Chimney fan

RS

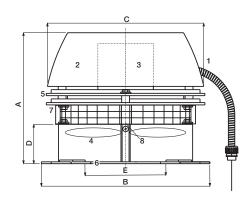
An Exodraft RS chimney fan is a specially designed extractor fan with horizontal discharge.

The fans can be used with all types of fuel burning appliances and are especially well-suited to appliances burning solid fuel, such as biomass or solid-fuel boilers, fireplaces and wood-burning stoves.

The fan is installed on top of a chimney and creates a negative pressure (suction) along the full length of the flue and chimney. The fan is part of an Exodraft system and must be connected to an Exodraft controller.



Technical data



- 1. Motor cable
- 2. Top section
- 3. Motor
- 4. Vane
- 5. Cooling plate
- 6. Base plate
- 7. Hinges
- 8. Locking screws

Model	Motor data				Weight	Dimension [mm]				
	rpm	V	Amp	kW*	kg	Α	BxB	C [Ø]	D	E [Ø]
RS009-41	1400	1 x 230	0.30	0.05	9	250	300	285	75	220
RS012-41	1400	1 x 230	0.40	0.09	14	275	365	350	85	280
RS014-41	1400	1 x 230	0.60	0.13	18	330	420	395	100	330
RS016-41	1400	1 x 230	1.20	0.29	25	405	480	450	100	380
RS255-41	1400	1 x 230	0.40	0.07	14	260	300	350	35	200
RS285-41	1400	1 x 230	0.80	0.18	20	290	355	395	35	230

^{*}Power consumption at ambient temperature of 20 $^{\circ}\text{C}$

The RPM of the above fan models are infinitely adjustable

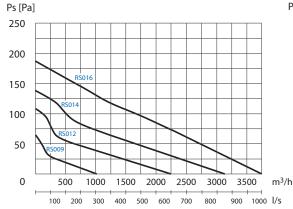
Motor protection IP rating IP54

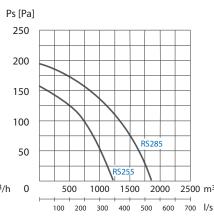
Insulation class F

The RS009 and RS012 fans can also be supplied with an octagonal mounting plate, specially designed for steel chimneys.



Capacity diagrams





Туре	Test flue diameters				
RS009	Ø 160 mm				
RS012	Ø 200 mm				
RS014	Ø 250 mm				
RS016	Ø 315 mm				
RS255	Ø 200 mm				
RS285	Ø 250 mm				
at 1400 rpm					

PLEASE NOTE: The capacity diagrams are measured with a flue gas temperature of 20 °C. The fan's capacity changes with the temperature of the flue gases. The correction of the capacity can be calculated using the following equation:

$$Ps_{20} = Ps_t \times \frac{273 + t}{293}$$

Ps = static pressure

t = temperature measured in °C

Example:

System demand: $500 \text{ m}^3\text{/h}$ and 90 Pa at $180 ^{\circ}\text{C}$ Fan selection: $500 \text{ m}^3\text{/h}$ and 139 Pa at $20 ^{\circ}\text{C}$

Sound data

Sound levels to external surroundings

Lw (dB) measured in accordance to ISO 3744

Model	Lw [dB]							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	Lp dB [A]
RS009-41	54	50	47	43	38	31	25	21
RS012-41	64	60	55	52	48	42	34	30
RS014-41	75	69	65	62	57	51	44	41
RS016-41	81	76	72	69	64	58	52	47

Tolerance +/- 3 dB.

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

 $\label{eq:Lp} \textit{Lp} = \textit{sound pressure level dB [A] at 10 m distance from the fan at half spheric sound distribution}$

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

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

