AEROCEL-3V

3V-shape Filter · ABS Frame Series · EN779 / MERV / ISO 16890

FILTLAB® FILTRATION SOLUTIONS



DESIGN FEATURES & ENGINEERING NOTES

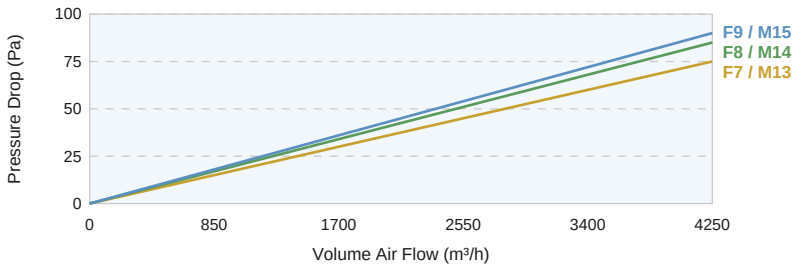
V-Pocket Geometry Optimised 3V-shape maximises effective filter media area per unit footprint, reducing airside resistance and extending service intervals.	**ABS Thermoplastic Frame** Chemically inert ABS provides dimensional stability across wide thermal cycles without corrosion, swelling or outgassing.
Metal-Free Construction Hot-melt pleat separator and zero metallic components eliminate galvanic corrosion risk in humid or chemically corrosive airstreams.	**Positive Sealing System** Polyurethane sealant bonded to Neoprene gasket delivers verified zero-bypass performance at rated housing compression torques.
Incinerateable Design Fully incinerateable filter body simplifies disposal per EU waste incineration directives — no hazardous ash or metallic residue.	**Wide Environmental Range** Rated to 80°C and 100% RH enabling reliable deployment in AHU, pharmaceutical cleanroom and marine HVAC applications.

PERFORMANCE MATRIX — EN779 TESTED · MERV / ISO 16890 EQUIVALENT

Nominal Size W×H×D (in)	Actual Dims (mm)	Air Flow (m³/h)	ASHRAE 52.2	Avg Efficiency @0.4 µm (%)	EN779	ISO 16890	ΔP Initial (Pa)	ΔP Final (Pa)
24×24×12	592×592×292	3,400	MERV 15	>95	F9	ePM1 ≥80%	90	450
12×24×12	287×592×292	1,700	MERV 15	>95	F9	ePM1 ≥80%	90	450
24×24×12	592×592×292	3,400	MERV 14	90–95	F8	ePM1 ≥65%	85	450
12×24×12	287×592×292	1,700	MERV 14	90–95	F8	ePM1 ≥65%	85	450
24×24×12	592×592×292	3,400	MERV 13	80–85	F7	ePM2.5 ≥65%	75	450
12×24×12	287×592×292	1,700	MERV 13	80–85	F7	ePM2.5 ≥65%	75	450

Measurement Method: EN779:2012 | MERV & ISO 16890 = equivalent (Eurovent REC 4/23) | Initial Resistance ±10% | Other sizes available upon request

PRESSURE DROP vs. AIRFLOW (592 × 592 mm)



BILL OF MATERIALS & OPERATING CONDITIONS

Frame	ABS Thermoplastic	**Max. Temperature**	80 °C
Filter Media	Glass Fiber	**Humidity Limit**	100% RH
Separator	Hot Melt Adhesive	**Fully Incinerateable**	Yes
Sealant	Polyurethane	**Test Standard**	EN779 (MERV / ISO equiv.)
Gasket	Neoprene	**Test Aerosol**	0.4 µm
Metal Parts	None (metal-free)	**Applications**	AHU / Cleanroom / HVAC

APPLICATION SELECTION GUIDE

EN779 / MERV	ISO 16890	Typical Application	Contaminants Removed	Pre-filter
F9 / MERV 15	ePM1 ≥80%	Pharmaceutical / Hospital OR Cleanroom ISO 7–8	Fine dust, bacteria, sub-micron particles	M5/M6 mandatory
F8 / MERV 14	ePM1 ≥65%	Commercial HVAC Data centres	Fine dust, pollen, mould spores	M5 recommended
F7 / MERV 13	ePM2.5 ≥65%	Industrial / Offices Retail & transport	Coarse/medium dust, pollen, fibres	G4 minimum