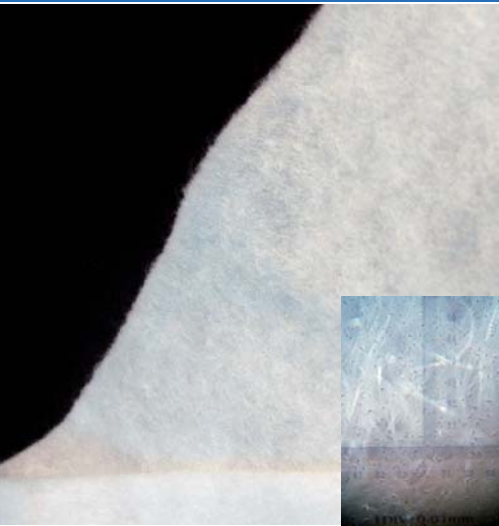


IF ES ElectroStatic Pleated Disposable

MERV11 Primary Filters



General Characteristics

ES Electrostatic Pleated disposable filters are made with 100% synthetic needle punched and electrostatically charged media during media manufacturing. The electrostatic charged filter has a tremendous increase efficiency in the range of particles of 1-3 micron size.

ES Pleated Disposable is of extended surface and fully disposable. They can be used as primary or pre filters in Fan Coil Units (FCU), Air Handling Units (AHU) or Fresh Air Fans (FAF) in both new or existing air filtration system. The flat media pad can also be used as filter in split units to prevent dust build up in the coils. The pleated filter has greater extended surface allowing higher dust holding capacity and longer replacement intervals compared to flat panel filters. It is used as a pre-filter which considerably extends the life of other secondary filters in the filtration system. The higher efficiency filter greatly prevents dust build-up on heating and cooling coils, fans and duct.

Model: ES65 M

Description: Electrostatic Media 30-40%
Actual Size: 595 x 595 x 2mm



Model: ES65 IF

Description: Electrostatic Pleated 40-45%
Nominal Size: 24 x 24 x 2" (LxWxD)
Actual Size: 595 x 595 x 45mm (LxWxD)

Construction

ES Electrostatic filter media comprises electrostatically charged 100% synthetic media. Independent tested against ASHRAE 52.2, the ES Pleated 40-45% can achieve MERV 11 value with Average Composite Particle Size Efficiency is 65-85% (1.0-3.0um).

The raw material is antimicrobial and it is a byproduct of the manufacturing process of the filter media. The antimicrobial feature inhibit the growth and reduce the microorganisms like bacteria, fungi on the filter media which may otherwise deteriorate the filter integrity.

The media support is an expanded diamond grid with an effective open area of not less than 98%. The corrosion resistant wire grid is laminated to the filter media to maintain pleat shape and reduce media oscillation.

The radial V pleat design ensures the maximum use of the filter media as well as maximising the dust holding capacity and extending the service life.

The enclosing frame is constructed of a rigid, heavy duty kraft board with diagonal support members bonded to each pleat upstream and downstream side to ensure pleat spacing and stability. The filter pack is bonded to the enclosing frame to eliminate the possibility of air bypass. Pleat stabilisers are included for 4" filters to ensure pleat spacing and rigidity.

Optional galvanised steel or aluminium Frame is available with corrosion resistant expanded GI mesh as downstream air face support.

Technical Data

Filter Media Polypropylene Synthetic Blend, Electret Media	
Enclosing Frame Heavy Duty Moisture-resistant Kraft board Option: Galvanised Steel/ Aluminum with Downstream face Expanded Mesh	
Sealant Water based adhesive	
Continuous Operating Temperature	80°C
Relative Humidity	90%
Recommended Final Pressure Drop	150 Pa
Maximum Final Pressure Drop	250 Pa

Specifications

Model	ES65 IF			ES65 M
	ES Pleated 40-45%			ES Media 40-45%
Nominal Thickness	1"	2"	4"	2mm
Rated Air Flow cmh	2000	3400	3400	1000
Face Velocity m/s	1.5	2.5	2.5	0.75
Face Area m ²	0.372	0.372	0.372	0.372
Initial Pressure Drop Pa	65	90	75	40
Filter Class EN779 / Eurovent 4/4	F5 / EU5			F5 / EU5
ASHRAE 52.76 Average Dust Arrestance Efficiency	95%			92%
ASHRAE 52.1-1992 Average Dust Spot Efficiency	35-40%			30-40%
ASHRAE 52.2-1999	MERV 11			65-85% @ 1-3micron
Media Area m ²	8.8	17	27	0.37
Pleats per 24x24"	28	28	21	NA

Different test methods are provided for comparison and information