



Why choose VES

VES has been supplying products for the HVAC industry for over 40 years, and have the in-depth knowledge and resources to provide solutions to all ventilation related requirements. We are a substantial British manufacturing company with over 200 employees, several factories plus a regional base in the north of England, and sales engineers located throughout the UK.

Complete range of products

The product range encompasses all types of ventilation products, including those required for commercial, industrial, public and domestic buildings. The emphasis is on low energy products and sophisticated controls to meet the requirements of the Building Regulations.

The range extends from a small bathroom extract fan up to a mighty central station air handling unit.

There are specialist heat recovery units, high temperature fans for kitchen hood extract; duct, wall, ceiling and roof units; low noise products and silencers; fitted controls.

High quality, flexible solutions

VES operate a quality assurance system to ISO 9001, monitored by the BSI. The air movement products are tested in-house to BS 848 Part 1, and submitted for external testing and approval when necessary.

VES specialise in bespoke designs for ventilation units, and whatever the issue, be it space, noise, temperature etc, can provide a design solution to meet the requirements of the project.

Superior customer service

From the moment we receive your enquiry to delivery and beyond, we have the people in place to give excellent customer service. The VES after sales service covers the whole of the UK and is among the best in the industry.

Experience and expertise

VES employ a range of experts in disciplines including air movement, noise control, air conditioning, controls, electrics and product refurbishment, and we have key staff who have worked at VES for many years.

Manufactured in the UK

VES has over 12000m² of manufacturing and stores space, and has state of the art sheet metalworking equipment, plus a large powder coating plant. VES also has a substantial controls department, and makes components such as dampers and electric heaters in-house. This not only provides employment for local people, but also many suppliers around the UK.

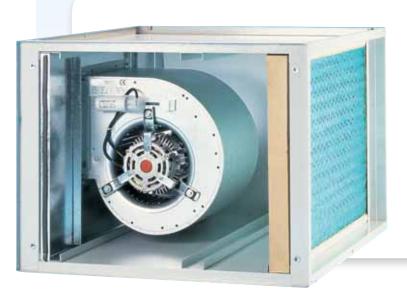
Introduction

The VES REX rectangular extract fan is suitable for internal use. With horizontal or vertical mounting and five sizes of unit the REX units are suitable for a wide range of applications.

REX is simple to install, commission and maintain.

Features and Benefits

- Five sizes of unit with air volumes from 0.05m³/sec to 3.2m³/sec.
- Optional single or double skinned case.
- Accessories include matching silencers and speed regulators.
- Easy maintenance fan plate side withdrawable.
- Horizontal or vertical mounting.
- Tough case construction in galvanised sheet steel with optional powder coat paint finish.
- Quick and easy to install on site.
- Units available with side withdrawable disposable cell filter.
- All units tested in accordance with BS 848, ensuring guaranteed performance.







REX Sound Data

Sound levels - Sound power level dB ref 10⁻¹²w PWL

Fan	SPL		Centre Frequency - Hz						
Size	*dBA	63	125	250	500	1000	2000	4000	8000
1	44	65	61	56	55	55	53	51	47
-	44	00	01	30	33	33	<u> </u>	31	
2	46	69	66	58	57	57	55	53	49
3	47	69	66	59	58	58	56	54	50
4	58	69	70	64	69	69	57	65	61
5	58	71	70	64	68	69	57	66	60
6	64	75	76	70	72	75	75	73	67
7	62	73	75	68	72	74	73	70	65
8	64	76	77	70	72	72	71	70	64
9	64	75	76	71	74	74	75	73	68
10	71	83	84	80	81	82	81	69	72
	•	•							

^{*}At 3 metres from outlet, free field

Noise breakout - Sound pressure levels SPL dBA at 1 and 3 metres from case

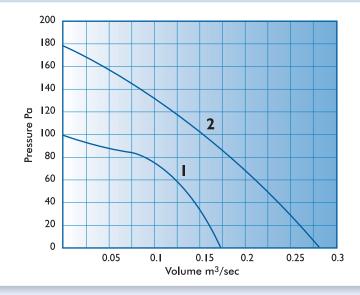
	Single Skin Case				Double Skin Case			
Fan	dBA	NR	dBA	NR	dBA	NR	dBA	NR
Size	@1m	@1m	@3m	@3m	@1m	@1m	@3m	@3m
1	37	35	32	30	32	30	27	25
2	39	35	34	30	34	30	29	25
3	40	35	35	30	35	30	30	25
4	51	45	46	40	46	40	41	35
5	51	45	46	40	46	40	41	35
6	57	55	52	50	52	50	47	45
7	55	50	50	45	50	45	45	40
8	55	50	50	45	50	45	47	40
9	57	55	52	50	52	50	47	45
10	64	60	59	55	59	55	54	50

REX Selection Charts

REX₁

To specify the unit you require:

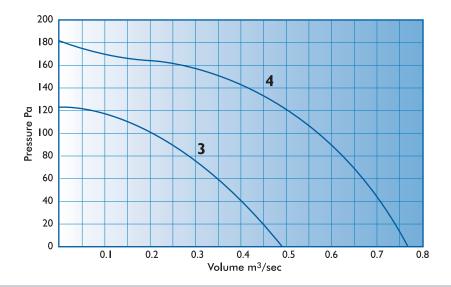
Case size 1, Fan size 2 = Model REX 12



REX 2

Should you require a fitted filter, add suffix F.

E.g. **REX 24 / F**

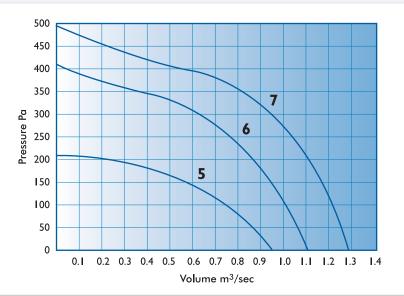


REX 3

The size 6 fan can also be fitted into a size 2 case if required,

E.g. Model REX 26

A filter can be used with this combination, but not above 0.6m³/sec due to air velocity across filter panel.

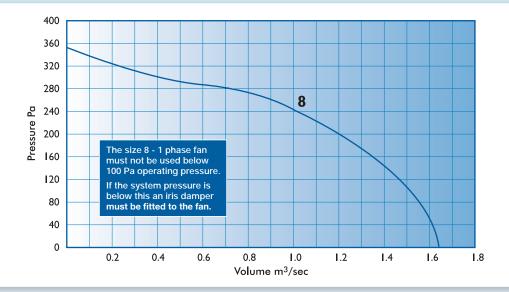




REX Selection Charts

REX 4

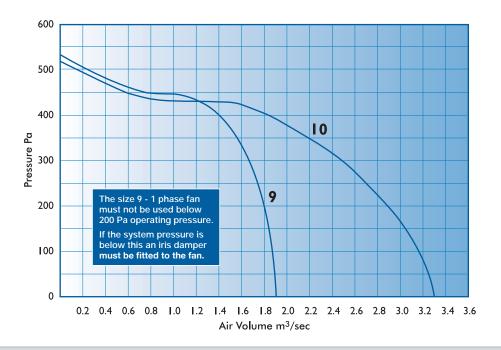
The **REX 48** is available with 1 or 3 phase motor.



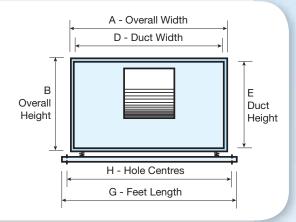
REX 5

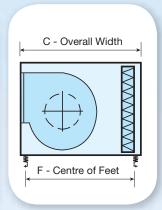
The **REX 59** is available with 1 or 3 phase motor.

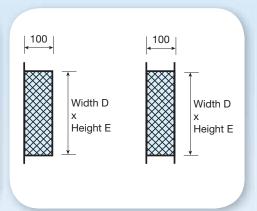
The **REX 510** is only available with 3 phase motor.



Dimensions REX 1-4 Units







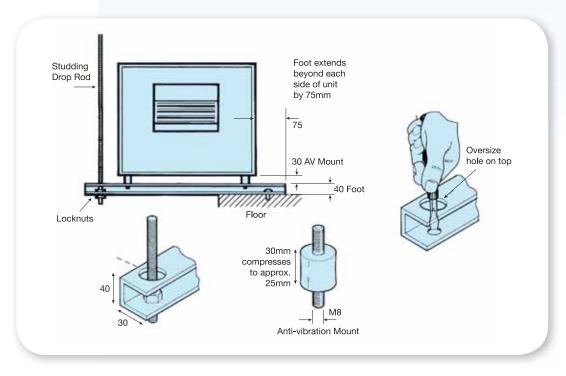
Access panels and electrical connections are available either left or right hand side looking in the direction of the airflow.

Optional Filter: Specify **REX 36 / F** There is no increase in length of size 1-4 units with filter,

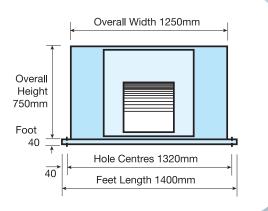
REX Units 1-4 Dimensions - mm

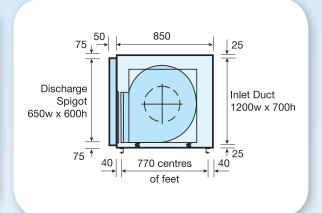
		Dimensions - mm						Weigh	ts - Kg	
Model	Α	В	С	D	Е	F	G	Н	Single Skin	Double Skin
1	600	325	445	550	275	365	750	670	16	23
2	750	480	575	700	430	495	900	820	36	51
3	850	550	720	800	500	640	1000	920	56	84
4	950	650	750	900	600	670	1100	1020	81	124

Mounting Feet and Anti-Vibration Mounts



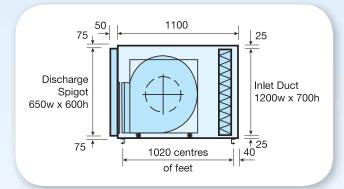
Dimensions REX 5 Unit





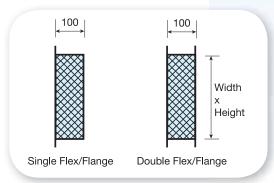
Access panels and electrical connections are available either left or right hand side looking in the direction of the airflow.

REX 5 Weights Kg	Extra for Filter Section
Single Skinned - 93	9
Double Skinned - 106	17



Fan internally isolated with AV mounts and flexible connection. Silencer model VA5 fits directly to unit outlet or onto inlet plenum. Silencer fits over discharge spigot onto unit case.

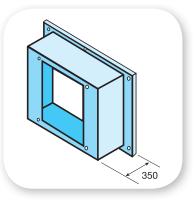
Flexible Connections



Location	Width	Height
	(mm)	(mm)
To unit inlet	1200	700
To silencer	800	700
To discharge spigot	650	600

Inlet Plenum Box

Model SAMPL5



REX	Filter Size	Filter Part
Model	(mm)	Number
1	550 x 270 x 50	SAMDF 1
2	700 x 425 x 50	SAMDF 2
3	800 x 495 x 50	SAMDF 3
4	900 x 595 x 50	SAMDF 4
5	695 x 598 x 100 (2 No.)	SAMDF 5

Electrical Details

	Motor Output	FLC Amps	Speed	Speed
Fan	Watts	Max	RPM	Regulator
1	73	0.4	900	T1
2	92	1.1	1300	VS2
3	125	1.3	850	T1
4	250	2.8	910	VS6
5	250	2.8	910	VS6
6	550	6.1	1380	VS6
7	550	8.0	1380	Т8
8-1ph	750	5.8	910	T8
8-3ph	1100	3.5	910	SC310
9-1ph	2600	12.2	820	T12
9-3ph	2700	6.3	850	SC310
10-3ph	2700	6.5	850	SC310

Fan Speed Controllers

		Dimensions (mm)				
Model	Width	Height	Depth			
VS2	90	150	45			
VS6	95	145	50			
T1	120	190	65			
T8	160	230	120			
T12	190	250	130			
SC310	223	320	110			







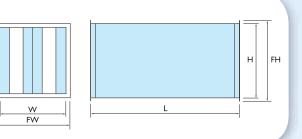




Silencers

The standard VA silencers are designed to fit straight on to the REX unit, on both the inlet and outlet. The splitters and side liners are non-combustible resin bonded mineral fibre slab faced with bonded glass tissue to prevent erosion of the attenuating material. The silencer case is galvanised sheet steel with 25mm proprietary duct flanges.

The VA5 silencer is narrower than the REX 5 case, and is located centrally. Should an inlet silencer be required, a 350mm long inlet plenum, part number SAMPL5, is to be fitted between the unit and silencer.



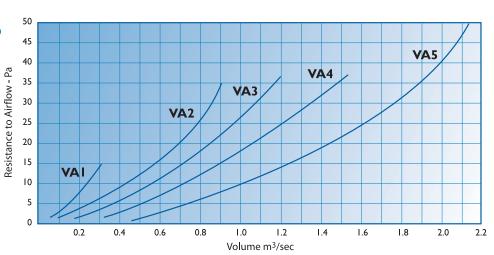
Dimensions - mm							1
Silencer Model	To fit REX	Width	Height	Length	FW	FH	Weight Kg
VA1	1	550	275	1000	600	325	23
VA2	2	700	430	1000	750	480	37
VA3	3	800	500	1000	850	550	44
VA4	4	900	600	1000	950	650	62
VA5	5	800	700	1200	850	750	60

Attenuation

Insertion Loss, dB

				Centre freq	juency - Hz			
Model	63	125	250	500	1000	2000	4000	8000
VA1	4	8	14	28	36	36	28	22
VA2	4	7	13	25	32	32	23	18
VA3	5	9	16	30	39	39	31	26
VA4	4	8	14	28	36	36	28	22
VA5	4	7	13	25	32	32	23	18

Silencer Air Pressure Loss



Product Specification

REX Rectangular Extract Fans

1.1 Quality Standards

VES is a British Standards Institution registered company operating a quality system to BS ISO 9001, certificate no Q5375. All units tested to BS 848 Part 1.

1.2 Case

The REX unit casings are rigidly constructed using galvanised sheet steel, single skinned or double skinned with an infill of mineral fibre slab. The units can be externally finished in polyester powdercoated signal gray RAL7004 as standard. The fan is easily removable on a slide out plate. Mounting feet are suitable for use either with drop rods or for fixing down to a floor or support.

The case is also suitable for fitting directly to 25mm proprietary duct flange connections.

1.3 Fan

Forward curved centrifugal fan, multi-vane, double inlet double width, direct driven by hub mounted motor. The motors in all fans are fitted with high temperature automatic cut-out protection. All fans can be speed controlled by VES speed regulators.

1.4 Filter (Optional)

The standard filter panel is continuously spun glass fibre filament. The media is non-hydroscopic and flame retardant, with a dust arrestance of 84% to EU3, at an operating velocity of 1.5m/sec. The nominal resistance to airflow of a clean filter is 25Pa at a face velocity of 1.5m/sec.

1.5 Silencer

The standard VA Silencers are designed to fit straight on to the REX Unit on both the inlet and outlet. The splitters and side liners are non-combustible resin bonded mineral fibre slab, faced with bonded glass tissue to prevent erosion of the attenuating material.

The splitters are supported with galvanised sheet steel frames, and the silencer case is galvanised sheet steel of lock formed construction, terminating in 25mm proprietary duct flanges.





Other products and services from the complete range of VES HVAC solutions:

Air Handling Units:

- Supply and extract, combined or separate.
- Heat recovery including crossflow plate heat exchangers, thermal wheel, run-around coils.
- Plantroom or weatherproof, flat or stacked.
- Fitted silencers, fitted inverters and controls.
- Matching DX condensing units.
- Various case constructions including EN 1886 certified units.

Duct Fans:

- In-line centrifugal, with forward or backward curved impellors.
- Round fans, axial and mixed flow fans.
- Fitted silencers available all units.
- Manual and automatic speed controllers available.

Twin Fans:

- For ceiling void, plantroom, and weatherproof.
- Many models and configurations.
- Fitted auto-changeover system.

Roof Extract Units:

- Three ranges for volume and pressure.
- Curb and soaker sheet bases.

Wall and Ceiling Fans:

All types for commercial, industrial and domestic premises.

Kitchen Hood Extract Fans:

- Heavy duty high temperature fans for hot greasy air.
- Motors out of airstream.
- Single inlet fans, in-line and vertical jet roof units.

Control Panels:

- Off the shelf and built to order panels.
- Air quality sensors and energy savers.
- Intelligent control software.
- A range of remotes including touch screen.

Noise Control:

- Matching silencers available for all ventilation products.
- Silencers designed to meet noise criteria.
- Cleanable silencers.
- Weatherproof silencers.

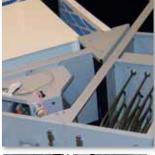
Specialist Site Services:

- Plant refurbishment.
- Energy saving upgrades.
- Noise reduction.
- Site surveys.
- Kitchen ventilation.
- AHU flat pack installation.
- Maintenance.
- Spares.



























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VES reserve the right to amend product specifications and details without notice.