

# **Ahlstrom FiltEV® Cooling**

# High performance filtration materials for Electric Vehicles

Effectiveness and lifetime of battery pack, fuel cell units and e-motors in electric vehicles highly depends on the ability to keep them in a narrow temperature window whatever the conditions of use.

Ahlstrom provides a wide range of high performance filtration media for cooling air and liquids which guarantee a smooth and safe operation of the thermal management unit:

- High permeability air filtration media preventing wear and clogging of the system by particles.
- Proprietary full synthetic 3-layer media with a wide range of efficiency covering most cooling oil filtration requirements.

#### **Benefits**

- Highest filtration performances low differential pressure and an optimal protection of the thermal management unit
- Extreme durability fully synthetic structure with superior media integrity providing reliability even with aggressive oils
- Superior dust holding capacity gradient depth filtration solutions increasing service intervals
- Fits with recent EV concepts offer filtration solutions for immersion cooling and eAxles

### Ahlstrom FiltEV® Cooling Air

Air filtration media for battery cooling systems offers a reliable removal of coarse particles with a very low pressure drop and an excellent dust holding capacity. The full synthetic structure and the flame retardancy feature (F1 according to DIN53438) guarantee durability and safety in real conditions of use.

	Basis Weight	Thickness	Air Permeability	MD Stiffness	ISO16890 Class	Dust Holding Capacity
Grades	g/m²	hw	L/m²s @200Pa	mg	-	g/m² at 200 Pa
T876 80	80	700	4,750	800	Coarse 70%	65

## **Ahlstrom FiltEV® Cooling Oil**

Based on our proprietary 3-layer wetlaid technology platform, Cooling Oil media deliver a unique combination of high dust holding capacity and low differential pressure for a wide range of particulate efficiency. The full synthetic structure guarantees an outstanding resistance to ageing in challenging conditions, along with an excellent mechanical stability for the highest reliability of thermal management system.

All Cooling Oil media can be provided laminated with a PBT mesh, for an extended mechanical resistance and an optimal pleat stability in most severe conditions of use.

		Basis Weight	Beta 200* (99.5%)	Thickness	Permeability	Burst Strength	Stiffness
Grades	Media Structure	g/m²	hw	hw	L/m²/s	kPa	mg
K891 170	3-layer	170	50	1050	650	1300	4000
K1982 120	3-layer	120	100	850	1400	940	1700
K1160 150	3-layer	150	140	1100	2100	1200	4900
K876 140	3-layer	140	180	1100	2700	1200	3600

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