

RSHG

Chimney Fans



EXHAUSTO

FOR A BETTER FLOW



RSHG - Product Information

Description

The EXHAUSTO chimney fan RSHG is located on top of the chimney and provide a controllable negative pressure in the flue and chimney.

A fail-safe system is fitted in the fan, which automatically measures the velocity of the flue gases. Only when the velocity exceeds the preset and safe level can the gas appliance be used. The fail-safe system will prevent any spillage of combustion products from the appliance when the fan and controller are commissioned correctly.

The fail-safe system complies with BS 5440: 2000 part 1 and BS 6644: 1991.

The fans guarantee optimum draught irrespective of the placing, dimensions or height of the chimney which is beneficial to new or existing installations.

EXHAUSTO Chimney fans are offered with a unique money-back guarantee: Should the fan not give you full satisfaction, within 30 days of installation, irrespectively, you may return the fan for a full refund of the purchase price provided an appraisal form has been completed, and submitted with your order.

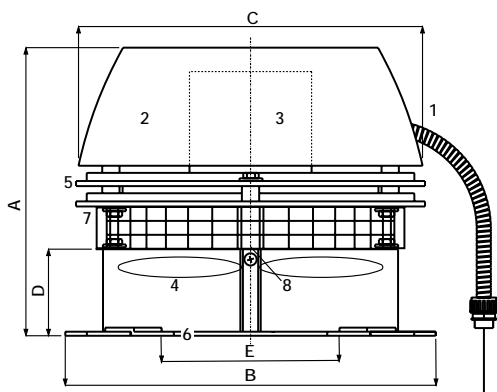
Construction

The chimney fans RSHG are constructed of corrosion resistant cast aluminium and are designed to work reliably in a hot and corrosive environment year after year.

The fans give a horizontal discharge and can withstand temperatures up to 200°C at the flue exit or chimney top. RSHG is supplied with an axial vane of stainless steel and a mesh safety guard covering the horizontal discharge. All fans are hinged, providing easy access for service and maintenance. The fans are fitted with an entirely closed, asynchronous motor with ball bearings sealed for life. The motor is specifically constructed to provide reliable operation at a high temperature. It is made to international classifications IP54 (protection class) and F (insulation).

The motor is located inside the motor housing and thus separated from the flue gases. The electrical connection is provided by a heat resistant silicone cable withstanding 200°C.

RSHG - Specifications



- 1. Motor cable
- 2. Motor housing
- 3. Motor
- 4. Vane
- 5. Ribbed cooling plate
- 6. Base plate
- 7. Hinges
- 8. Locking nut

Model	RPM	1x230V Amp/kW*	Weight kgs	A mm	BxB mm	C ø/mm	E ø/mm	D mm
RSHG012-4-1	1400	0.4/0.03	14	275	365	350	165	85
RSHG014-4-1	1400	0.4/0.04	18	330	420	395	188	100

*Effect at the motor shaft

Ambient temperature: 20°C

RPM is infinitely adjustable for all 1x230 V motors

Motor protection class IP 54

Insulation class F

Sound levels

Sound levels to external surroundings.

Measured in accordance to ISO 3744

Model	Lw (dB)							Lp dB (A)
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
RSHG012-4-1	64	60	55	52	48	42	34	30
RSHG014-4-1	75	69	65	62	57	51	44	41

Tolerance +/- 3 dB.

Lw = Sound effect level dB (reference: 1 pW)

Lp = Sound pressure level dB(A) at a distance of 10m from the fan
half-spheric sound distribution

Lp (5 meter) = Lp (10 meter) + 6 dB

Lp (20 meter) = Lp (10 meter) - 6 dB

Sound levels to flue pipe.

Measured in accordance to ISO 5136

Model	Lw (dB)							Lw dB (A)	Lp dB (A)
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz		
RSHG012-4-1	72	65	59	49	47	41	31	61	53
RSHG014-4-1	82	73	63	58	52	48	38	68	61

Tolerance +/- 3 dB.

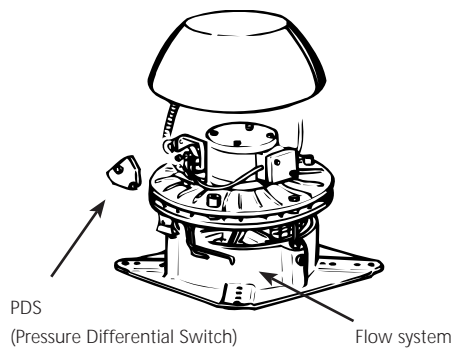
Lw = Sound effect level dB (reference: 1 pW)

Lp = Sound pressure level dB(A) at a distance of 10m from the fan
half-spheric sound distribution

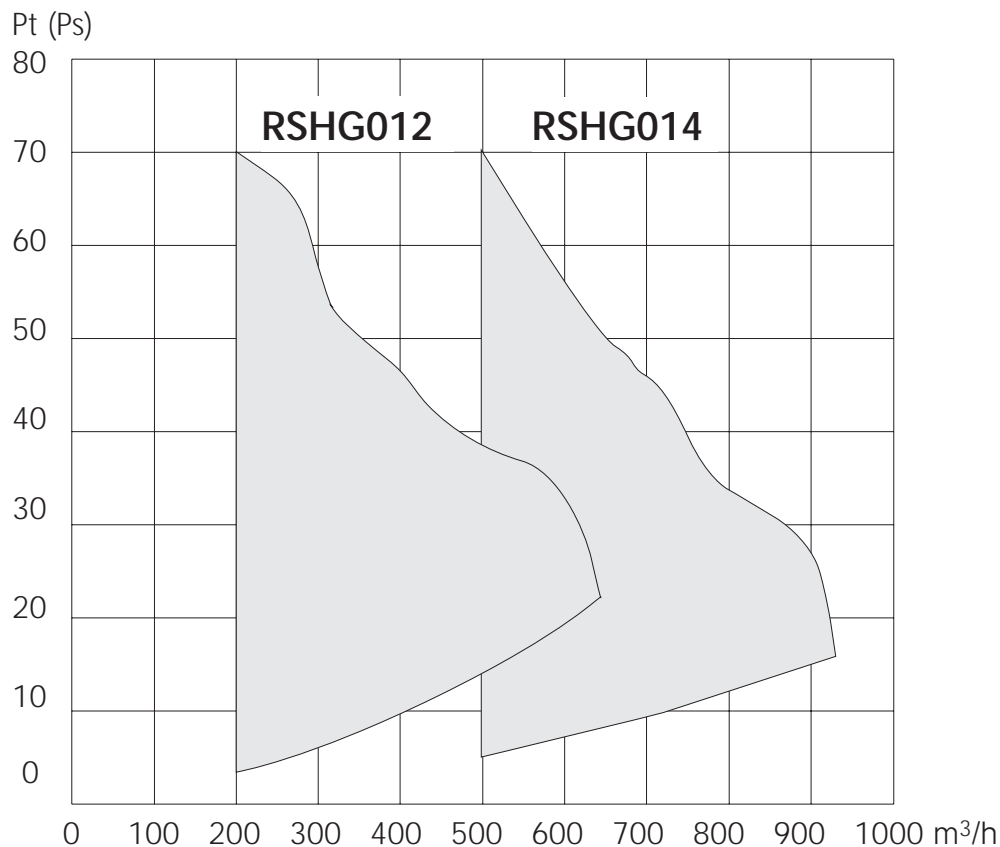
Lp (5 meter) = Lp (10 meter) + 6 dB

Lp (20 meter) = Lp (10 meter) - 6 dB

RSHG - fail-safe system



RSHG - Capacity charts



The capacity charts are measured at a flue gas temperature of 20 °C. The fan capacity changes with temperature of the flue gases. Correction of system pressure loss for flue gas temperature higher than 20°C is calculated:

$$P_{s, 20} = P_s \times \frac{273 + t \text{ (}^\circ\text{C)}}{293}$$

Example

System demand: 500m³/h and 90 Pa at 180°C

Chimney fan selection: 500m³/h and 139 Pa at 20°C

RSHG - Chimney fan selection

Please use the EXHAUSTO appraisal form.

EXHAUSTO offers a free fan selection service. The correct chimney fan and control unit are calculated according to EN 13384 and DIN 18895.

EXHAUSTO Chimney Fans are supplied with a 2 year warranty. EXHAUSTO is certified according to ISO 9001

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