

FT3 fully-supported deep bed air filter

Description:

Filterfit's FT3 deep bed air filter, is a fully-supported, 3 pocket filter which provides economical, medium to high efficiency filtration, with a low operating pressure drop. The unique pocket design of the FT3 together with the internal full depth bag support frame, ensure that the maximum filter area is utilised, providing excellent dust holding capacity and extended service life. FT3 deep bed filters are easily constructed in banks of multiple filters to suit any given air capacity.

Construction:

FT3 deep bed filters consist of a replaceable filter bag, galvanised steel permanent mounting frame and a removable galvanised inner wire bag support frame. Permanent mounting frames are nominally 50 mm in depth. Filter bags are firmly held in place by the removable inner support frame, which clips into the permanent mounting frame and provides a positive seal between the filter media and the mounting frame. Standard FT3 deep bed filters are constructed whereas service access is on the dirty air side of the filter. Reverse access filters are also available on request. Filter mounting frames and inner wire support frames can be supplied with a powder-coated finish or can be manufactured from stainless steel if required.

Filter Media Types:

FT3 deep bed filters can be supplied with a range of filter media to suit each application. Filter media available include medium efficiency washable type BR16, and high efficiency 2 stage BR9/BR13 which is effective at removing cigarette smoke.

Application:

Due to the range of filter media available and the extended service life of the FT3 deep bed



filter, the filter is ideal for a complete range of applications including general air conditioning and ventilation systems, process air systems and industrial applications.

Dimensions:

Filters are available in standard sizes of:
610 x 610 x 600mm
610 x 305 x 600mm

Installation:

FT3 deep bed filters are easily installed by fixing permanent mounting frames to filter plenums and can be made up into banks by riveting or bolting mounting frames together. It is recommended that an approved sealant be applied between mounting frames and between mounting frames and plenum walls to prevent air by-pass. Where bank sizes exceed 2.0 metres it is recommended that stiffeners are installed to prevent distortion of filter frames.

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Maintenance and service:

Due to the high dust holding capacity of the FT3 deep bed filter, it is recommended that a manometer be installed across the filter bank, so that optimum filter life is achieved. When replacing filters it is recommended that the fan is switched off so as no dust, which may dislodge from the dirty filter, is drawn through the system.

Care should be taken to ensure new filter bags are of the same efficiency and performance of the existing original filter, as replacing with filters of lesser performance may be in breach of local building codes.

When airflow is restricted due to build up of dust, removal and replacement of the dirty filter bag is easily carried out. The inner wire support basket is removed by pushing the handles toward each other and withdrawing the inner from the clips. The contaminated filter bag is then easily removed and should be placed immediately in a sealed bag to prevent any contaminate from spilling out.

Place the replacement filter bag over the inner frame support and insert both the filter bag and inner frame into the mounting frame ensuring a seal is formed between the media and the mounting frame and that the handles are firmly fastened into the mounting frame.

Performance data:

Fractional efficiency test based on AIRAH researched method

The following result was obtained by the use of a calibrated laser particle counter and ambient air dust utilising BR10 filter media.

Test filter size: 553 x 553mm, test flow rate: 551 l/sec

Particle size range, microns				Inferred AS1234 no. 1 dust efficiency
0.3 - 0.5	0.5 - 1.0	1.0 - 5.0	5.0 +	
19.70%		63.30%		21%
Avg. upstream count, particles per litre				
431,720	29,219	7,282	204	

Summary: test results indicate that the AS1234.1 rating would be at least F5

Part no. (bag only)	Dimensions (mm) W x H x D	Filter class	Media type	Face velocity m/sec	Air capacity l/sec	Initial resistance Pa.	Min. eff.	Avg. eff.	Avg arrestance %
1-3007	595 x 595 x 600	G3	BR16 wash.	2.5	944	30	*	*	85.5
1-3017	595 x 297 x 600	G3	BR16 wash.	2.5	471	30	*	*	85.5
1-3003	595 x 595 x 600	F5	BR10 disp.	2.5	944	27	22	40	90
1-3013	595 x 297 x 600	F5	BR10 disp.	2.5	471	27	22	40	90
1-3004	595 x 595 x 600	F5	BR12 disp.	2.5	944	50	28	50	91.5
1-3014	595 x 297 x 600	F5	BR12 disp.	2.5	471	50	28	50	91.5
1-3012	595 x 595 x 600	F6	BR10/13 disp.	2.5	944	70	60	60	94.6
1-3112	595 x 297 x 600	F6	BR10/13 disp.	2.5	471	70	60	60	94.6

Part no. bag & cage complete assy.	Description	Size (mm)
		W x H x D
2-3007	Full cage assembly complete with BR16 media bag	610 x 610 x 600
2-3107	Half cage assembly complete with BR16 media bag	610 x 305 x 600
2-3003	Full cage assembly complete with BR10 media bag	610 x 610 x 600
2-3103	Half cage assembly complete with BR10 media bag	610 x 305 x 600
2-3004	Full cage assembly complete with BR12 media bag	610 x 610 x 600
2-3104	Half cage assembly complete with BR12 media bag	610 x 305 x 600



Due to on-going product development, Filterfit reserves the right to change design and specifications without notice