



# HEPA AIR FILTERS

## BREATHE EASIER WITH THE SIGMA HEPA FILTER

The Workplace Health & Safety (WHS) and Mine Safety & Health Administration (MSHA) solution for dust saturated atmospheres and harmful toxic working environments.

Ensuring cabin air is safe to breathe and free from airborne contaminants including pesticide, asbestos, silica dust, fine coal dust and diesel particulate matter. To ensure risk for the coal mine operators is at an acceptable level.

HEPA solutions for underground and surface mining applications

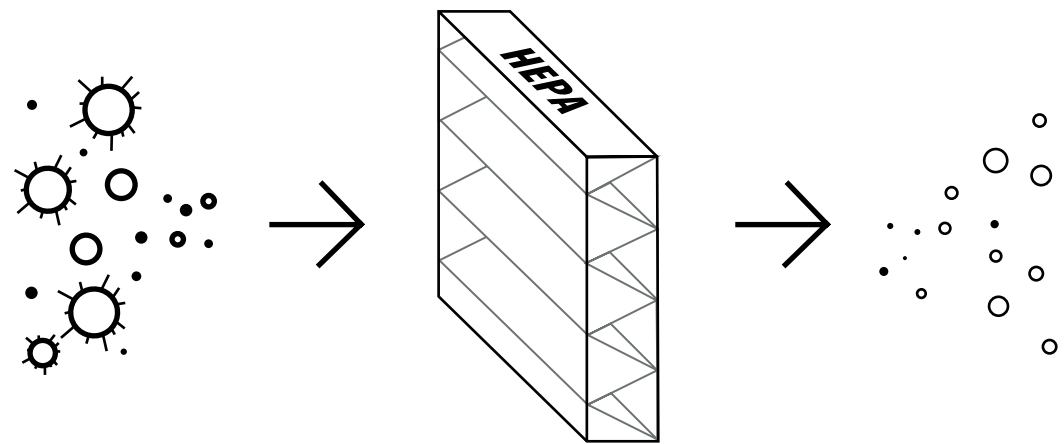


**KNORR-BREMSE**

HAF20721

**SIGMA**  
BUILT FOR THE TOUGHEST AIR CONDITIONS

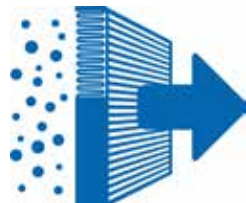
# HEPA FILTER



Here at Sigma Air Conditioning we understand the importance of quality in your business and how your biggest assets, your operators, work tirelessly day in and day out in the heat and cold. Create a safe and healthy breathing space with Sigma’s range of High Efficiency Particulate Air (HEPA) filters. Our H13 compliance HEPA filters removes 99.95% of all particles greater than 0.3 microns.

## WHAT DOES A HEPA FILTER DO?

HEPA filters are a special type of filter that capture microscopic particles like fine silica dust, particulate matter, smoke, bacteria and some virus. HEPA filters also capture toxic substances like asbestos, heavy metals and carcinogenic dust.



## WITHOUT HEPA

Long-term exposure to unwanted air particulates is one of the leading causes for life threatening illnesses. Recommended for operators in mine sites but also suitable for all work places that requires a clean and healthy environment.

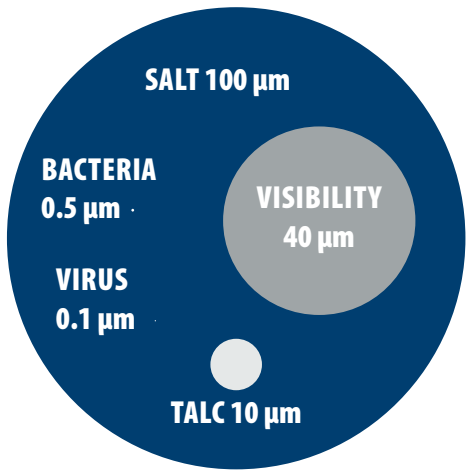
## WHY HEPA FILTER?

Apart from the preventive and air quality benefits, operators can breathe easy knowing that the air inside the cabins is clean and safe. Employers can enjoy the peace of mind, knowing that the HEPA filters upgrade provides their operators with a safe and healthy working environment.

## HOW BIG IS A MICRON?

As a unit of measure, 1 micron also called micro meter is equal to 1 millionth of a meter or .000039 inch.

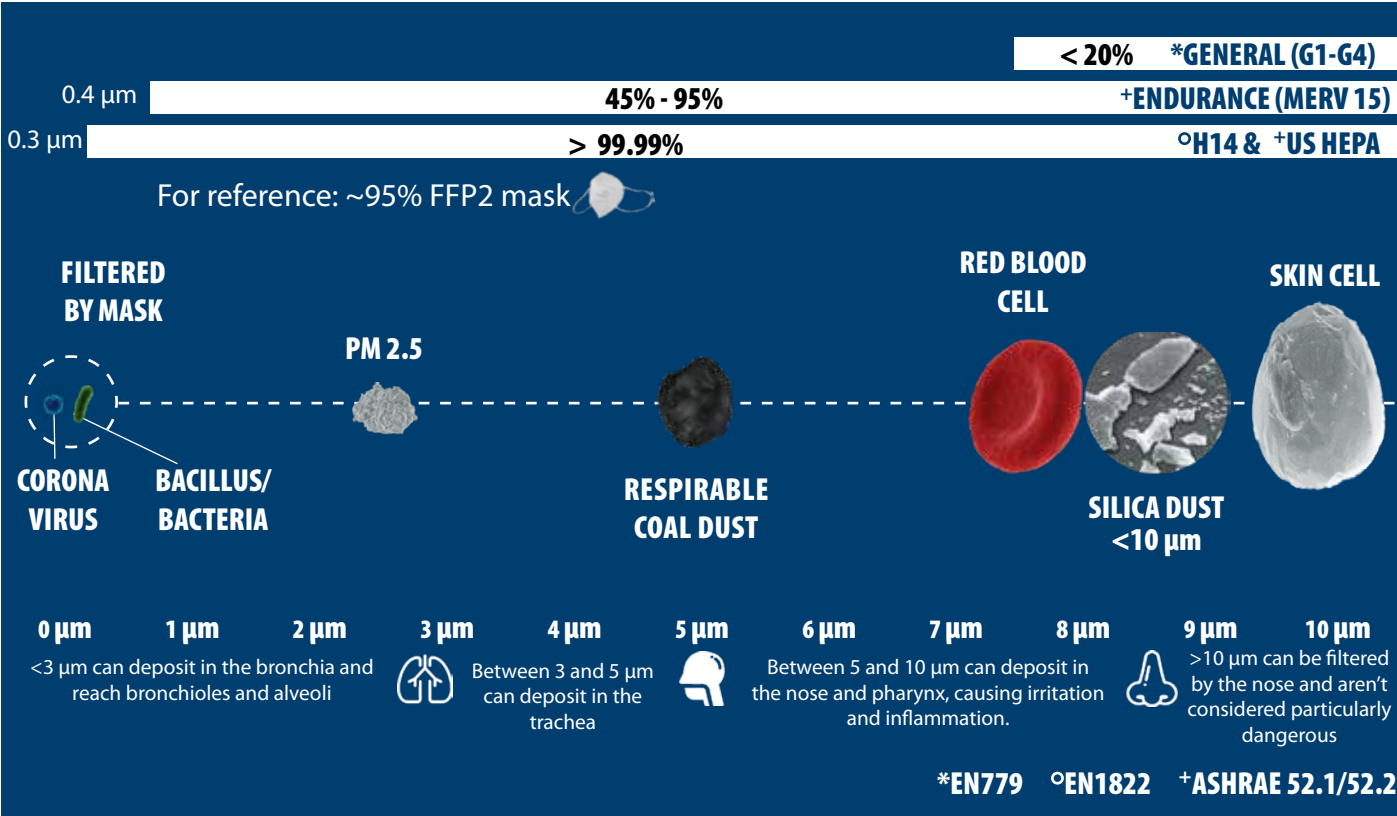
- 100 µm = Grain of table salt
- 40 µm = Lower limit of visibility
- 10 µm = Talcum powder
- 5 µm = Respirable Coal Dust
- 0.5 µm = Bacillus / Bacteria
- 0.1 µm = Virus



# RELATIVE DUST/PARTICLE SIZE

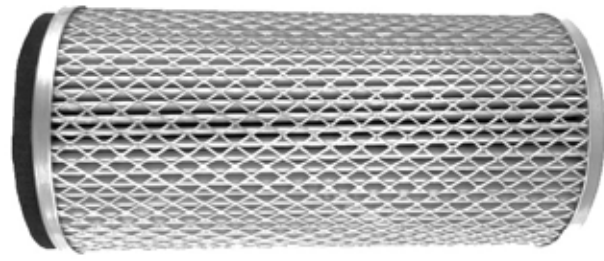
Microns (Log Scale)	0.001	0.01	0.1	1.0	10	100	1000
Test Aerosols		Scanning Electron Microscope		Optical Microscope		Visible to Naked Eyes	
			← Atomised NaCl →		← SAE Fine Dust →	← SAE Coarse Dust →	
			DOP Tests				
Relative size of Common Materials	← Aqueous Salts →		← Smog →			← Mold Spores →	
	← Metal Ions →		← Diesel Soot →			← Human Hair →	
		← Virus →		← Bacteria →		← Mist →	
	← Atomic Radii →	← Carbon Black →			← Pollen →	← Lint →	
		← Tobacco Smoke →		← Coal Dust →		← Beach Sand →	
				← Milled Flour →			

## FILTER EFFICIENCY



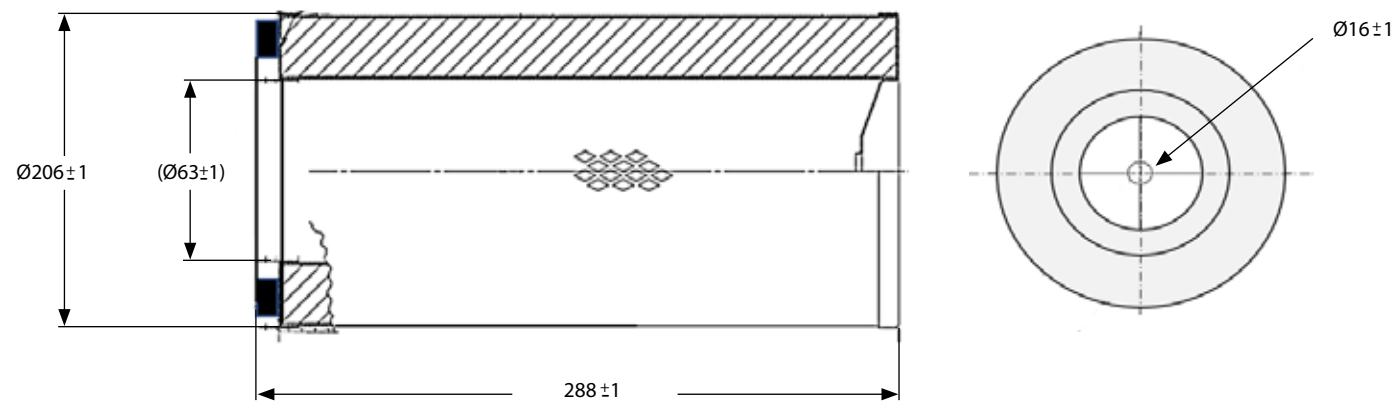
## H13 HEPA FILTER

H0116836



H13 COMPLIANCE 99.95% FILTRATION EFFICIENCY MEETING EUROPEAN STANDARD EN1822

Fresh Air filter, 206OD x 288mm , H13 intermediate stiffness HEPA filter media composed of borosilicate microfibers with acrylic resin binder. Supply with Top Cap 16ID and Bottom Cap 63ID. 99.95% for particles diameter 0.3  $\mu\text{m}$



## COMPATIBLE WITH

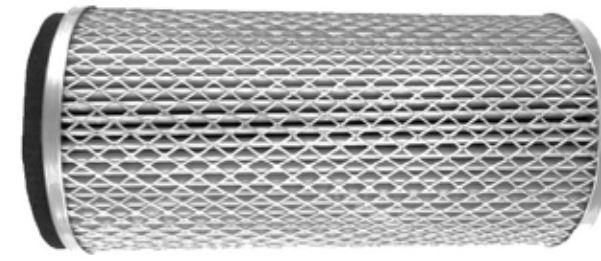


H0111416 / H0111417

**NOTE:** Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability

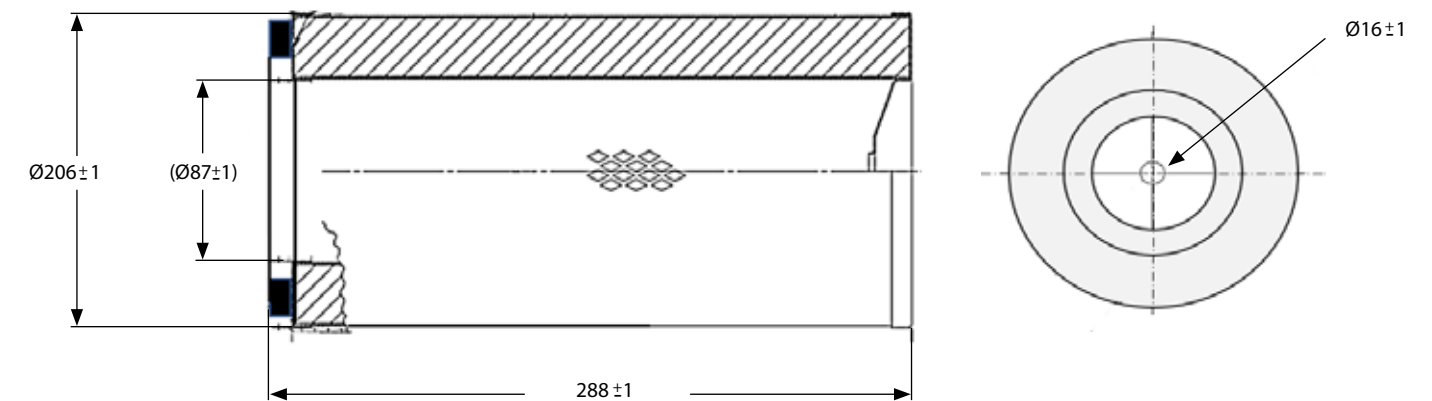
## H13 HEPA FILTER

H0116837



H13 COMPLIANCE 99.95% FILTRATION EFFICIENCY

Fresh Air filter, 206OD x 288mm , H13 intermediate stiffness HEPA filter media composed of borosilicate microfibers with acrylic resin binder. Supply with Top Cap 16ID and Bottom Cap 63ID. 99.95% for particles diameter 0.3  $\mu\text{m}$



## COMPATIBLE WITH



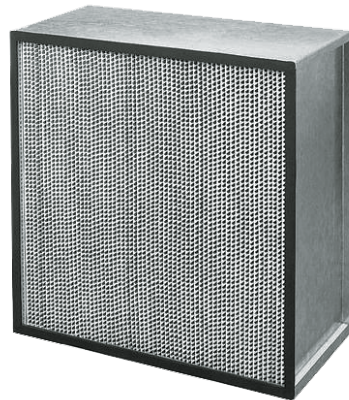
H0111418

**NOTE:** Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability



# H14/US HEPA FILTER

AU460863



H14 & US HEPA COMPLIANCE 99.99% FILTRATION EFFICIENCY

HEPA filter, 305x305x149mm (nominal), with galvanised steel case, 99.99% filtration efficiency for particles diameter 0.3 µm

## MATERIAL

PARTICULARS	DESCRIPTION
MEDIA	TYPE 55 GLASS PAPER
CASE	GALVANISED STEEL
SPACERS	ALUMINUM
GASKET	NEOPRENE

FEATURES FIRE RESISTANT AND SELF EXTINGUISHING

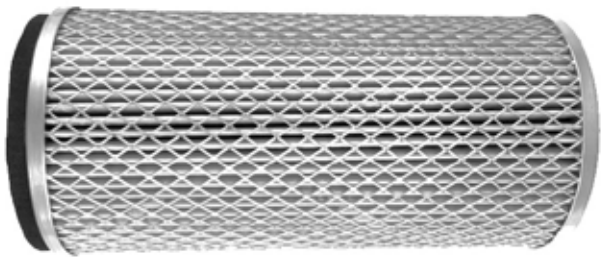
## PERFORMANCE

PARAMETERS	DESCRIPTION
------------	-------------

Maximum temperature 70°C / 158°F - CONTINUOUS  
120°C / 248°F - SHORT PERIODS ONLY

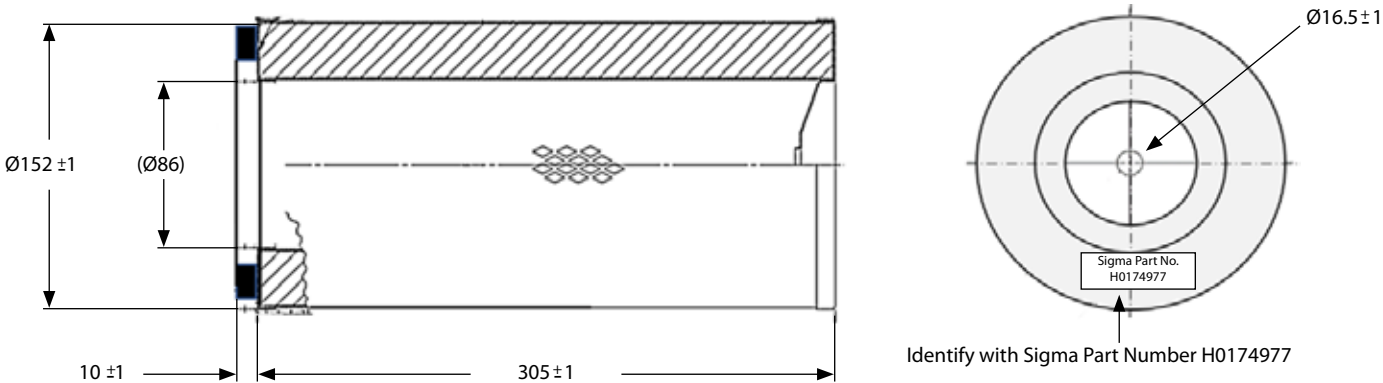
# H13 HEPA FILTER

H0174977



H13 COMPLIANCE 99.95% FILTRATION EFFICIENCY MEETING EUROPEAN STANDARD EN1822

Fresh Air filter, 305L x 152OD, H13 intermediate stiffness HEPA filter media composed of borosilicate microfibers with acrylic resin binder. Supply with 17 ID rubber bonded metal washer. 99.95% for particles diameter 0.3 µm



## COMPATIBLE WITH



PVV50B2



PVV50M2

**NOTE:** Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability

## COMPATIBLE WITH

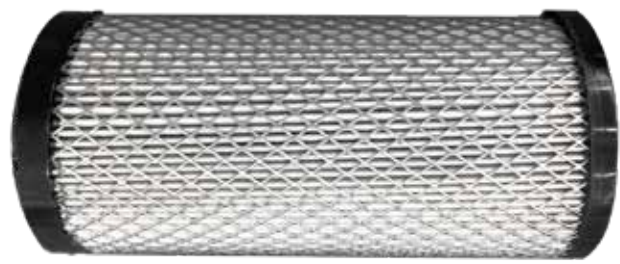


FVV80



FVV100

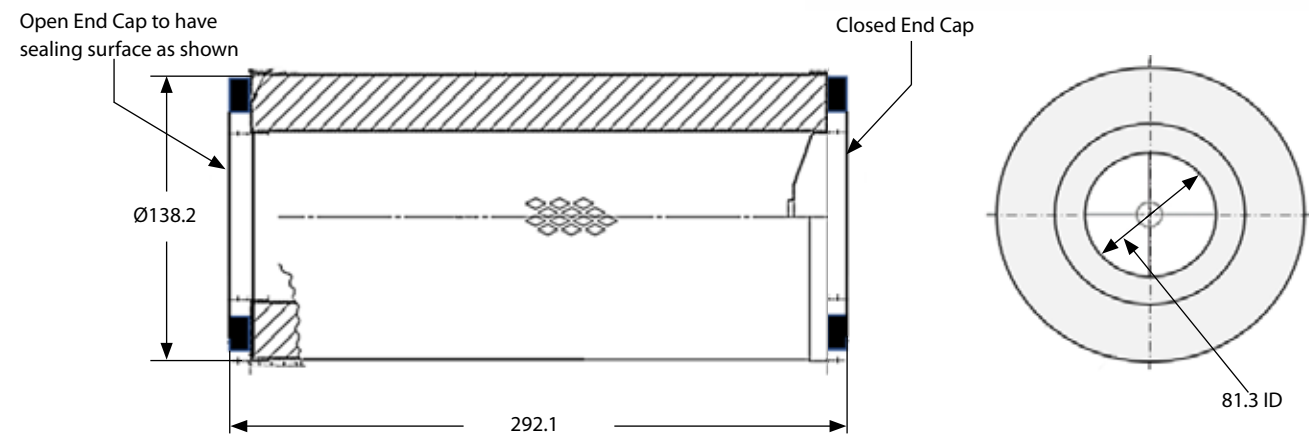
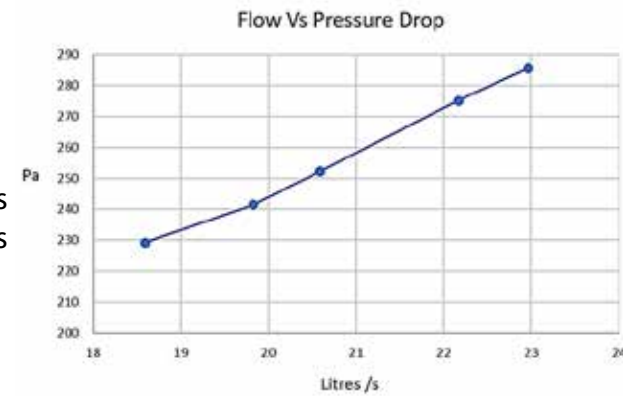
**NOTE:** Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability



**H13 HEPA FILTER**  
H0202671

H13 COMPLIANCE 99.95% FILTRATION EFFICIENCY  
MEETING EUROPEAN STANDARD EN1822

Fresh Air filter, 292L x 138OD, H13 intermediate stiffness  
HEPA filter media composed of borosilicate microfibers  
with acrylic resin binder. 99.95% for particles diameter  
0.3 µm



## COMPATIBLE WITH



EB9P2X



EB9P4X

**NOTE:** Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability

# PRODUCTS KIT SET

Upgrade the standard EB9P4X Endurance filter to HEPA grade with SIGMA HEPA UPGRADE KIT (KIT H0225677). H13 intermediate stiffness HEPA filter media composed of borosilicate microfibers with acrylic resin binder.

## KIT PARTS

PART NO.	DESCRIPTION	QTY
1 H0202671	H13 HEPA FILTER	1
2 AU682070	AIR FLOW AND MONITORING SWITCH	1
3 AU622401	CABLE RADOX FOR WIRING	1
4 KIT500001	KIT FOR AIRFLOW SWITCH DUCT	1

99.95% PARTICULATE  
EFFICIENCY  
AT 0.3 MICRON



**NOTE:** Some additional parts may be required for installation. Please consult with the Sigma Technical Sales team to confirm HVAC selection and suitability

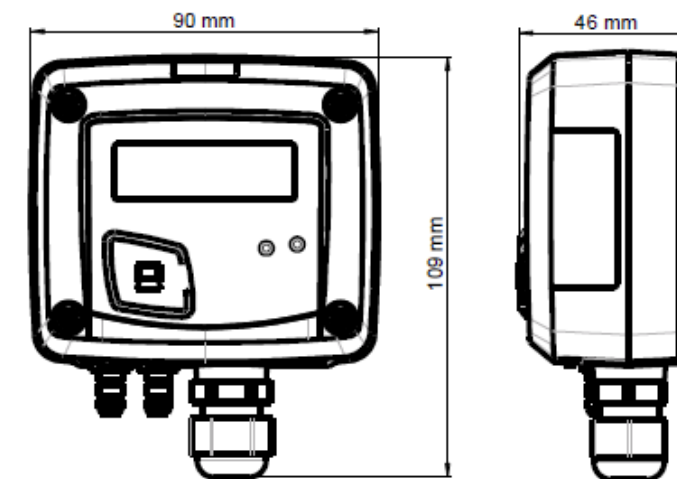
## PRESSURE MONITORING UNIT

### KEY POINTS

- Range from -100/+100 Pa to -2000/+2000 mbar (according to model)
- RCR relay output 3A/230 Vac, power supply 24 Vac/Vdc
- Visual and audible alarm, red led in front
- ABS V0 IP65 housing
- "1/4 turn" system mounting with wall-mount plate
- Housing with simplified mounting system
- Solenoid valve for auto-calibration (only on PST11 model)



### FEATURES OF HOUSING



PARAMETERS	DESCRIPTION
<b>Material</b>	ABS V0 as per UL94
<b>Protection</b>	IP65
<b>Display</b>	LCD 10 digits Size : 50 x 17 mm
<b>Height of digits</b>	Values : 10 mm Units : 5 mm
<b>Connections</b>	ribbed, Ø 6.2 mm
<b>Cable gland</b>	Ribbed Ø 6.2 mm (PST11 - PST12 - PST13) Security Ø 6.2 mm (PST14 - PST15)
<b>Weight</b>	143 g

### TECHNICAL FEATURES

PARAMETERS	DESCRIPTION
<b>Unit of measurement</b>	Pa, mmH2O, inWG, mmHG, daPa, kPa, hPa, mbar (PST-11, PST-12, PST-13) mbar, inWG, mmHG, PSI, mmH2O, daPa, hPa, kPa (PST-14, PST-15)
<b>Accuracy*</b>	<b>PST11</b> : ±1% of reading ±2 Pa <b>PST12</b> : ±1.5% of reading ±3 Pa <b>PST113</b> : ±1.5% of reading ±3 mmH2O <b>PST14 and PST15</b> : ±1.5% of reading ±3 mbar
<b>Response time</b>	1/e (63%) 0.3 s
<b>Resolution</b>	1 Pa ; 0.1 mmH2O ; 0.01 mbar ; 0.01 inWG ; 0.01 mmHG ; 0.1 daPa ; 0.001 kPa
<b>Autozero</b>	20.0 Kg
<b>Type of fluid</b>	Air and neutral gases
<b>Overpressure tolerated</b>	<b>PST11, PST12</b> : 21 000 Pa ; <b>PST13</b> : 69 000 Pa ; <b>PST14</b> : 1400 mbar ; <b>PST15</b> : 4100 mbar
<b>Operating temperature</b>	From 0 °C to +50 °C
<b>Storage temperature</b>	From -10 °C to +70 °C

\*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

### TECHNICAL SPECIFICATIONS

PARAMETERS	DESCRIPTION
<b>Output</b>	1 RCR relay 3 A / 230 Vac
<b>Power supply</b>	24 Vac/Vdc ±10 %
<b>Consumption</b>	2 VA
<b>Relay and alarm status</b>	Red led in front and internal buzzer
<b>Electromagnetical compatibility</b>	EN61326
<b>Electrical connection</b>	Terminal block for cables Ø0.05 to 2.5 mm2
<b>PC communication</b>	USB-mini Din cable
<b>Environment</b>	Air and neutral gases
<b>Storage temperature</b>	From -10 °C to +70 °C





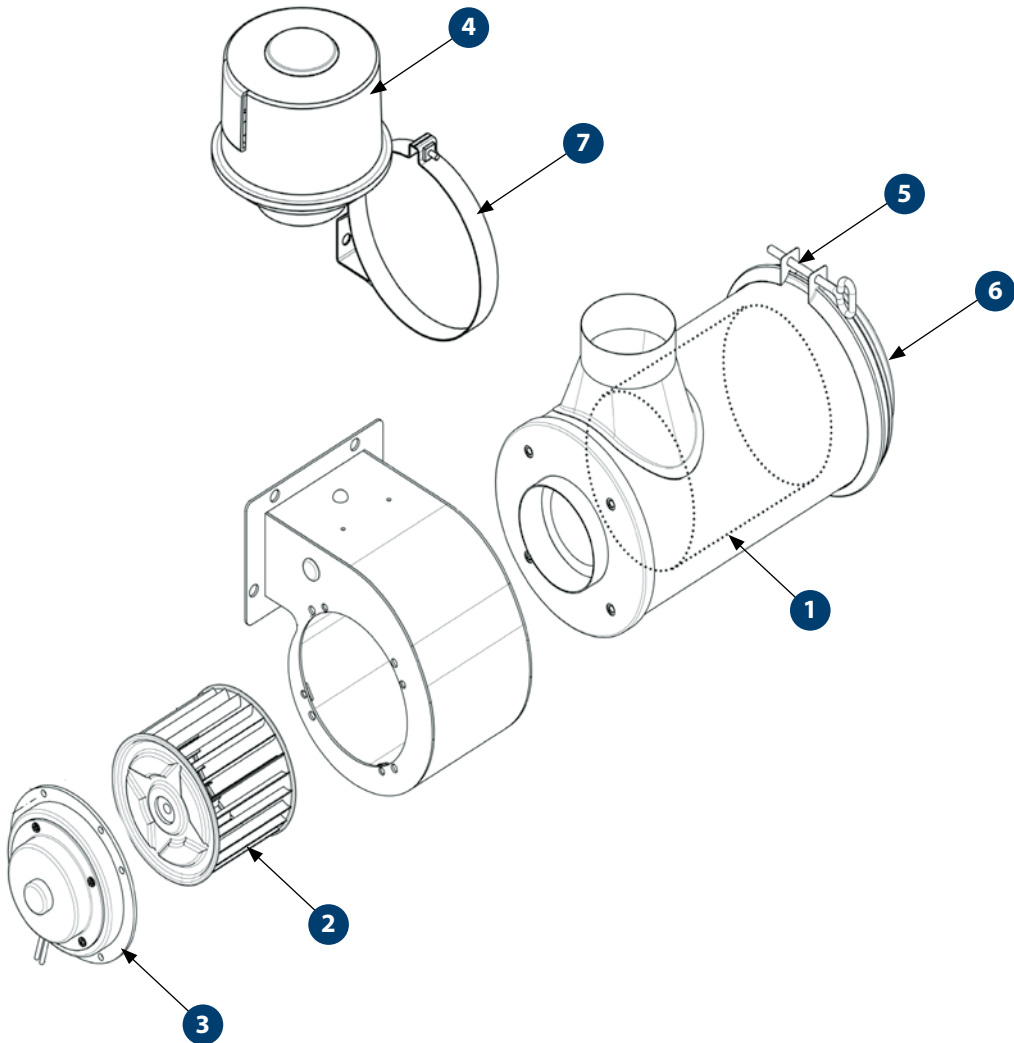
## EB9P2X / 4X

### FRESH AIR PRESSURISER

**EB9P2X**  
Fresh Air Pressuriser 31 l/s 12V

**EB9P4X**  
Fresh Air Pressuriser 31 l/s 24V

**EB9P4XL**  
Fresh Air Pressuriser 35 l/s 24V



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460083	FILTER CARTRIDGE ENDURANCE (EB9P4X)	1
AU460082	FILTER CARTRIDGE ENDURANCE (EB9P4XL)	1
* Note: Sites which have both EB9P4 and EB9P4X can use KNHV80005 to suit both unit		
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET	1
2 UE327	MOTOR 80W 12V FOR EB9P2X	1
H0175266	MOTOR 70W 24V ASSEMBLY FOR EB9P4X & EB9P4XL	1
3 AU460963	PRE CLEANER TS 3" INLET SMALL	1
4 H0056158	CLAMP ASSEMBLY 168MM INTERNAL DIAMETER	1
5 H0056157	COVER ASSEMBLY	1
6 AU870001	MOUNTING BAND AIR CLEANER 6.5" DIAMETER	1
7 S3750100	SEAL GASKET MOTOR	1
S3750101	SEAL CASKET CANISTER	1

## HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0202671 (FOR EB9P2X & EB9P4X)
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	138mm OD x 292 mm

\* on qualified cabins

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	31 l/s	65 CFM
Fresh Air (EB9P4XL)	35 l/s	74 CFM
Power Supply	12V / 24V	12V / 24V
Power Supply (EB9P4XL)	24V	24V
Current Draw	6 A / 3 A	6 A / 3 A
Weight (nominal)	8.0 Kg	17.6 lbs
Technical Manual Reference	SM407-5065	SM407-5065
Dimension L X W X H	462mm X 364mm X 192mm	18.2in X 14.3in X 7.6in

## MAINTENANCE

MONTHLY / 300 HOURS	
AU460083	FILTER CARTRIDGE ENDURANCE (EB9P4X)
AU460082	FILTER CARTRIDGE ENDURANCE (EB9P4XL)
KNHV80005*	FILTER KIT
6 MONTHS / 1800 HOURS	
H0202671	H13 HEPA FILTER OPTION FOR EB9P2X & EB9P4X (FOR UPGRADED UNIT)
ANNUAL / 3600 HOURS	
UE327	MOTOR 80W 12V FOR EB9P2X
H0175266	MOTOR 70W 24V ASSEMBLY FOR EB9P4X & EB9P4XL
3 YEARS / 10,800 HOURS	
AU410337	BLOWER 120D X 89W X 5/8 CCW SINGLE INLET
AU460963	PRE CLEANER TS 3" INLET SMALL

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

## COMPANION ITEMS

PART NO.	DESCRIPTION
H0202671	H13 HEPA FILTER OPTION FOR EB9P2X & EB9P4X
H0225677	HEPA UPGRADE KIT WITH PRESSURE MONITOR
AU682070	AIR FLOW AND MONITORING SWITCH



KNORR-BREMSE

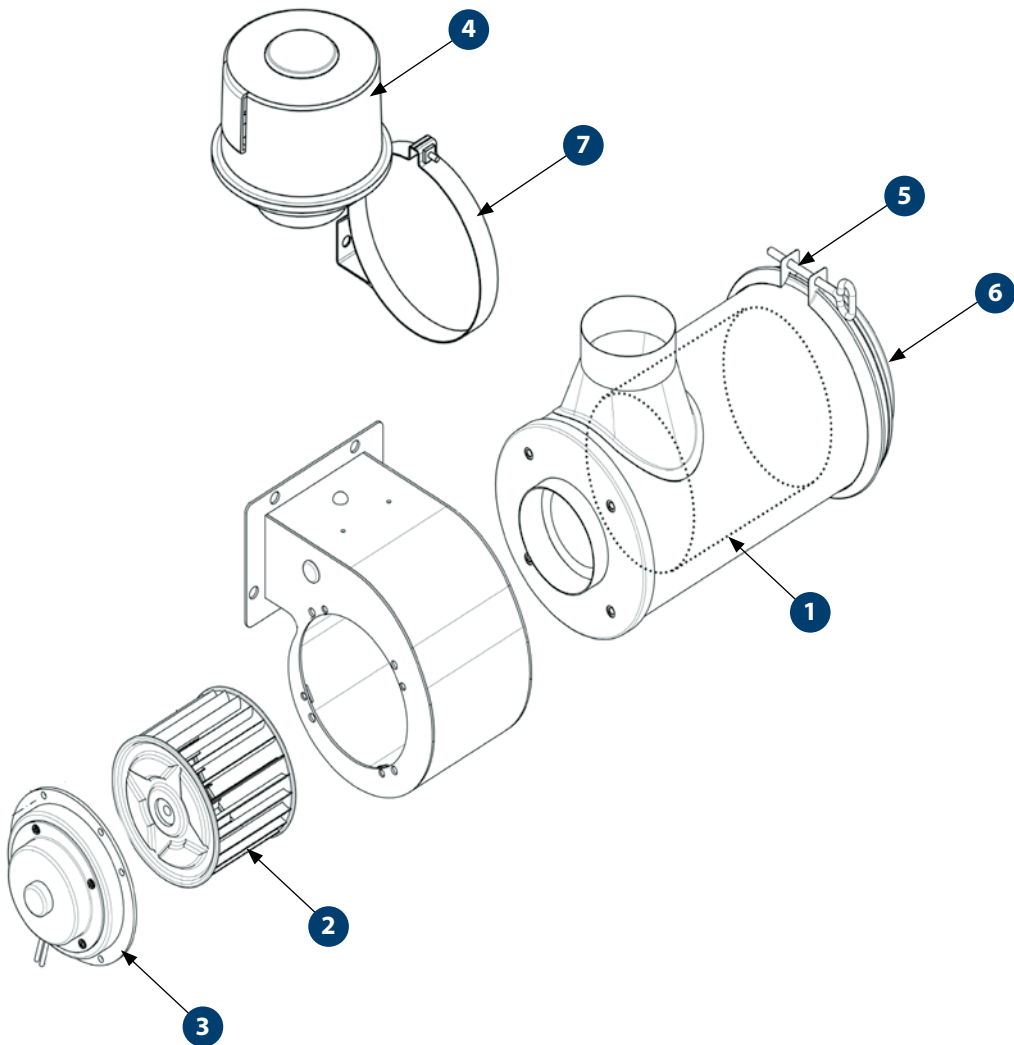


# EB9P

## FRESH AIR PRESSURISER WITH HEPA

**H0316118**  
Fresh Air Pressuriser with HEPA 20 l/s 24V

**H0316119**  
Fresh Air Pressuriser with HEPA 20 l/s 12V



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 H0202671	H13 HEPA FILTER	1
2 AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET	1
3 UE327 H0175266	MOTOR 80W 12V FOR EB9P2X MOTOR 70W 24V ASSEMBLY FOR EB9P4X & EB9P4XL	1
4 AU460963	PRE CLEANER TS 3" INLET SMALL	1
5 H0056158	CLAMP ASSEMBLY 168MM INTERNAL DIAMETER	1
6 H0056157	COVER ASSEMBLY	1
7 AU870001	MOUNTING BAND AIR CLEANER 6.5" DIAMETER	1
S3750100	SEAL GASKET MOTOR	1
S3750101	SEAL CASKET CANISTER	1

## HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	H0202671
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	138mm OD x 292 mm

\* on qualified cabins

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	22 l/s	46 CFM
Power Supply	12V / 24V	12V / 24V
Current Draw	3 A / 1.5 A	3 A / 1.5 A
Weight (nominal)	8.0 Kg	17.6 lbs
Dimension L X W X H	462mm X 364mm X 192mm	18.2in X 14.3in X 7.6in

## MAINTENANCE

6 MONTHS / 1800 HOURS	
H0202671	H13 HEPA FILTER OPTION FOR EB9P2X & EB9P4X (FOR UPGRADED UNIT)
ANNUAL / 3600 HOURS	
UE327	MOTOR 80W 12V FOR EB9P2X
H0175266	MOTOR 70W 24V ASSEMBLY FOR EB9P4X & EB9P4XL
3 YEARS / 10,800 HOURS	
AU410337	BLOWER 120D X 89W X 5/8 CCW SINGLE INLET
AU460963	PRE CLEANER TS 3" INLET SMALL

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

## COMPANION ITEMS

PART NO.	DESCRIPTION
AU682070	AIR FLOW AND MONITORING SWITCH



KNORR-BREMSE







FRESH AIR PRESSURISER UNIT

H0111416  
Compact HEPA Filtration Pressuriser  
System 12 VDC

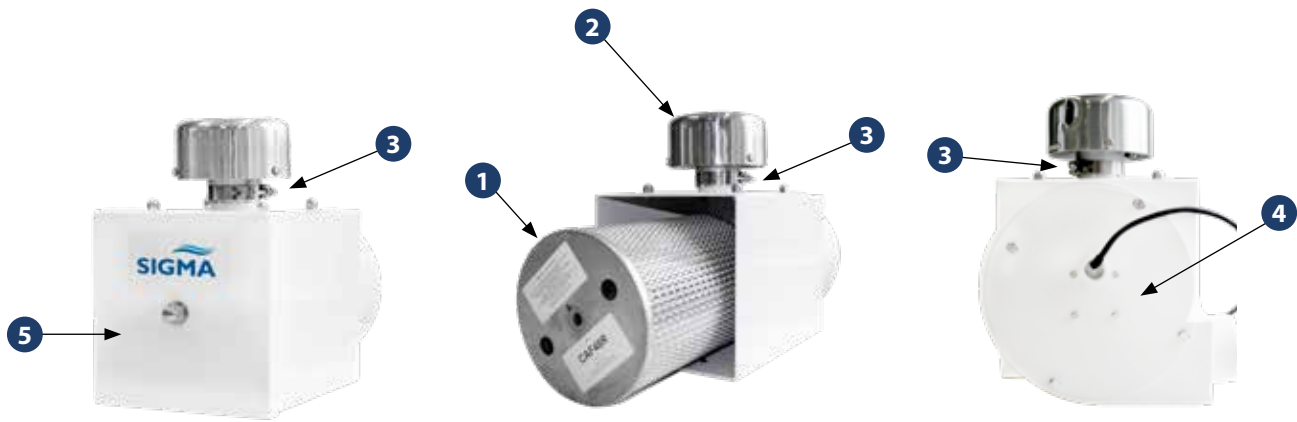
H0111417  
Compact HEPA Filtration Pressuriser  
System 24 VDC

AVAILABLE IN  
12V OR 24V  
  
Meets the EN 15695  
in qualifying cab

99.9% PARTICULATE  
EFFICIENCY  
AT 0.3 MICRON  
0.5% CABIN LEAKAGE

AIM

To provide highest quality filtered fresh air into the cabin to reduce exposure to harmful particulates and gasses. Also to provide positive pressure inside the cabin, positive pressure inside the cabin will allow the filtered air to leak out through minor gaps in the door seal, this reduces the risk of ingress of dust into the cabin through those seals.



SYSTEM OPERATION

The airflow through the FPS Series Filter is as follows:  
  
Contaminated air is drawn into the system through the centrifugal pre-cleaner. The circular motion of the pre-cleaner separates out larger particulates dramatically increasing filter life.



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 H0116836	FILTER 16 / 79ID X 206OD X 288H EN15695 (HEPA)	1
2 AU460748	CENTRIFUGAL PRE -CLEANER	1
3 H0133899	2-1/2 INCH ADAPTOR	1
4 H0133903 H0133904	24V MOTOR W/ MOTOR MOUNTING PLATE 12V MOTOR W/ MOTOR MOUNTING PLATE	1
5 H0133901	FILTER ACCESS PANEL, SERIES 955	1

HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	H0116836
HEPA GRADE	H13 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	206 mm OD x 288 mm

\* on qualified cabins

The high capacity and high efficiency HEPA filter and pressuriser is designed using heavy-duty 304 stainless steel construction that is suitable for mobile applications in corrosive atmospheres. The activated filter media can be customised to suit the removal of specific contaminants and odours from the workplace, resulting in clean fresh air to the operator.



PRESSURISATION

Air exiting the FPS unit creates positive pressure in a properly sealed cabin. This over-pressure pushes clean air out leaks in the positive side pressure side of the system, rather than allowing contaminated air to enter. A differential pressure gauge is available to measure the difference in pressure between the inside and outside of the cabin.

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	22 l/s	50 CFM
Power Supply	12v/24v	12v/24v
Current Draw	3.2 /1.6A	3.2 /1.6A
Weight (nominal)	20.0 Kg	44.0 lbs
Dimension L X W X H	450x250x370 mm	17.72x9.82x 14.57 inch

MAINTENANCE

6 MONTHS / 1800 HOURS	
H0116835	FILTER 16 / 79ID X 206OD X 288H
H0116836	FILTER 16 / 79ID X 206OD X 288H EN15695 (FOR UPGRADED UNIT)
ANNUAL / 3,600 HOURS	
AU460748	CENTRIFUGAL PRE-CLEANER
3 YEARS / 10,800 HOURS	
H0133903	24V MOTOR W/ MOTOR MOUNTING PLATE
H0133904	12V MOTOR W/ MOTOR MOUNTING PLATE

COMPANION ITEMS

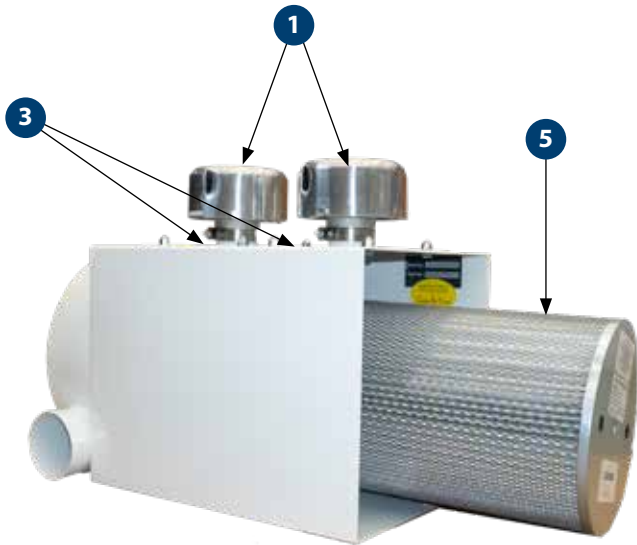
PART NO.	DESCRIPTION
H0116835	FILTER 16 / 79ID X 206OD X 288H
H0133905	3 INCH INLET ADAPTOR
AU460747	PRE-CLEANER 3 INCH



# FPS955-220VAC

## COMPACT FILTRATION PRESSURISER

**H0111418**  
Compact HEPA Filtration Pressuriser System FPS955 220VAC



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
1	AU460748 CENTRIFUGAL PRE-CLEANER 2-1/2 INCH ID	2
2	H0133898 220 V MOTOR AND MOUNTING PLATE	1
3	H0133899 2-1/2 INCH ADAPTOR	2
4	H0133901 FILTER ACCESS PANEL SERIES FPS955	1
5	H0116837 FILTER 16/87ID X 273OB X 417H (H13 GRADE)	1
	FLANGE KIT WITH 3 INCH SPIGOT	1

## HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	H0116837
HEPA GRADE	H13 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	273mm OD x 417 mm

\* on qualified cabins

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	70 l/s	150 CFM
Power Supply	220 VAC	220 VAC
Weight (nominal)	40.0 Kg	88.0 lbs
Dimension L X W X H	400mm X 680mm X 400 mm	19.3in X 26.8in X 15.7in

## MAINTENANCE

6 MONTHLY / 1800 HOURS	
H0116837	FILTER 16 / 87ID X 273OD X 417H (H13 GRADE)
ANNUAL / 3,600 HOURS	
AU460747	FILTER PRE-CLEANER 8.5" FULL VIEW
AU460748	CENTRIFUGAL PRE-CLEANER
3 YEARS / 10,800 HOURS	
H0133898	220 V MOTOR AND MOUNTING PLATE

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

## COMPANION ITEMS

PART NO.	DESCRIPTION
AU460747	CENTRIFUGAL PRE-CLEANER 3 INCH ID
H0133905	3 INCH INLET ADAPTOR



KNORR-BREMSE

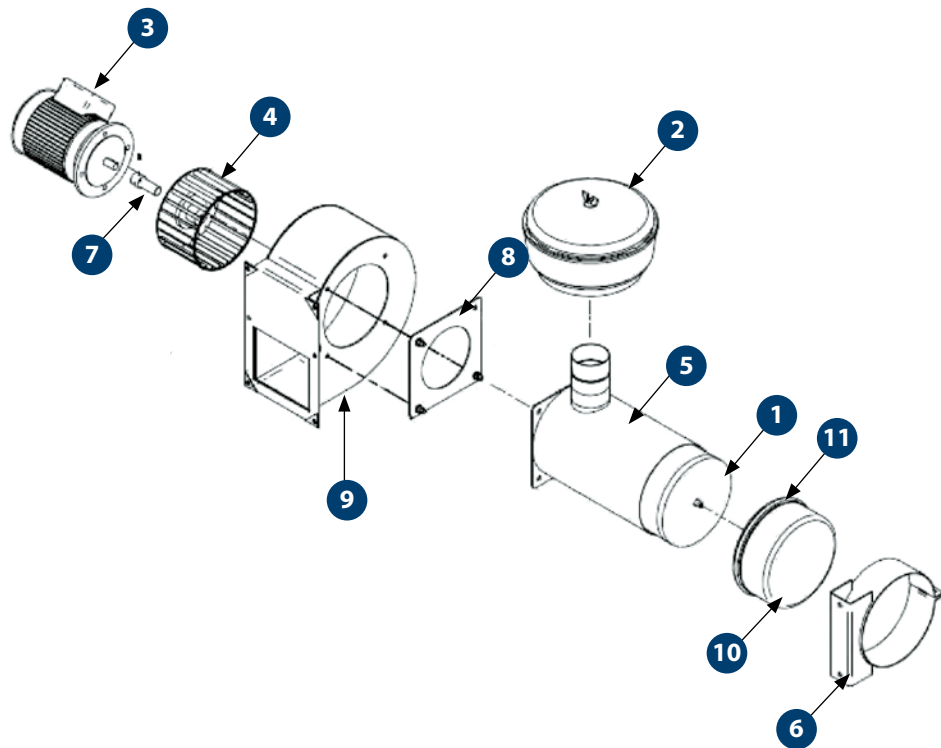




# FVV80

## FRESH AIR PRESSURISER UNIT

**FVV80MR1**  
Fresh Air Pressuriser 80 l/s 415 VAC



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460734	FILTER ELEMENT SUIT FVV80 & FVV100	1
2 AU460728	FILTER PRE-CLEANER 186MM FULL VIEW	1
3 AU304150	MOTOR 0.55KW 415V 71 FL 2P	1
4 AU410525	BLOWER 178D X 76W X 19MM	1
5 AS162609	FILTER CANNISTER ASSEMBLY	1
6 AS162611	FILTER SUPPORT CLAMP ASSEMBLY	1
7 AU872011	SHAFT EXTENSION 14MM F X 19MM M	1
8 R1626026	GASKET FVV100 INLET 200MM X 200MM 140MM DIAMETER	1
9 AS162614	FAN HOUSING ASSEMBLY	1
10 AU460768	END CAP	1
11 AU460765	CLAMP ASSEMBLY	1

## HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0174977
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	152mm OD x 305 mm

\* on qualified cabins

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	80 l/s	170 CFM
Power Supply	415 VAC	415 VAC
Current Draw	1.3 A	1.3 A
Maximum Ambient Temperature Range	46°C	115°F
Weight (nominal)	22.0 Kg	48.4 lbs
Dimension L X W X H	724mm X 333mm X 495mm	28.5in X 13.1in X 19.5in

## MAINTENANCE

MONTHLY / 300 HOURS	
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100
AU460081	FILTER CARTRIDGE ENDURANCE (FOR UPGRADED UNIT)
H0174977	HEPA CARTRIDGE (FOR UPGRADED UNIT)
3 YEARS / 10,800 HOURS	
AU460728	FILTER PRE-CLEANER 186MM FULL VIEW
AU410525	BLOWER 178D X 76W X 19MM CCW SINGLE INLET

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

## COMPANION ITEMS

PART NO.	DESCRIPTION
AU460965	PRE-CLEANER TS 3" INLET LARGE
AU460081	FILTER CARTRIDGE ENDURANCE
H0174977	HEPA FILTER CARTRIDGE

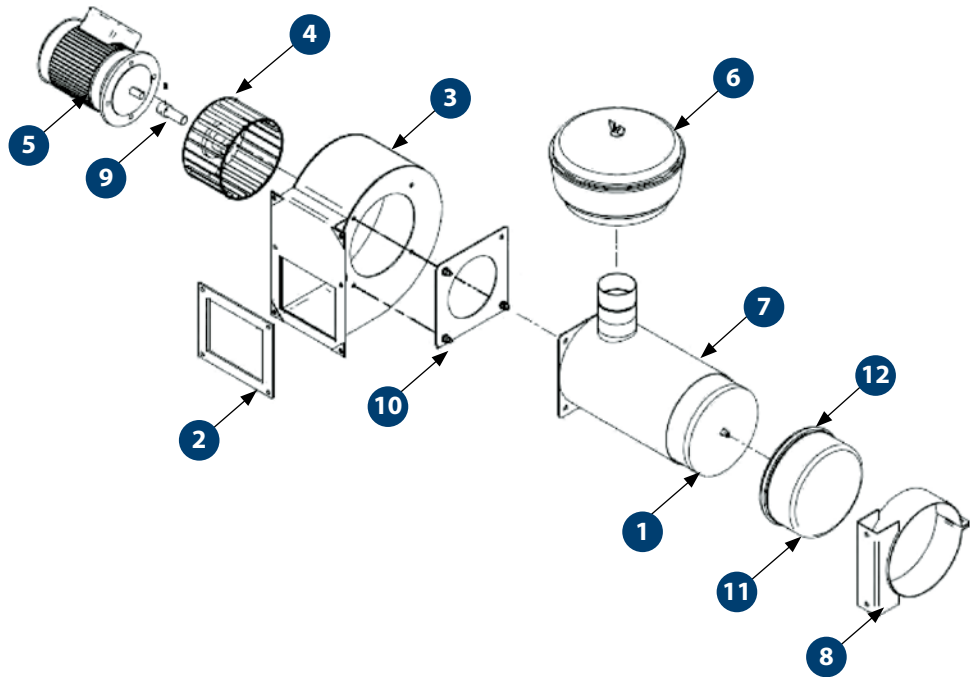




# FVV100

## FRESH AIR PRESSURISER UNIT

**FVV100MR1**  
Fresh Air Pressuriser 100 l/s 415 VAC



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100	1
1 AU460081	FILTER CARTRIDGE ENDURANCE	1
H0174977	H13 HEPA FILTER	1
2 R1626027	GASKET OUTLET 206MM X 178MM	1
3 AS162608	FAN HOUSING	1
4 AU410520	BLOWER 178D X 102W X 19MM	1
5 UE800	MOTOR 0.37kW BEEW FL 2900RPM 240V (FVV100K1)	1
AU304150	MOTOR 0.55KW 415V 71 FL 2P (FVV100MR1)	1
6 AU460729	FILTER PRE-CLEANER 270MM - STANDARD	1
7 AS162609	FILTER CANNISTER ASSEMBLY	1
8 AS162611	FILTER SUPPORT CLAMP ASSEMBLY	1
9 AU872011	SHAFT EXTENSION 14MM F X 19MM MALE	
10 R1626026	GASKET FVV100 INLET 200MM X 200MM 140MM DIAMETER	1
11 AU460768	END CAP	1
12 AU460765	CLAMP ASSEMBLY	1

## HEPA FILTRATION OPTION

PARTICULARS	DESCRIPTION
PART NO.	H0174977
HEPA GRADE	H13
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	152mm OD x 305 mm

\* on qualified cabins

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Air Flow	100 l/s	212 CFM
Power Supply	415 VAC	415 VAC
Current Draw	1.3 A	1.3 A
Weight (nominal)	22.0 Kg	48.4 lbs
Dimension (L X W X H)	755mm X 333mm X 495mm	29.7in X 13.in X 19.5in

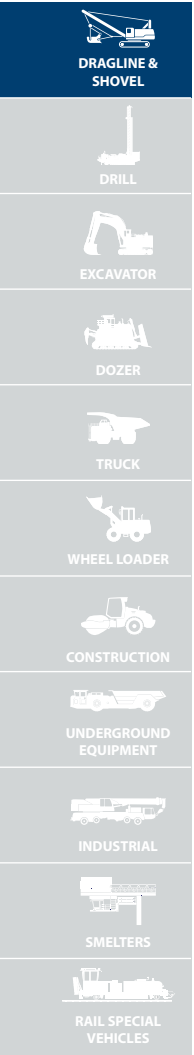
## MAINTENANCE

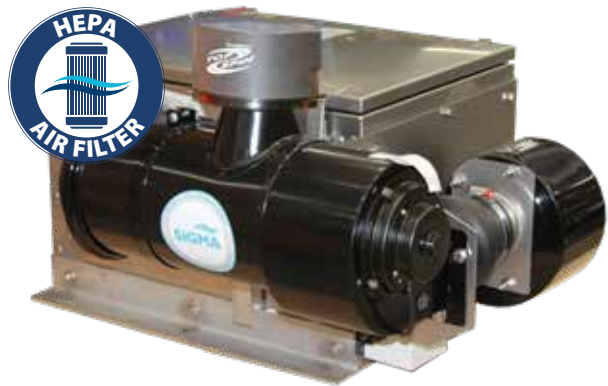
MONTHLY / 300 HOURS	
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100
AU460081	FILTER CARTRIDGE ENDURANCE
6 MONTHS / 1800 HOURS	
H0174977	H13 HEPA FILTER
3 YEARS / 10,800 HOURS	
AU460729	FILTER PRE-CLEANER 270MM - STANDARD
AU410520	BLOWER 178D X 102W X 19MM

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

## COMPANION ITEMS

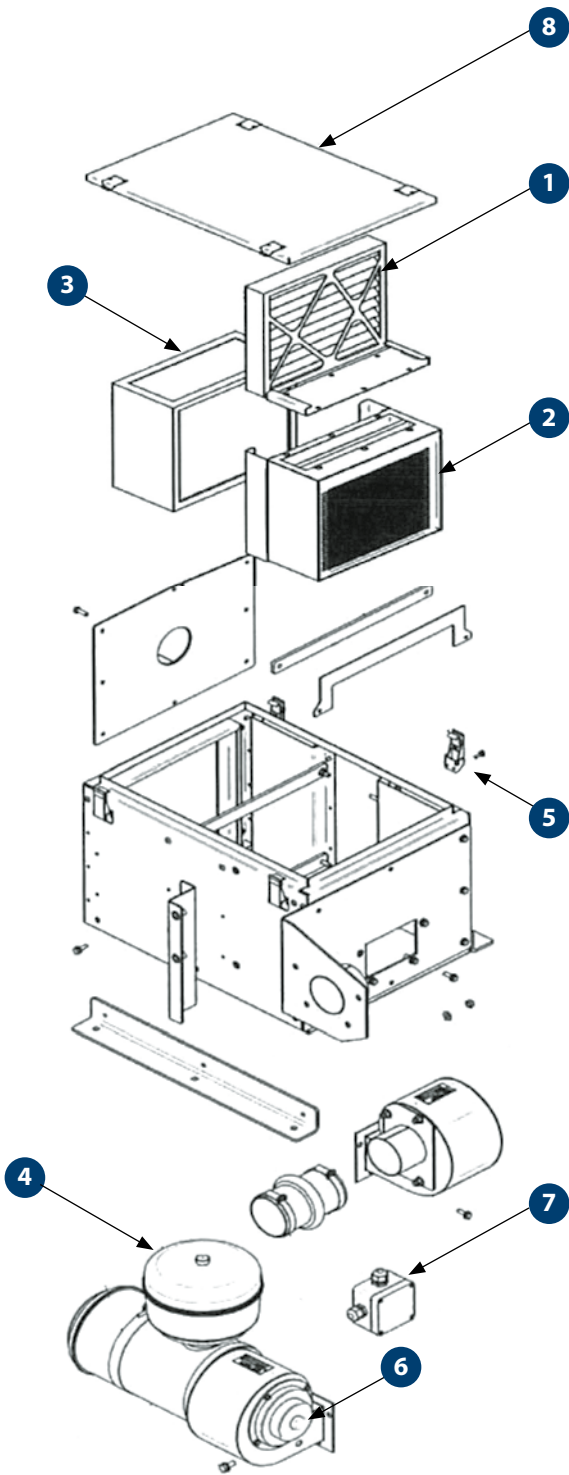
PART NO.	DESCRIPTION
AU460965	PRE-CLEANER TS 3" INLET LARGE
AU460081	FILTER CARTRIDGE ENDURANCE
H0174977	HEPA FILTER CARTRIDGE





PVV50B2  
PRESSURISER

**PVV50B2**  
Fresh Air Multi Stage Filtration (H14 HEPA) and  
Pressuriser 30 l/s 24V



SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM	1
AS3505127	FILTRATION MODULE ASSEMBLY	1
AU480004	MEDIA ACT ALUMINA	1
2 AU480010	MEDIA ACT CARBON	1
AU480011	MEDIA IMPREG CARBON	1
3 AU460863	FILTER 305MM X 305MM X 149MM METAL CASE (H14 HEPA FILTER)	1
4 AU460963	PRE CLEANER TS 3" INLET SMALL	1
5 UC310	CATCH TOGGLE OVERCENTRE SS	4
6 H0175266	MOTOR 70W 24VDC ASSEMBLY	2
7 AU613047	TERMINAL BOX 80MM X 80MM	1
8 AS5242124	LID ASSEMBLY	1
AU460706	FILTER ASSEMBLY ROUND 133MM - STANDARD	1
AU460080	FILTER CART ENDURANCE FVV50B2	1
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET	2
AU862211	SEAL RUBBER	2
S3750100	SEAL GASKET MOTOR	1
S3750101	SEAL GASKET CANISTER	1
UC369	CATCH STRIKER STAINLESS STEEL	4
AU635405	TERMINAL BLOCK	1
AU460083	FILTER CARTRIDGE ENDURANCE FOR EB9P4X	1
H0056158	CLAMP ASSEMBLY 168MM INTERNAL DIAMETER	1
H0056157	COVER ASSEMBLY	1
AU870001	MOUNTING BAND AIR CLEANER 6.5" DIAMETER	1

HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	AU460863
HEPA GRADE	H13 / US HEPA / AS4260 (GRADE 2)
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	305mm x 305mm x 149mm

\* on qualified cabins

SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	30 l/s	64 CFM
Power Supply	24V	24V
Current Draw	6 A	6 A
Weight (nominal)	60.0 Kg	132.0 lbs
Dimension L X W X H	695mm X 364mm X 520mm	27.4in X 14.3in X 20.5in

MAINTENANCE

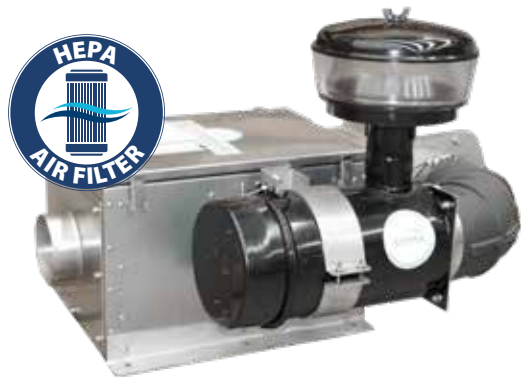
3 MONTHS / 900 HOURS	
AU4600083	FILTER CARTRIDGE ENDURANCE FOR PVV50B2
AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM
AU480004	MEDIA ACT ALUMINA
AU480010	MEDIA ACT CARBON
AU480011	MEDIA IMPREG CARBON
ANNUAL / 3,600 HOURS	
AU460863	FILTER 305MM X 305MM X 149MM METAL CASE
H0175266	MOTOR 70W 24VDC ASSEMBLY
3 YEARS / 10,800 HOURS	
AU460963	PRE CLEANER TS 3" INLET SMALL
AU410337	BLOWER 120D x 89W x 5/8 COUNTER CLOCKWISE SINGLE INLET

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

COMPANION ITEMS

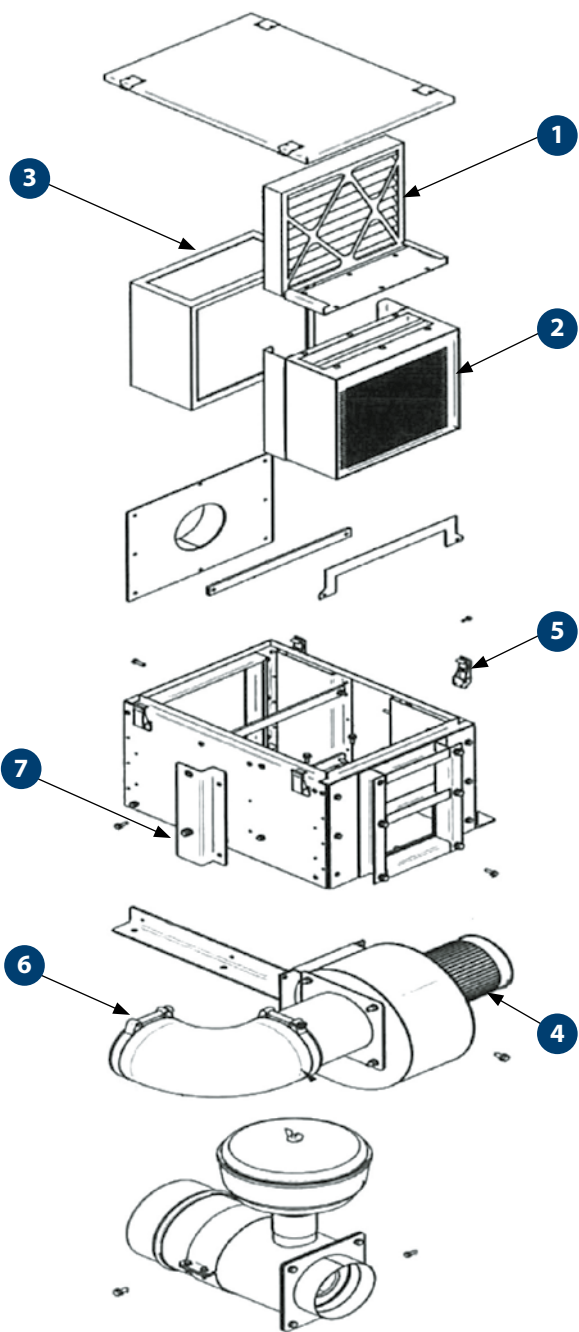
PART NO.	DESCRIPTION
KNHV90007	FIELD SERVICE KIT PVV50 24VDC – EXCL MED





# PVV50M2 PRESSURISER

**PVV50M2**  
Fresh Air Multi Stage Filtration (H14 HEPA) and Pressuriser  
50 l/s 415 VAC



## SPARE PARTS

PART NO.	DESCRIPTION	QTY
1 AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM	1
AS3505127	FILTRATION MODULE ASSEMBLY	1
AU480004	MEDIA ACT ALUMINA	1
AU480010	MEDIA ACT CARBON	1
AU480011	MEDIA IMPREG CARBON	1
3 AU460863	FILTER 305MM X 305MM X 149MM METAL CASE (H14 HEPA FILTER)	1
4 AU304150	MOTOR 0.55KW 415V 71 FL 2P	1
5 UC310	CATCH TOGGLE OVERCENTRE SS	4
6 UC265	ELBOW RUBBER 90DEG 6"	1
7 AS3505146	CANISTER MOUNTING BRACKET ASSEMBLY	1
AS162608	FAN HOUSING	1
AS162609	FILTER CANNISTER ASSEMBLY	1
AS162611	FILTER SUPPORT CLAMP ASSEMBLY	1
AU410520	BLOWER 178D X 102W X 19MM CCW SINGLE INLET	1
AU460081	FILTER CARTRIDGE ENDURANCE FVV100	1
AU460727	FILTER CYCLONE 8" METAL	1
AU460729	FILTER PRE-CLEANER 270MM	1
AU460734	FILTER ELEMENT SUIT FVV80 & FVV100	1
AU460765	CLAMP ASSEMBLY	1
AU460768	END CAP	1
AU862121	GASKET OUTLET 206MM X 178MM	1
AU862211	SEAL RUBBER	2
AU872011	SHAFT EXTENSION 14MM F X 19MM M	1
R1626026	GASKET FVV100 INLET 200MM X 200MM 140MM DIAMETER	1
UC266	CLAMP SUIT UC265	2

## SPECIFICATIONS

	METRIC	IMPERIAL
Fan Speeds	1	1
Fresh Air	50 l/s	106 CFM
Power Supply	415 VAC	415 VAC
Current Draw	6 A	6 A
Weight (nominal)	60.0 Kg	132.0 lbs
Dimension L X W X H	695mm X 364mm X 520mm	27.4in X 14.3in X 20.5in

## MAINTENANCE

3 MONTHS / 900 HOURS	
AU460081	FILTER CARTRIDGE ENDURANCE
AU460628	FILTER CARTRIDGE PLEAT 305MM X 305MM X 50MM
AU480004	MEDIA ACT ALUMINA
AU480010	MEDIA ACT CARBON
AU480011	MEDIA IMPREG CARBON
ANNUAL / 3,600 HOURS	
AU460863	FILTER 305MM X 305X149MM METAL CASE
3 YEARS / 10,800 HOURS	
AU460729	FILTER PRE-CLEANER 270MM
AU410520	BLOWER 178D X 102W X 19MM CCW SINGLE INLET

Please contact SIGMA for more information including details on an overhaul scope and interval.  
Maintenance periods and scope are dependent on application and site conditions, and are to be used as a guide.

## HEPA FILTRATION

PARTICULARS	DESCRIPTION
PART NO.	AU460863
HEPA GRADE	H13 / US HEPA / AS4260 (GRADE 2)
TEST STANDARD	EN 1822 or equivalent
FILTRATION EFFICIENCY	*99.95% for particles diameter 0.3 µm
FILTER DIMENSION	305mm x 305mm x 149mm

\* on qualified cabins





## SIGMA PVV50 SERIES:

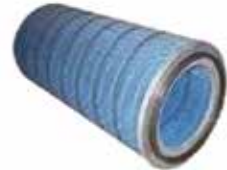
The high capacity and high efficiency HEPA filter and pressuriser is designed using heavy-duty 304 stainless steel construction that is suitable for mobile applications in corrosive atmospheres. The activated filter media can be customised to suit the removal of specific contaminants and odours from the workplace, resulting in clean fresh air to the operator.

## PVV50 - 5 stages of filtration.

**Available in 12VDC, 24VDC or 415VAC.**



Pre-cleaner



### Cartridge Filter



Activated Media



Post Filter



H14 HEPA Filter

H14 Certified 99.99% efficient on particulate 0.3 micron and above.

## Customised Contaminant Removal

MULTI-MIX®	NH <sub>3</sub>	CO	CO <sub>2</sub>	Cl <sub>2</sub>	C <sub>2</sub> H <sub>4</sub>	HCOH	HC	VOC	HF	H <sub>2</sub> S	H <sub>2</sub> SO <sub>4</sub>	HCl	NO <sub>x</sub>	O <sub>3</sub>	SO <sub>x</sub>
MM-100		●													
MM-200			●												
MM-1000					●	●									●
MM-3000							●	●						●	
MM-7000	●														
MM-9000				●					●	●	●	●	●		
MM1355					●	●	●	●						●	●
MM-1955				●					●	●	●	●	●		●

**Where,**

<b>NH<sub>3</sub></b>	Ammonia	<b>C<sub>2</sub>H<sub>4</sub></b>	Ethylene	<b>HF</b>	Hydrogen Fluoride	<b>NO<sub>x</sub></b>	Oxides of Nitrogen
<b>CO</b>	Carbon Monoxide	<b>HCOH</b>	Formaldehyde	<b>H<sub>2</sub>S</b>	Hydrogen Sulphide	<b>O<sub>3</sub></b>	Ozone
<b>CO<sub>2</sub></b>	Carbon Dioxide	<b>HC</b>	General Hydrocarbon	<b>H<sub>2</sub>SO<sub>4</sub></b>	Sulphuric Acid	<b>SO<sub>x</sub></b>	Oxides of Sulphur
<b>Cl<sub>2</sub></b>	Chlorine	<b>VOC</b>	General VOC	<b>HCl</b>	Hydrochloric Acid		

## NOTES

This image shows a full page of blank handwriting practice paper. It features approximately 28 evenly spaced horizontal blue lines across the entire page, providing a guide for letter height and placement. The background is plain white, and there are no margins, text, or other markings present.



## **KNORR BREMSE AUSTRALIA Pty Ltd**

Incorporating SIGMA Air Conditioning

23 – 29 Factory Street

Granville NSW 2142

Australia

**Customer service:** 1300 643 643

(+61) 2 8863 6500

**Email:** mid.aus@sigma-hvac.com

W W W . S I G M A - H V A C . C O M

### **Australia:**

Factory St, Granville, Sydney, Australia

Boundary Road, Darra, Brisbane, Australia

Enterprise Street, Paget, Mackay, Australia

Colin Jamieson Drive Welshpool, Australia

### **United States:**

Arthur Peck Drive, Westminster MD, USA

### **India:**

Delhi-Mathura Road, Palwal, Haryana, Delhi, India

### **China:**

Jingui Road, Wuxi Jiangsu Province, China



**SIGMA**

AUTHORISED SIGMA  
DEALER



**SIGMA**  
BUILT FOR THE TOUGHEST AIR CONDITIONS