

NOG

ROUND AIR VENT WITH A HEATER



Description:

Round air vent with a heater, with a telescopic sleeve for installation in a building partition with a thickness of 320–550 mm.

Intended use

The NOG air intake ventilators with a heater are intended for use as a supply of fresh air, which is pre-heated, for residential, storage or technical rooms, such as boiler rooms. In apartments, they can be mounted above or next to a window. Air vents in boiler rooms should be installed at a height of about 300 mm above the floor level.

Design

The NOG air vents are equipped with a thermostat which ensures automatic operation of the heater. It is responsible for turning it on when the temperature of the incoming air is lower than about 3°C and turning it off when its temperature rises above about 10–15°C. Half-ceramic heating elements automatically regulate power consumption depending on the amount and temperature of the flowing air. The NOG ventilators are equipped with an air intake that is responsible for the intake of air from the outside. The design of the air intake protects against precipitation and has a mesh protecting against insects. Inside the building, the air vent is equipped with a diffuser with a layer of insulation that prevents the formation of condensation in the winter and acts as a noise damper. The diffuser allows for precise adjustment of the air flow rate by the user. Optionally, the air vent can be equipped with a flow stabilizer. It regulates the stream of air flow, limits the airflow and prevents it from changing its direction. Each air vent comes with an additional air filter (separately, for self-assembly), which captures dust and other airborne contaminants. The diffuser is painted in RAL9003.

The air intake can be made of the following materials:

CC – stainless steel 1.4301,

ML – galvanized steel, powder coated (RAL9003 as standard, optionally another colour from the RAL palette).

Dimensions

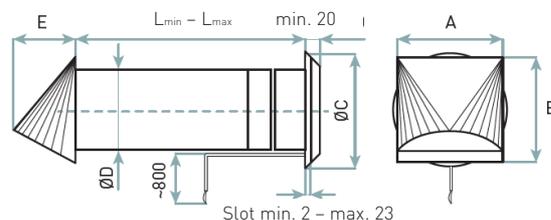


Figure 1. Dimensions of the NOG air vent with a heater

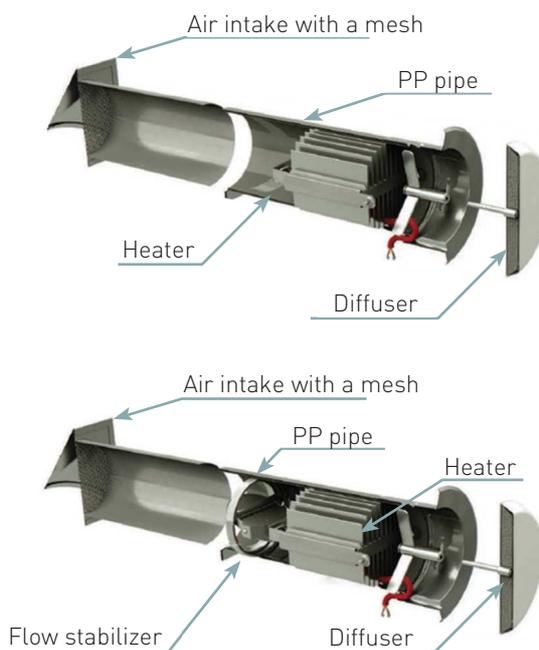


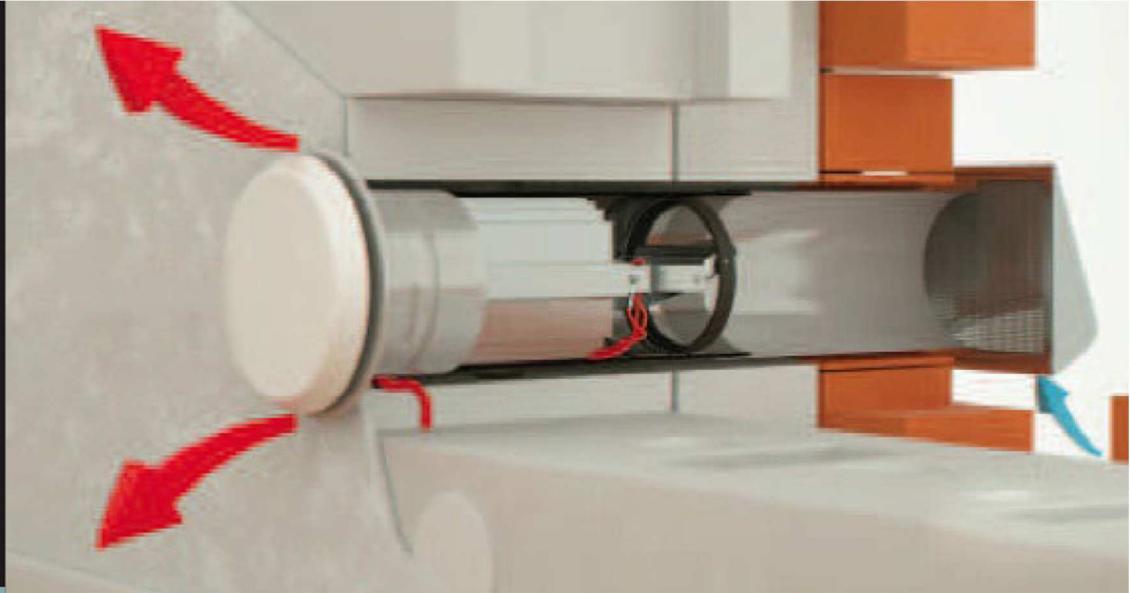
Figure 2. Construction of the NOG round air vent and the NOG-S round air vent with stabilizer.

Table 1. Dimensions of the NOG air vent.

Air vent version	Dimensions [mm]					Channel cross-section [cm ²]	Channel length L _{min} -L _{max} [mm]	Mounting hole diameter [mm]	Efficiency for 10 Pa [m ³ /h]	Weight m [kg]
	A	B	C	D	E					
NOG-80A	104	105	121	77	62	38	320 ÷ 550	90	28	1.3
NOG-110A	146	147	161	112	87	87	320 ÷ 550	120	49	2.4
NOG-150A	196	197	211	162	116	177	350 ÷ 580	170	97	4.1
NOG-S-80A	104	105	121	77	62	38	320 ÷ 550	90	22	1.4
NOG-S-110A	146	147	161	112	87	87	320 ÷ 550	120	40	2.6
NOG-S-150A	196	197	211	162	116	177	350 ÷ 580	170	74	4.4

AIRFLOW CONTROL AND DISTRIBUTION

SL SN RAL



Operating principle

An example of the correct air flow in an apartment in a single-family house or block of flats. Fresh outside air is supplied through ventilators installed in a living room or a bedroom. The supplied air flows through subsequent rooms and is removed through a ventilation grille, usually installed in a kitchen or a bathroom. In order for the air to flow freely to the air vent and to the ventilation grille, an undercut should be made in the doors of the rooms (1 mm min gap) or equalizing grilles should be installed.

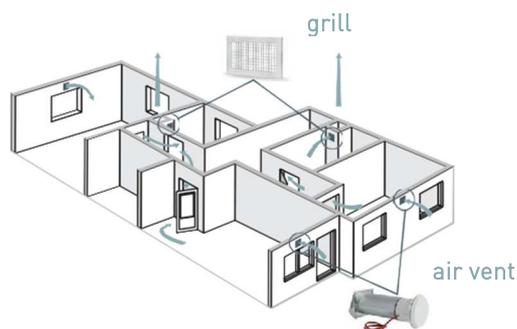


Figure 3. Arrangement of elements and correct air flow.

Technical data

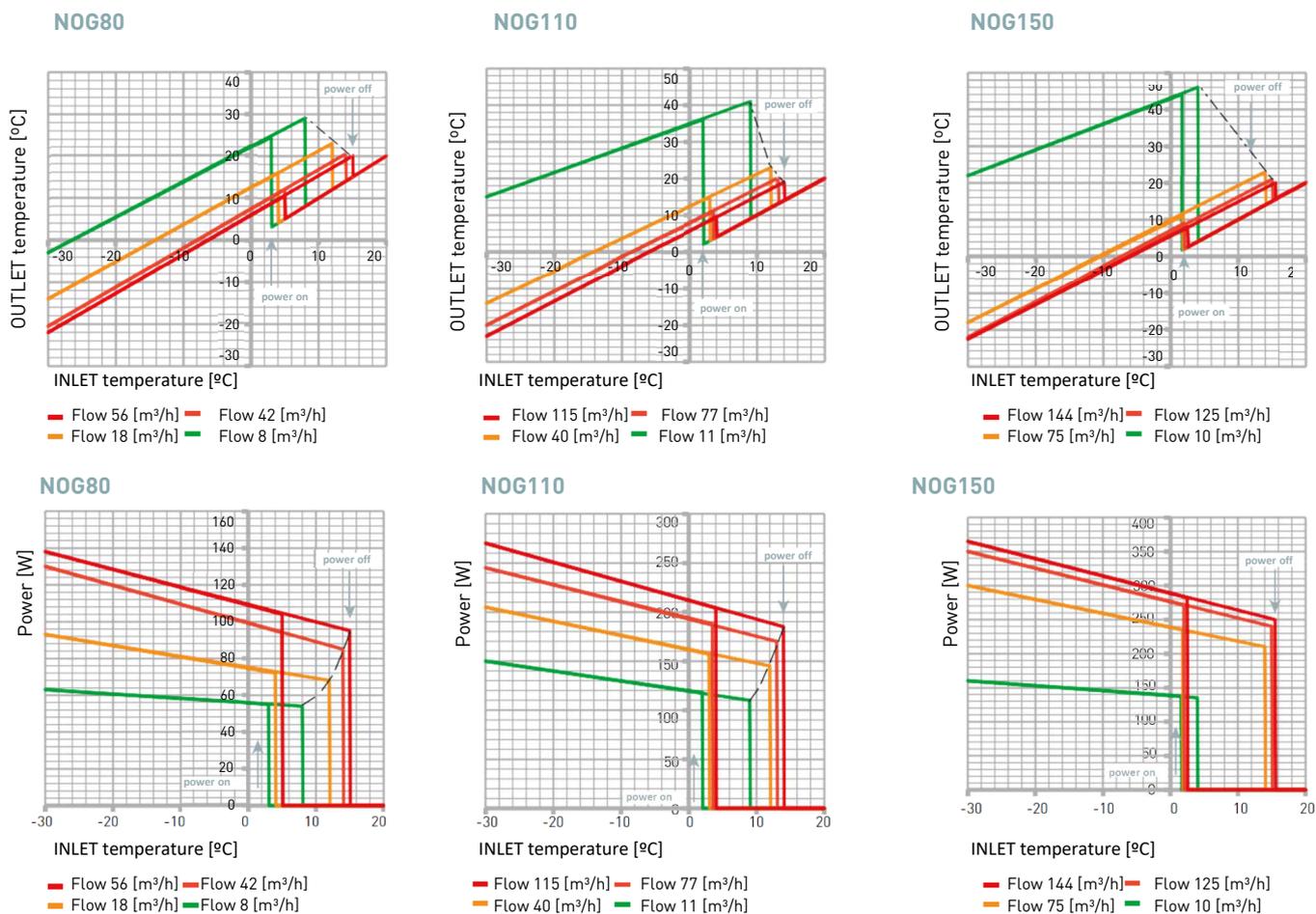
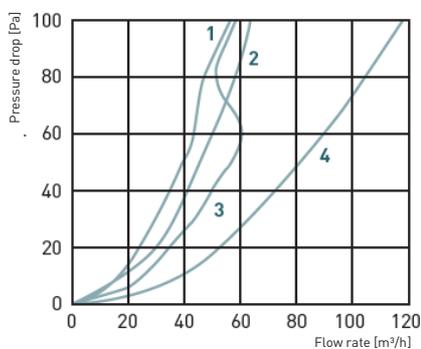
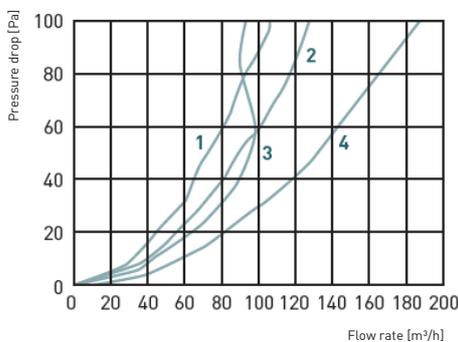


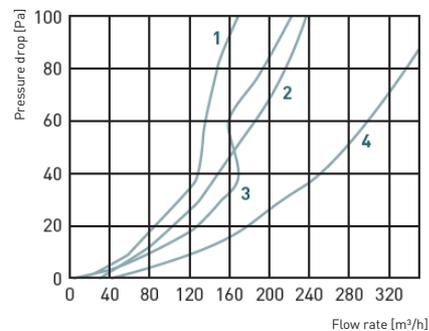
Chart 1. Selection characteristics of the NOG air vent with a heater



- 1 - NOG-S-80A - with filter ξ variable
- 2 - NOG-80A - with filter $\xi = 7.7$
- 3 - NOG-S-80A - without filter ξ variable
- 4 - NOG-80A - without filter $\xi = 2.3$



- 1 NOG-S-110A - with filter ξ variable
- 2 - NOG-110A - with filter $\xi = 9.8$
- 3 - NOG-S-110A - without filter ξ variable
- 4 - NOG-110A - without filter $\xi = 4.5$



- 1 - NOG-S-150A - with filter ξ variable
- 2 - NOG-150A - with filter $\xi = 12.4$
- 3 - NOG-S-150A - without filter ξ variable
- 4 - NOG-150A - without filter $\xi = 4.4$

Chart 2. Pressure losses of the NOG air vent with a heater



FNP Filter... (for self-assembly)

Figure 4. FNP air filter

Electrical diagram

Table 2. Technical parameters of the heater.

Electrical parameters	NOG80	NOG110	NOG150
Supply voltage		230 V	
Nominal power	138 W	270 W	305 W
Maximum current	2 A	3 A	3.5 A
Housing protection		IP 33	

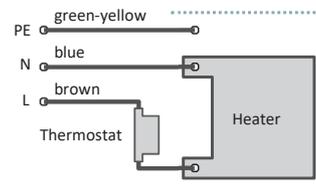


Diagram 1. Electrical diagram

NOG – Round air vent with a heater

When ordering, please provide information in accordance with the following pattern:

NOG - <S> - <D> A - <M>

Where:

S	Stabilizer*
	None – Without flow stabilizer
	S – Flow stabilizer
D	Air vent size
	80 – Size 80
	110 – Size 110
	150 – Size 150
A	Diffuser
M	Intake material
	CC – Stainless steel, grade 1.4301
	ML – Powder coated galvanized steel (standard RAL 9003)

* Optional values – if not specified, default values will be used

Sample order: **NOG-S-110A-ML**



Approval documents available on the website www.smay.pl.