

## HEPA Cassette Filters (H11, H12, H13, H14 to EN1822)

### Applications

The Cassette (HEPA) filter offers an economical method of installing a HEPA Filter into a Cleanroom, offering an alternative to the HEPA Terminal Housing. The Cassette HEPA Filter can also be used to create a Laminar Flow Cabinet or a specific application with the minimum of engineering.

Applications include clean rooms, operating theatres, research facilities, the electronic and micro-electronic industries, nuclear and pharmaceutical industries and high speed turbines.

### Description

The HEPA Cassette Filter ensures it yields only clean filtered air from the filter face when connected to a duct system or fan via its spigot connection on the rear of the filter. This is without the concerns of clamping pressures, gasket seals and the quality of the sealing mating face, associated with the traditional Terminal Housing. Once connected, only filtered air can leave the filter, as it has been factory tested and the cassette casing is the integral case of the HEPA filter as well.

The HEPA Cassette Filter can have either a knife edge seal, or alternatively a flanged seal complete with neoprene gasket. As standard a white powder coated grille is incorporated into the face of the filter to offer good mechanical protection to the HEPA filter pack.

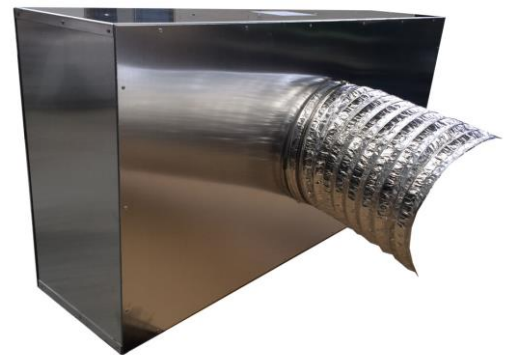
The filter pack is sealed within the HEPA Cassette and has a 300mm overall depth providing a suitable plenum behind the filter for air distribution.

The overall size of the HEPA Cassette Filter can be reduced to 145mm, by utilising a mini pleat filter pack, and in a few specifically engineered designs the traditional 292mm pack can be used giving an overall height of 500mm for the cassette.

### Technical

HEPA Cassette Filters can be provided to efficiencies and performance as shown below:

Grade	Overall Efficiency	Local Value Efficiency	Suggested for ISO 14644 : 1999
H11	95%	-	
H12	99.5%	-	ISO Class 8
H13	99.95%	99.75%	ISO Class 6
H14	99.995%	99.975%	ISO Class 5
U15	99.9995%	99.9975%	ISO Class 4



References are typically:

AA/H14/FL/GR/CASS for an aluminium cased, Aluminium separator grade H14 and a 20mm flange with a white powder coated grille.

AA/H13/K/CASS for an aluminium cased, Aluminium separator grade H13 and a 40mm knife edge protruding below the filter pack.

## Extras

A simple damper can be installed in the neck of the spigot for flow adjustment.

DOP Insertion Points can be added into the plenum of the cassette to facilitate DOP to be introduced into the filter for In-situ leak testing

Pressure tapping points can be included in the cassette for measuring upstream filter pressure.

CASSETTE FILTERS H14 300 Dia Spigots as standard						
Actual Sizes mm			Flow Rate	PD	AA/H14/K or FL	
H	W	D	m <sup>3</sup> /s	Pa	Style	Part No.
508	508	315	0.16	250	Knife Edged Cassette	1513101
585	585	315	0.20	250	Knife Edged Cassette	1513102
609	609	315	0.24	250	Knife Edged Cassette	1513103
585	1185	315	0.40	250	Knife Edged Cassette	1513104
508	508	315	0.16	250	Flanged Cassette	1513107
585	585	315	0.20	250	Flanged Cassette	1513108
609	609	315	0.24	250	Flanged Cassette	1513109
585	1185	315	0.40	250	Flanged Cassette	1513110

\* Tolerance on dimensions stated: Height and Width +0 - 3mm

\* Non Standard sizes are available