

FTV & FDV semi-supported deep bed air filter



FTV666



FTV636

Description:

Filterfit's FTV & FDV semi-supported deep bed air filters provide economical, medium to high efficiency filtration with a low operating pressure drop. A self-supporting wire is sewn to the front of the bag keeping the bag open to maintain configuration. This allows for easy retrofit to any existing holding frame containing other styles of air filter.

Construction:

FTV & FDV filters consist of a synthetic filter bag with wire support built-in and a separate permanent outer holding frame.

Permanent mounting frames are nominally 50mm in depth. Filter bags are held in place by way of a compression fit with the filter media being sandwiched between the support wire and the holding frame.

Filter media types:

FTV & FDV filters can be supplied with a range of filter media to suit each application. Filter media available include: BR16 (washable G3), BR10 (disposable F5) and BR9/13 (disposable F6) which is effective in removing cigarette smoke.

Application:

Due to the range of filter media available and the extended service life of the FTV & FDV deep bed filters, the filter is suitable as a low-cost alternative for a large 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
610 x 610 x 400mm (FDV only)
610 x 305 x 400mm (FDV only)
Size quoted are holding frame sizes.

Installation:

FTV & FDV 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 by simply holding the front of the bag by the wire support and withdrawing. The contaminated filter bag 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

FTV: Three pocket full, Two pocket half bags

Part no.	Filter class	Media type	Dimensions mm	No. of pockets	Face velocity m/sec	Air capacity l/sec	Initial resistance Pa	Min. eff.	Average eff.	Average arrestance %
			(W x H x D)							
1-9204	F5	BR10 disp.	595 x 595 x 600	3	2.5	944	27	21	40	90
1-9227	F5	BR10 disp.	595 x 297 x 600	2	2.5	471	27	21	40	90
1-9202	F5	BR12 disp.	595 x 595 x 600	3	2.5	944	50	28	50	91.5
1-9225	F5	BR12 disp.	595 x 297x 600	2	2.5	471	50	28	50	91.5
1-9203	G3	BR16 wash.	595 x 595 x 600	3	2.5	944	30	*	*	85.5
1-9226	G3	BR16 wash.	595 x 297x 600	2	2.5	471	30	*	*	85.5
1-9228	F6	BR10/13 disp.	597x 597x 600	3	2.5	944	70	60	60	94.6
1-9229	F6	BR10/13 disp.	597x 297x 600	2	2.5	471	70	60	60	94.6

FDV: Two pocket full, Single pocket half bags

Part no.	Filter class	Media type	Dimensions mm	No. of pockets	Face velocity m/sec	Air capacity l/sec	Initial resistance Pa	Min. eff.	Average eff.	Average arrestance %
			(W x H x D)							
1-9104	F5	BR10 disp.	595 x 595 x 400	2	2.5	944	35	21	40	90
1-9127	F5	BR10 disp.	595 x 297 x 400	1	2.5	471	35	21	40	90
1-9103	G3	BR16 wash.	595 x 595 x 400	2	2.5	944	38	*	*	85.5
1-9126	G3	BR16 wash.	595 x 297 x 400	1	2.5	471	38	*	*	85.5
1-9150	F5	BR10 disp.	595 x 595 x 600	2	2.5	944	35	21	24.9	90
1-9163	F5	BR10 disp.	595 x 297x 600	1	2.5	471	35	21	24.9	90
1-9149	G3	BR16 wash.	595 x 595 x 600	2	2.5	944	38	*	*	85.5
1-9162	G3	BR16 wash.	595 x 297x 600	1	2.5	471	38	*	*	85.5