Semicircular displacement flow diffuser NW-p

Description and application

Semicircular displacement flow diffuser NW-p are used in industrial facilities or public utility, in places where there is a need to bring a large amount of fresh air. The air is supplied at low speed. The air is supplied at low speed from 0.2 m/s to 0.6 m/s near of the workstations and the occupied zone. The supply air temperature while cooling should be lower by 4 to 6 K, while the maximum temperature difference during heating is 9 K. The entire surface of the diffuser blowing air has a low turbulence, easily displaces the the used air from the work area or occupied zone in theextract air openings.

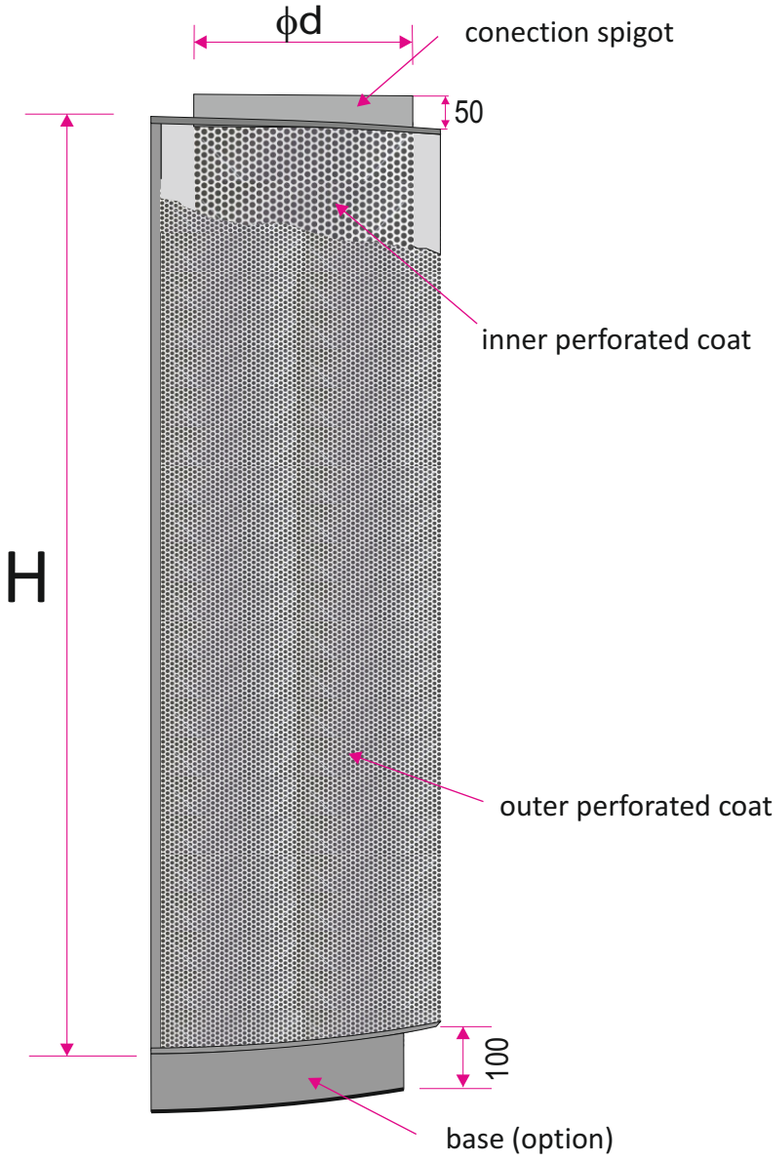
Displacement flow diffuser has Hygienic Certificate HK/K/0522/02/2016

Description and application

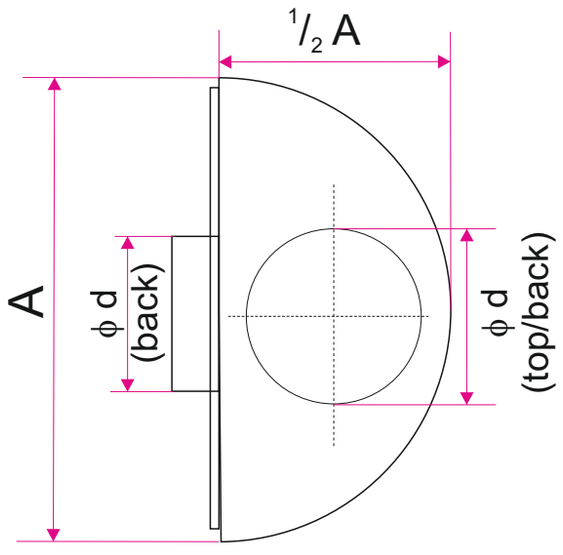
The diffusers are made of double coating perforated sheet set on the semi-circle and back from galvanized steel, powder coated all agreed RAL color. Spigot supply and diffuser pedestal are made of galvanized steel sheet, also powder coated in a selected color. NW-p They are designed for installation on the wall, rectangular or circular ducts. There is a possibility the individual making of diffusers according to customer requirements.

Size

The dimensions according to the table in the product data sheet or individual order.



Diameter ϕ **d** [mm]	Width **A** [mm]	Height **H** [mm]	Weight **m.** [kg]
125	450	700	8
160	550	700	8,5
200	600	1000	16,0
250	710	1200	19,5
315	900	1200	20
400	1100	1500	42,0
500	1200	1500	43,0
630	1400	2000	55,0



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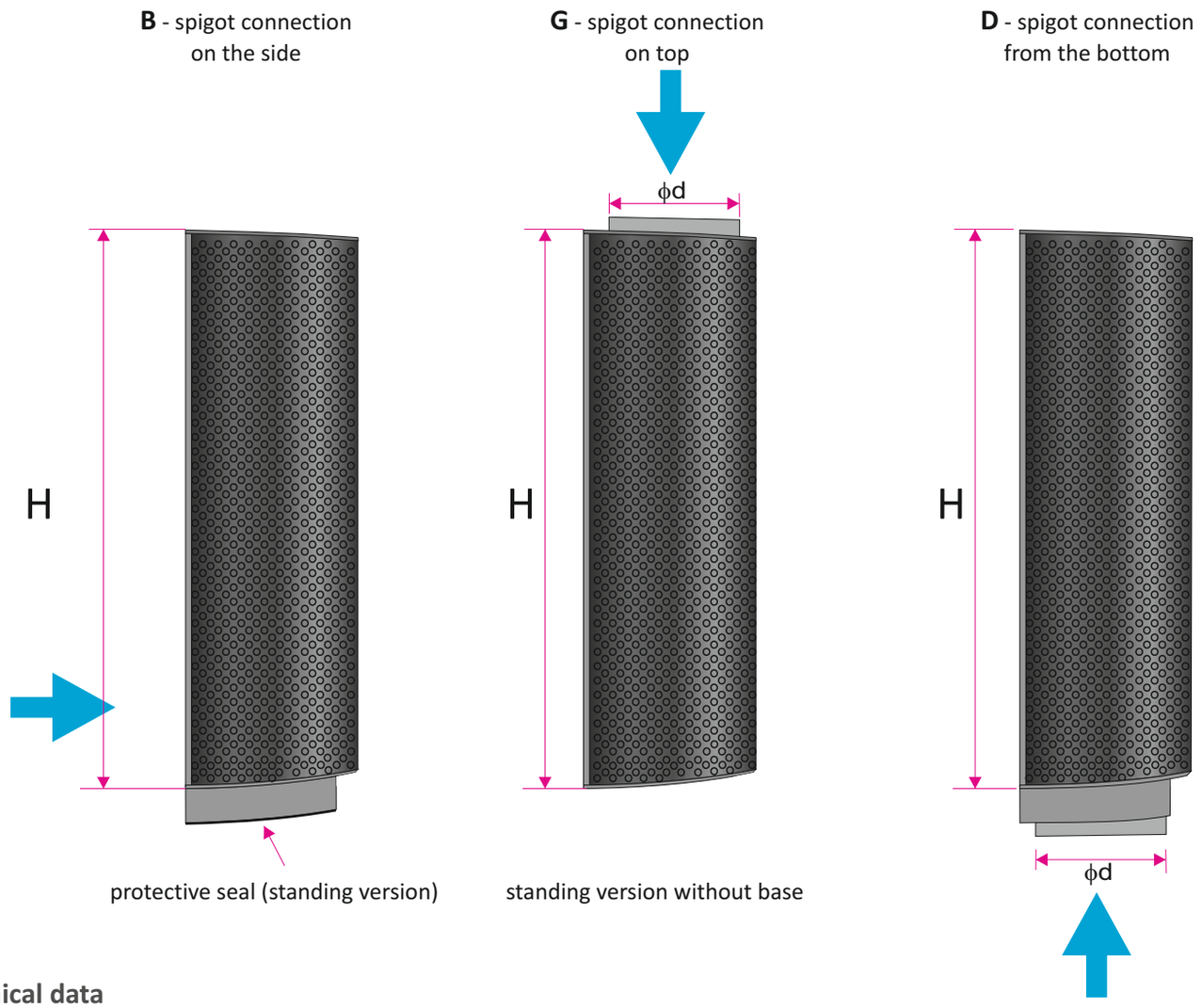
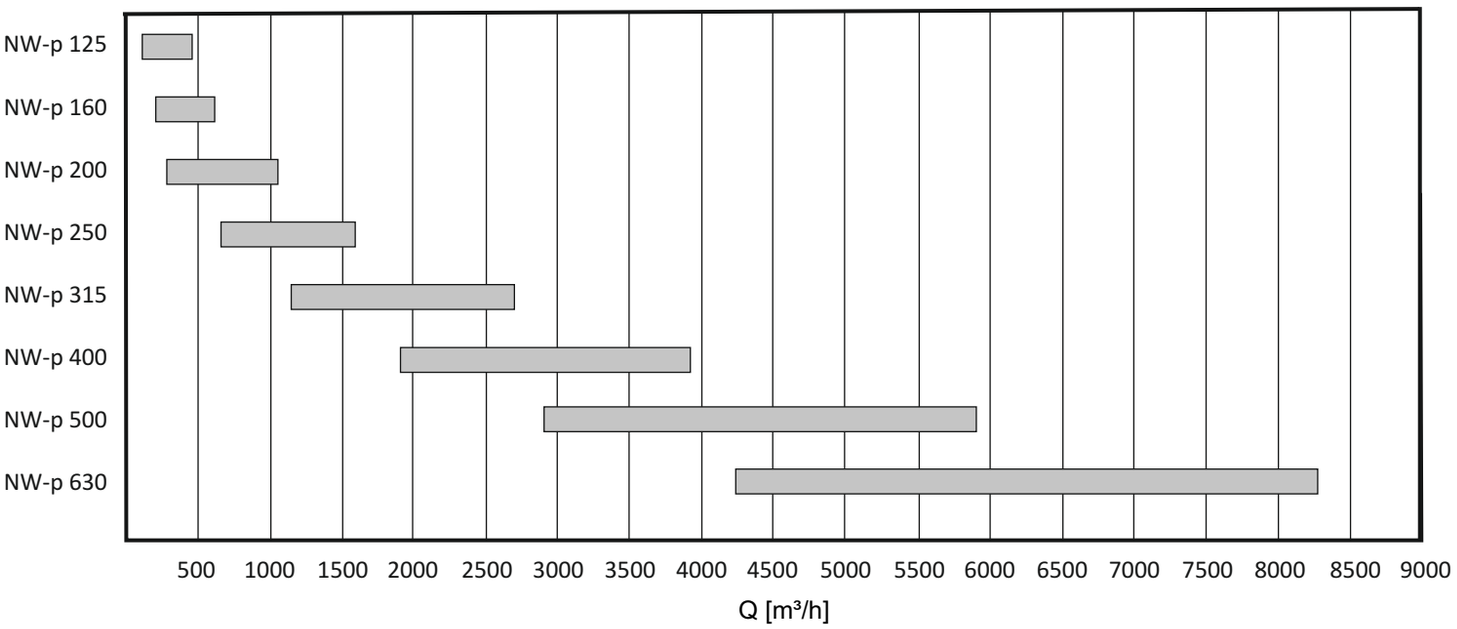
Variants realization / location

Semicircular displacement flow diffuser they can be made in various connections to the installation:



Technical data

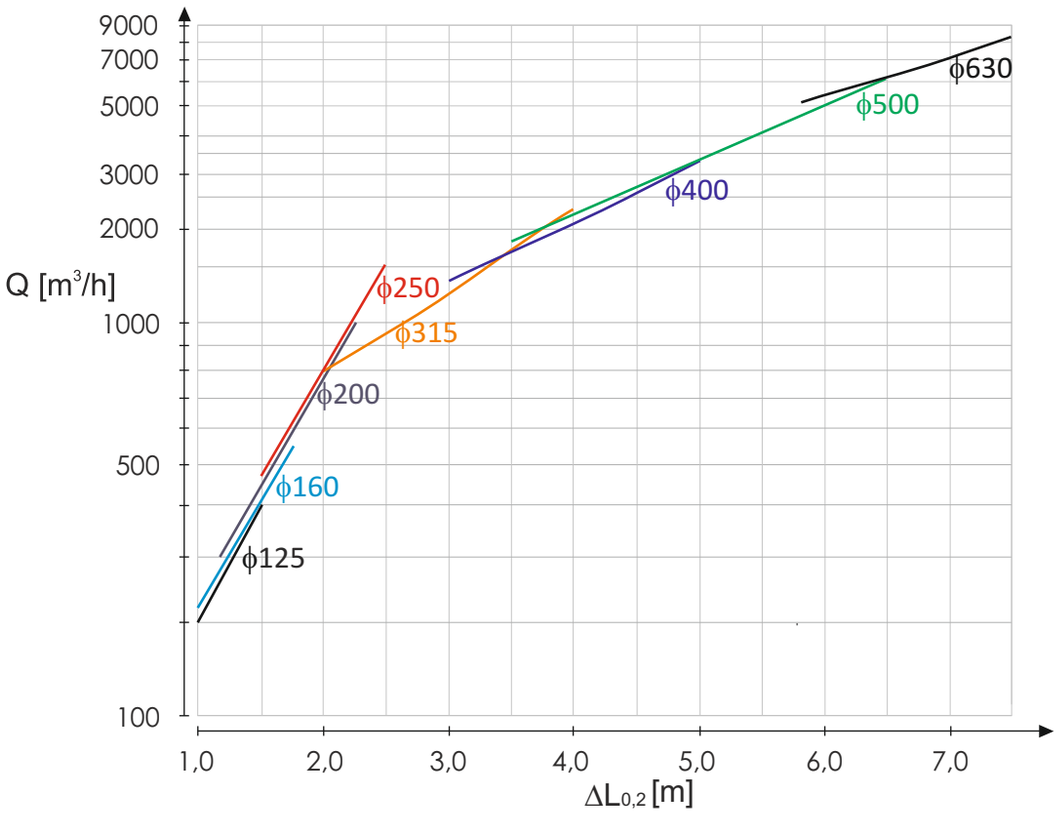
Quick selection NW-p



Semicircular displacement flow diffuser NW-p

Technical data

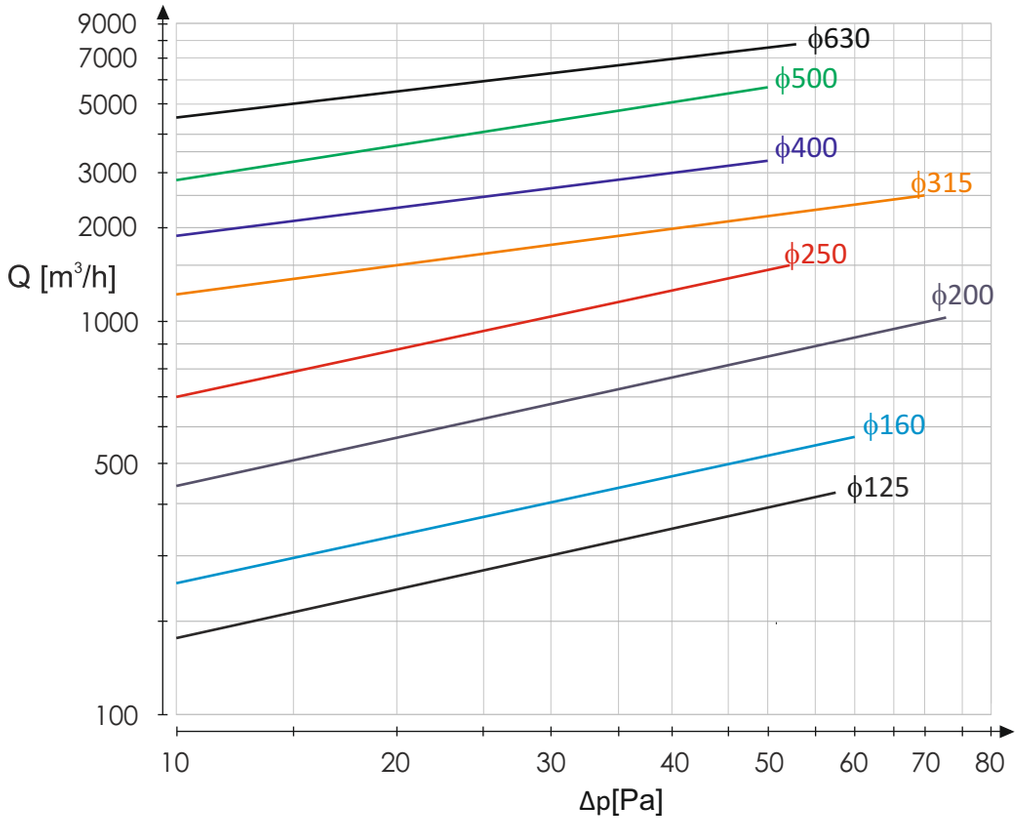
Dependence the air stream range $L_{0,2}$ [m] from air volume flow Q [m^3/h]



Marking:
Q [m^3/h] - air volume flow

$L_{0,2}$ [m] - range of air stream for $\Delta t = 3K$

Dependence of pressure drop Δp [Pa] from air volume flow Q [m^3/h]



Marking:
Q [m^3/h] - air volume flow

Δp [Pa] - pressure drop

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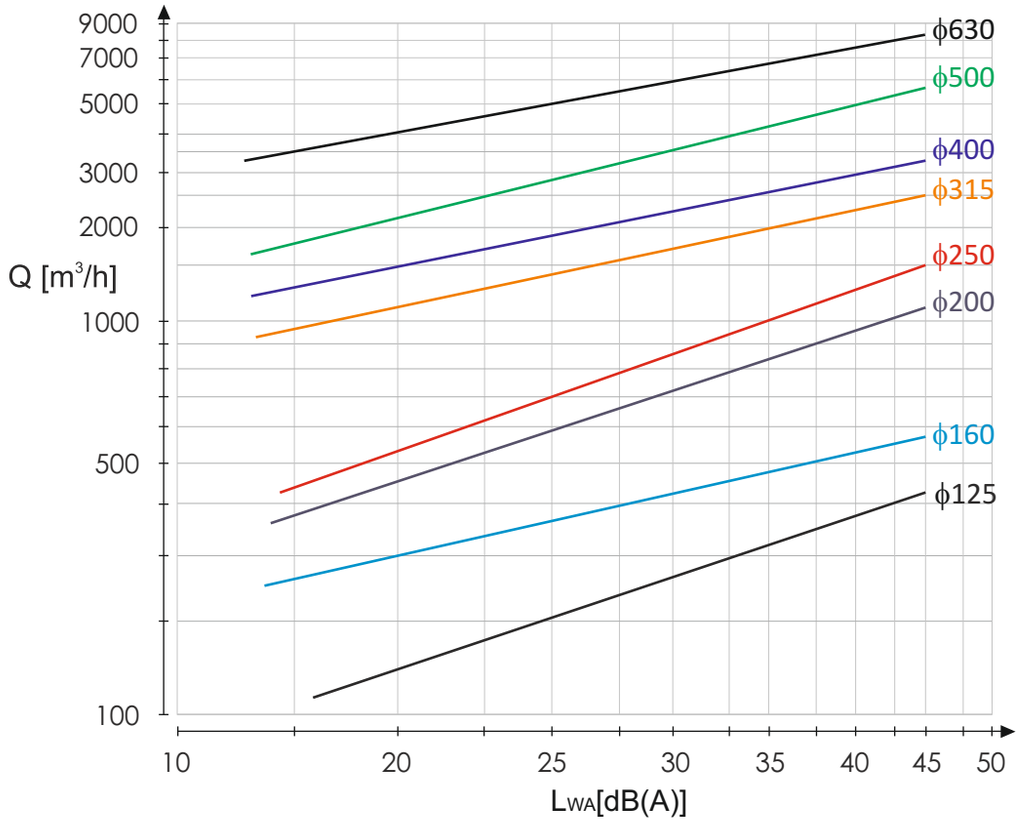
Technical data

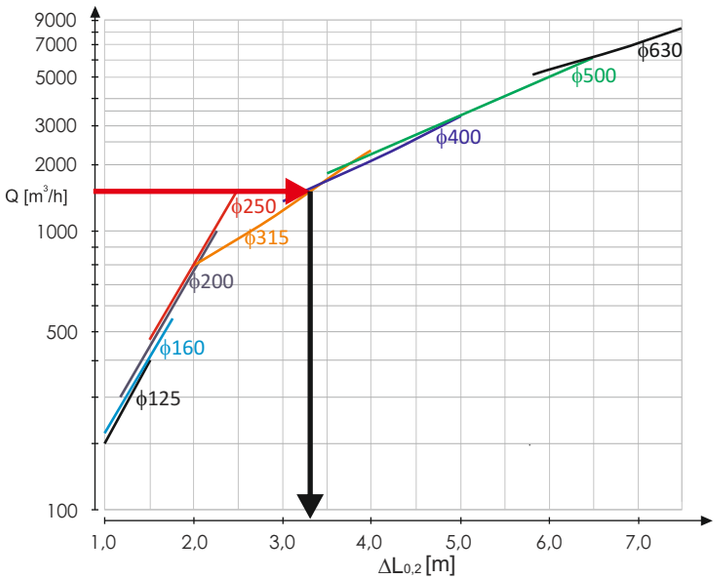
Dependence of acoustic power L_{WA} [dB(A)] from air volume flow Q [m³/h]



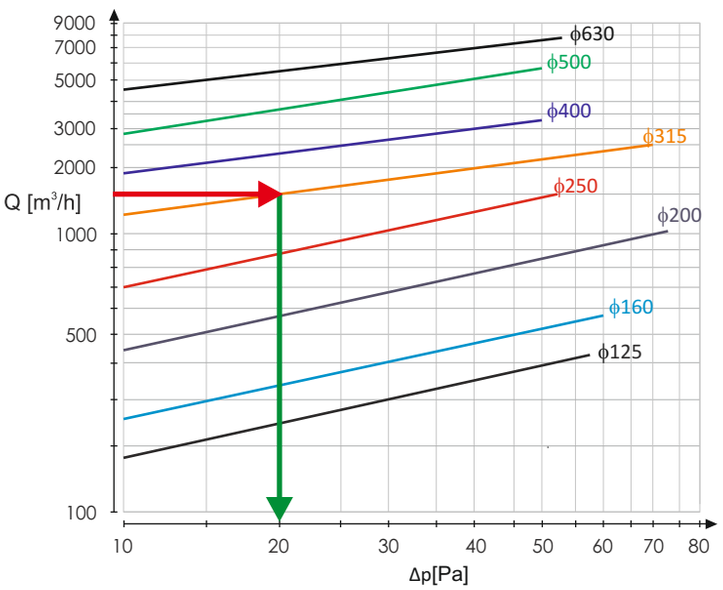
Marking:
Q [m³/h] - air volume flow

L_{WA}[dB(A)] - acoustic power

Dependence the air stream range $L_{0,2}$ [m] from air volume flow Q [m³/h]



Dependence of pressure drop Δp [Pa] from air volume flow Q [m³/h]



EXAMPLE

- Air volume flow Q=1500 m³/h

Reading the graph:

- inner diameter of the diffuser ϕd=315 mm
- range of air stream $\Delta L_{0,2}$=3,3 m
- pressure drop on diffuser Δp=20 Pa

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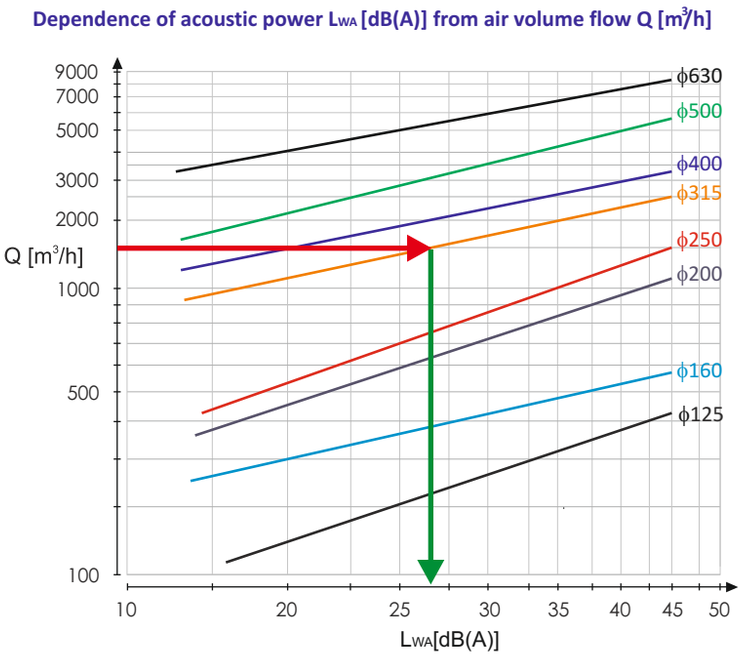
Technical data:

EXAMPLE

• air volume flow Q=1500 m^3/h

Reading the graph:

• acoustic power L_{WA}<30 dB



The method of placing an order

Please make orders according to the following formula:

NW-p / 'K' / 'ϕd' / 'H' / 'RAL' / 'M'

'K'	- position of connection spigot: **B** - side spigot **G** - top spigot * **D** - bottom spigot
'ϕd'	- diameter of diffuser connection spigot **125, 160, 200, 250, 315, 355, 400, 500 ...**
'H'	- height of the diffuser *
'RAL'	- diffuser color RAL
'M'	- material: **OC** - galvanized steel* **AL** - aluminum powder coated **KO** - stainless steel (gat. 1.4301 or 1.4404)
'C'	- accessories: **null** * **C** - base (standing version)

* - If you don't give the information will be used standard parameters.