 97  | 11                                   |
| <b>LAT0875115NW21</b> | 115                              | 930             | 400   | 650                | 99.97   | 10                                   |
| <b>KH32120004</b>     | 100                              | 290             | 56  | 200                | >99.99  | 8                                    |

## Ahlstrom-Munksjö FilteV® Carbon Cabin

Carbon Cabin portfolio for electric vehicles has been designed to offer an excellent removal of fine particles, enhanced by the adsorption of a wide range of chemical pollutants, for an increased level of protection of the passengers.

**LA1094 series** easily recognized by its blue colour, delivers excellent pleating performances, an optimal adsorption of Volatile Organic Compounds (VOCs) and a unique antimicrobial feature limiting the development of microorganisms on the media (tested according to ISO846 A & C and JIS L 1902). All media are laminated with a high particulate efficiency layer.

**IA350M4** is a newly launched filtration solution implementing a unique activated carbon which delivers an improved adsorption of VOCs for a better protection and longer lifetime, but also widens the range of targeted gases including SO<sub>2</sub> and NO<sub>x</sub>. This media, meeting the highest OE specifications, is combined with an optimal particulate filtration layer delivering up to 75% efficiency on 0.5µm NaCl particles (DIN71460-1) and maintaining a level of pressure drop suitable for most HVAC units.

| Grades                    | Basis Weight<br>g/m <sup>2</sup> | Thickness<br>µm | Air Permeability<br>L/m <sup>2</sup> /s @200 Pa | MD Stiffness<br>mg | DIN71460-1 w/<br>NaCl, 0.2m/s                |                                    | DIN71460-2 w/<br>80ppm 0.1m/s          |
|---------------------------|----------------------------------|-----------------|---|--------------------|--|------------------------------------|--|
|                           |                                  |                 |   |                    | Initial Fractional Efficiency<br>% at 0.5 µm | Carbon Content<br>g/m <sup>2</sup> | Initial Break-Through<br>n-butane<br>% |
| <b>LA1094 340 30 NW04</b> | 340                              | 1,900           | 1,000   | 3,500              | 55   | 185                                | 35                                     |
| <b>LA1094 440 30 NW04</b> | 440                              | 2,200           | 900   | 4,800              | 55   | 300                                | 20                                     |
| <b>LA1094 540 30 NW04</b> | 540                              | 2,700           | 850   | 5,200              | 55   | 400                                | 10                                     |
| <b>IA350M4</b>            | 495                              | 1,700           | 980   | 7,000              | 75   | 350                                | 5                                      |

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