

# PTFE HEPA/ULPA Minipleat

ULPA Filters U15 99.9995%@0.1-0.2um to U16 99.9999%@0.1-0.2um



## General Characteristics

As pioneers in synthetic pleating and filters, ePTFE ULPA filters are new innovative products researched to provide 40% lesser initial pressure drop than traditional fibreglass. Boron Free, extreme low outgassing, chemical & water resistant and optional design with temperature up to 200degC. Thus can use lesser media area to achieve slim minipleat (MP) design of 50mm. Available with Aluminium Separator (Alsep) filters 150mm, 292mm They are used in clean rooms & equipment, laminar flow cabinets, Fan Filter Units for a localised contamination control, corrosive and higher temperature environment. Mainly in wafer electronics clean rooms and production.

## Specifications

Model	U5BP		U5MP		U6MP	
Description	ULPA AlSep		PTFE ULPA MP		PTFE ULPA MP	
Efficiency at 0.3um or MPPS	99.995/ 99.9995%@0.1-0.2um		99.9995%@0.1-0.2um		99.99995%@0.1-0.2um	
Frame Thickness (Pleat Height) mm	150	290	50 (35)	70 (50)	50 (35)	70 (50)
Rated Airflow cmh 600x1210mm * Rated Airflow at 0.45 m/s, *2.5m/s	*1620	*3400	1200	1200	1200	1200
Initial Pressure Drop Pa	125 / 140	175 / 200	80	50	100	60
Filter Class to EN1822	H14 / U15		U15		U16	
IES RP-CC-001.3	Type D/ Type F		Type F		Type G	
EN1822 MPPS Global/Integral @0.1-0.2um	≥99.9995%		≥99.9995%		≥99.99995%	
PAO/ DOP/PSL @ 0.3um	≥99.9999%		99.9999%		-	

Performance data is based on IEST-RP-CC-001.6 and EN1822. Test methods incl IEST-RP-CC034.4 HEPA & ULPA Filter leak tests, IEST-RP-CC006 Airflow, NSF49 Biosafety Cabinetry are used in conjunction. Only Quality Conformed and test report results of HEPA/ULPA will be affixed with label on HEPA Filter. MPPS: Most Penetrating Particle Size at 0.1-0.2um or 0.2-0.3um, mean mass particle of 0.3um Gasket of 5mm thickness are provided downstream of filters. Optional both sides gaskets can be requested. Filter can be installed any direction depending on site, direction on label for reference  
\*\*Traditional DOP has been replaced using with other non-toxic suitable aerosols challenge like PAO/Emery Oil/PSL.

## Technical Data

<b>Filter Media</b> PTFE (synthetic), water and chemical resistant Boron Free
<b>Enclosing Frame</b> Extruded Aluminium (Al), Stainless Steel 304 (SS)
<b>Faceguard</b> Nil, Optional Aluminium (Al)
<b>Separator</b> Minipleat: Hotmelt or Plastic Fingers AlSep: Aluminium Separator
<b>Sealant</b> Polyurethane High Temperature Option HT AlSep U5BH: Red Silicone
<b>Gasket</b> Neoprene HT (high temp option) U5BH: Red Silicone
Continuous Operating Temperature 60°C HT option Temperature up to 180°C
Relative Humidity 90%
Recommended Final Pressure Drop 250 Pa
Maximum Final Pressure Drop 500 Pa

## Dimensions

Actual Size L x W x D  in mm	Rated Air Flow m <sup>3</sup> /h	Media Area m <sup>2</sup>	Nett Weight kg	Packing per carton
	Face Velocity at 2.50 m/s			
305x305x150	405	3.2	4.6	8
305x610x150	810	6.5	7.0	4
610x610x150	1620	13.1	10.0	2
305x305x290	850	4.2	5.0	4
305x610x290	*1700	8.5	9.0	2
610x610x290	*3400	17.0	14.0	1
	at 0.45m/s			
305 x 610 x 50	300	3.8	2.8	10
610 x 610 x 50	600	7.9	4.0	5
610 x 914 x 50	900	11.8	5.0	3
1210 x 600 x 50	1200	15.5	6.7	3
1170 x 570 x 50	1100	13.7	6.3	3
305 x 610 x 70	300	5.5	4.0	8
610 x 610 x 70	600	11.3	5.6	4
610 x 914 x 70	900	16.9	7.2	2
1210 x 600 x 70	1200	22.2	9.5	2
1170 x 570 x 70	1100	19.6	9.0	2

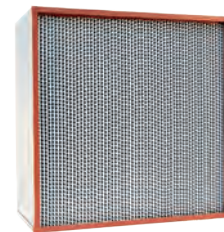
Other sizes can be customised, rated airflow in proportional to face area of 610x610.

Standards for Reference

1. IEST-RP-CC-001.6, IEST-RP-CC034.4 PAO/P.S.L Overall Testing 99.97-99.9999% at 0.3um

2. EN1822-5 for Classes H14,U15,U16 3. IEST-RP-CC-007 Type F/G/H/I/J/K 4. IEST-RP-CC-001, for TYPE A/B/C/D

Each single filter media roll used in production is systematically tested in accordance with standard EN 1822-3. In accordance to Recommended Practice, IEST-RP-CC-001 w CC034/ EN1822-4 & 5, at the end of the production, individual filter element is locally scanned tested for leaks/penetration by using non-toxic suitable aerosol of PAO/Emery Oil/ polystyrene latex spheres (PSL) challenge by using aerosol photometer or particle counter and determining filter efficiencies. Global efficiency can also be determined measuring upstream and downstream concentration. For IEST-RP-CC-007/ EN1822-4 & 5, MPPS is determined and for rating above H12, individual filter is locally scanned tested for leaks/penetration using particle counter to determine the global efficiency. The pressure loss is also determined. The filter test results are recorded on labels and affixed onto the HEPA filter.



HT High temperature to 180degC  
Boron free ULPA Al-Sep  
Model: U5BH