F Series

Filtration & Pressurization Systems



FVV50 Pressurizer

This is a basis pressurization for 12 and 24 V DC. It is suitable for well sealed cabs and enclosures. The typical application is as an auxiliary piece of equipment to BES's 'T' series air conditioners.

A welded steel base construction and impact resistant plastic cover, along with plenty of performance, ensure a comfortable environment.

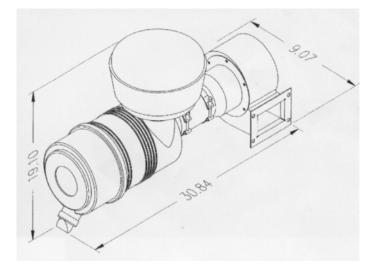


FVV60 Pressurizer

This configuration is a recent BES development that utilizes a plastic filter housing and in-stream motor arrangement. Performance, static pressure and air delivery, are better than the FVV50, the system is quieter, the filter surface is larger, the motor runs cooler and there is the added flexibility that the canister can be relocated to a remote site and ducting run between the blower and filter. The system is available in 12 and 24 V DC and 110 V single phase A.C.

Technical Specifications:		
Model	FVV50	FVV60
Type of Unit	filter/blower	filter/blower
Voltages Available V.D.C.	12 or 24	12 or 24
Voltages Available V.A.C.	n/a	115-1-50/60
Pressurizer Watts @ 24vdc	120	150
Pressurizer Watts @ 115vac	n/a	200
Pressurizer Airflow:		
Clear filter, 0.00" w.c. ESP	85cfm-40l / s	170cfm-80l / s
0.25" w.c. ESP	18cfm-9l / s	145cfm-70l / s
0.50" w.c. ESP	5cfm-2.5l / s	126cfm-60l / s
Max. Fan Static Pressure Avaliable	0.65" w.c.	2.5" w.c.
No. of Blower / Motors	1	1
No. of Motor Speeds	1	1
Method of Speed Change		
Pre-CleanerRoughing	1	1
Pre-Filter Disposable	n/a	n/a
No. of Final Filter Elements	1	1
Permanent Filter Size	5"Dia x 11"Lg	6.5"Dia x 14"Lg
Type of Permanent Filter	Pleated	Pleated
Filter Material	Paper	Paper
Filtration Efficiency	See Note	See Note
Outlet Spigot	2.75" x 4.25"	3.63" x 3.63"
Compressed Air Inlet		
Compressed Air Pres. Req'd		
Mounting Type	Foot	Foot
Cleaning Trigger		
Motor External Protection	no	no
Internal Thermal Prot.	yes	yes
Pressurizer Casing Mat'l	Painted Steel	Plastic
Weight	17lb/7.7kg	21lb/9.5kg

Note #1: Air Cleaner Test, SAE J126, which includes 12% in the 0 - 5 micron range. Note #2: 1" w.c. = 250 pascals



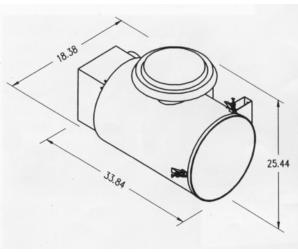


Filtration & Pressurization Systems

This is the largest of our particulate filters that require manual cleaning and are suitable for very dusty applications with extended intervals between cleaning. The element is from a 16" Donaldson STG housing and is typically used as an engine intake filter on off-highway machinery.

A safety filter is also included as standard and the system is available in AC or DC configurations.





Technical Specifications:		
Model	FVV150	
Type of Unit	filter/blower	
Voltages Available V.D.C.	12 or 24	
Voltages Available V.A.C.	115-1-50/60	
Pressurizer Watts @ 24vdc	150	
Pressurizer Watts @ 115vac	200	
Pressurizer Airflow:		
Clear filter, 0.00" w.c. ESP	315cfm-150l / s	
0.25" w.c. ESP	235cfm-110l / s	
0.50" w.c. ESP	210cfm-100l / s	
Max. Fan Static Pressure Avaliable	2.2" w.c.	
No. of Blower / Motors	1	
No. of Motor Speeds	1	
Method of Speed Change		
Pre-CleanerRoughing	1	
Pre-Filter Disposable	n/a	
No. of Final Filter Elements	2	
Permanent Filter Size	14.5"Dia x 24"Lg	
Type of Permanent Filter	Pleated	
Filter Material	Paper	
Filtration Efficiency	See Note	
Outlet Spigot	5.5" Dia.	
Compressed Air Inlet		
Compressed Air Pres. Req'd		
Mounting Type	Foot	
Cleaning Trigger		
Motor External Protection	no	
Internal Thermal Prot.	yes	
Pressurizer Casing Mat'l	Stainless Steel	
Weight	87lb/40kg	

Note #1: Air Cleaner Test, SAE J126, which includes 12% in the 0 - 5 micron range. Note #2: 1" w.c. = 250 pascals



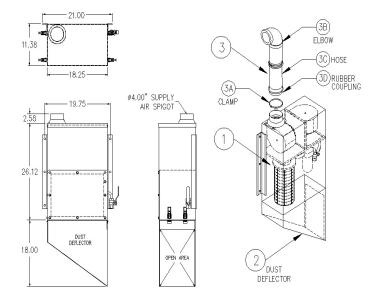




BES has designed this system for use on cabs and enclosures of typically heavy diesel driven machinery; ideally where a compressed air source is available. As with the larger FVF120 alternating current version, two fans are mounted in series to provide high static pressure capability wihtout the need to introduce large volumes of air which will require conditioning prior to admission to the enclosed space.

Air is drawn through a heavy-duty pleated filter by two fans and discharged out the top of the unit for ducting to the air conditioner. As with the larger unit, the fans will run for a time period, stop for a while and then compressed air is discharged into the filter element and dust is removed. The cycle times are adjustable to suit site conditions.





Technical Specifications:		
Model	FVW100	
Type of Unit	filter/blowers	
Voltages Available V.D.C.	12 or 24	
Voltages Available V.A.C.	115-1-50/60	
Pressurizer Watts @ 24vdc	300	
Pressurizer Watts @ 115vac	400	
Pressurizer Airflow:		
Clear filter, 0.00" w.c. ESP	365cfm-175l / s	
0.25" w.c. ESP	325cfm-155l / s	
0.50" w.c. ESP	285cfm-135l / s	
Max. Fan Static Pressure Avaliable	5.3" w.c.	
No. of Blower / Motors	2	
No. of Motor Speeds	1	
Method of Speed Change	manual	
Pre-CleanerRoughing	n/a	
Pre-Filter Disposable	n/a	
No. of Final Filter Elements	1	
Permanent Filter Size	6"Dia x 13"Lg	
Type of Permanent Filter	Pleated	
Filter Material	Spun Polyester	
Filtration Efficiency	99% @ 0.3 microns	
Outlet Spigot	4" Dia.	
Compressed Air Inlet	3/8"FPT	
Compressed Air Pres. Req'd	60-100psig	
Mounting Type	Wall	
Cleaning Trigger	Adjustable Timer	
Motor External Protection	Circuit Breaker	
Internal Thermal Prot.	yes	
Pressurizer Casing Mat'l	Stainless Steel	
Weight	100lb/45kg	



Filtration & Pressurization Systems



FVF120

Technical Specifications: Model FVF120 filter/blowers Type of Unit Voltages Available V.D.C. n/a Voltages Available V.A.C. 115-1-50/60 Pressurizer Watts @ 24vdc n/a Pressurizer Watts @ 115vac 400 Pressurizer Airflow: 365cfm-175l / s Clear filter, 0.00" w.c. ESP 0.25" w.c. ESP 325cfm-155l / s 0.50" w.c. ESP 260cfm-125I / s Max. Fan Static Pressure Avaliable 4.7" w.c. No. of Blower / Motors 2 No. of Motor Speeds Variable Speed Method of Speed Change Auto Pres. Transducer Pre-Cleaner ---Roughing n/a Pre-Filter ---- Disposable n/a No. of Final Filter Elements Permanent Filter Size 5"Dia x 24"Lg Type of Permanent Filter **Teflon Coated** Filter Material Polyester Sock Filtration Efficiency 99% @ 0.3 microns 6" Dia. **Outlet Spigot** Compressed Air Inlet 3/8" FPT Compressed Air Pres. Req'd 60-100psig Mounting Type Foot Cleaning Trigger Adjustable Timer Circuit Breaker Motor External Protection Internal Thermal Prot. Pressurizer Casing Mat'l Stainless Steel Weight 285lb/130kg

BES designed the FVF120 to suit mains powered electrical equipment and baghouse technology has been adopted on a smaller scale. The heart of the unit consists of eight teflon coated elements housed on wire frame structures fitted with a venturi tube air delivery.

Two backward curve fans, mounted in series to increase static pressure, provide a number of control options that include:

Two stage operation with the second fan coming on with drop in room pressure, alternatively

Automatic speed control according to room pressure, infinitely variable. This is done by mounting an adjustable pressure transducer in the room and a matched control in the unit

The system is equipped with a receiver tank and solenoid valves for cleaning the air filtration system. The back-flush cycle is on a variable time basis which is determined by site conditions. After a pre-set time, the fans will stop to assist the purging process with compressed air. After another time delay, fans will start up again.

The system has been designed as a stand-alone device and has the capacity to have up to three air discharge outlets from its base. Standard electrical power supply is 110 V-1PH-50/60HZ.

