Round displacement flow diffuser NW

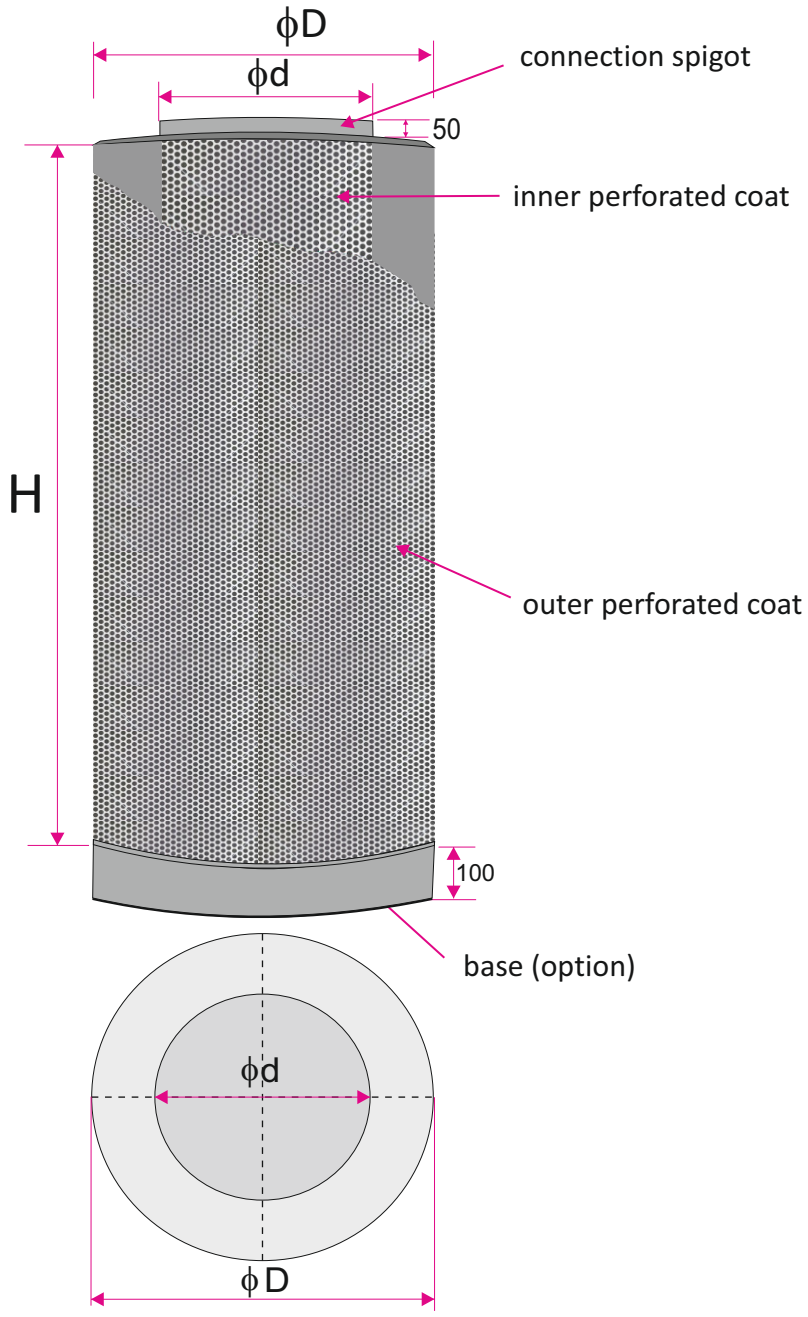
Description and application

Round displacement flow diffuser NW 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 the extract air openings.

Description and application

The diffusers are made of double coating perforated sheet, powder coated agreed to RAL color. Spigot supply and diffuser pedestal are made of galvanized steel sheet, also powder coated in a chosen RAL color. NW is designed for mounting directly onto round ducts (on special request possibility connection to rectangular duct). The manufacturer reserves the right to make production changes.

Size

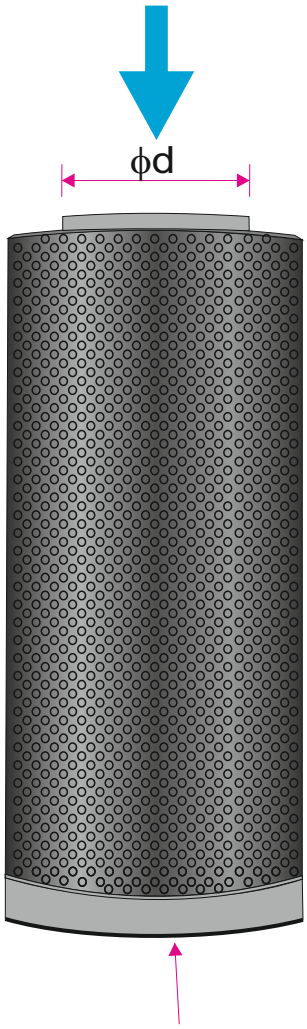


ϕ d [mm]	ϕ D [mm]	height H [mm]
200	300	750
200	300	1200
200	300	1500
315	500	750
315	500	1200
315	500	1500
315	500	2000
400	700	750
400	700	1200
400	700	1500
400	700	2000
500	800	750
500	800	1200
500	800	1500
500	800	2000
630	950	750
630	950	1200
630	950	1500
630	950	2000
800	1100	750
800	1100	1200
800	1100	1500
800	1100	2000

Variants realization / location

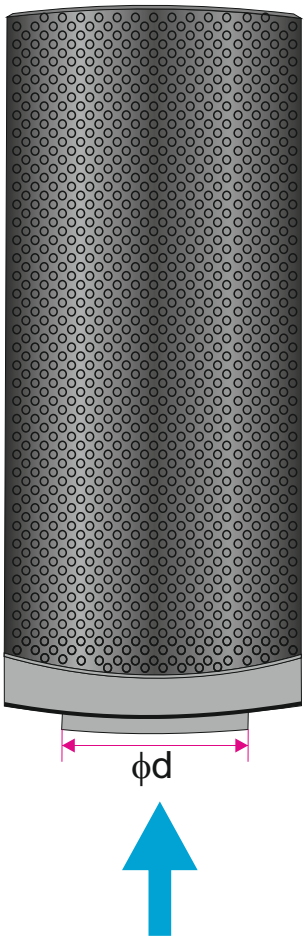
Diffusers can be divided due to the installation location at: standing, hanging and at wall (2/3 perimeter perforation).
Diffusers in version hanging have necessary elements for suspension / mounting (to be agree).

top spigot connection
(360° perforation)



protective seal
(standing version)

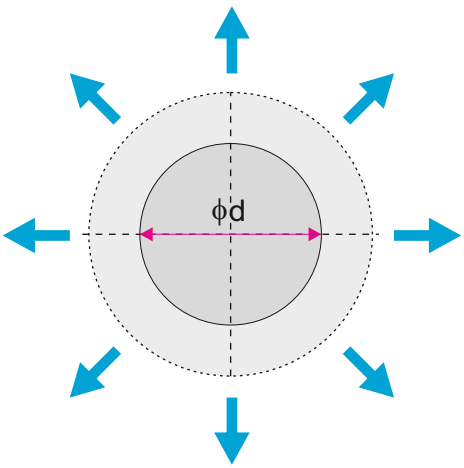
bottom spigot connection
(360° perforation)

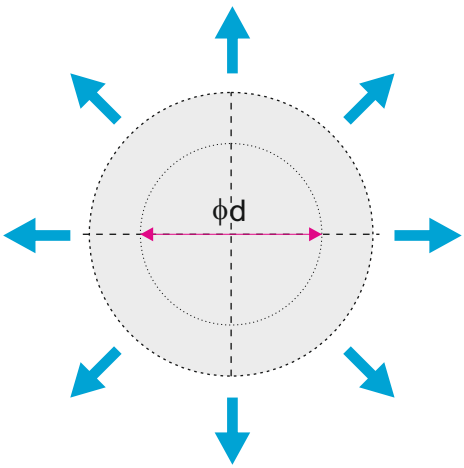


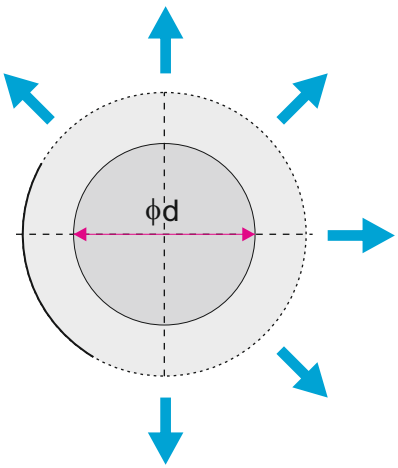
protective seal
(standing version)

top spigot connection,
NW at wall (240° perforation)

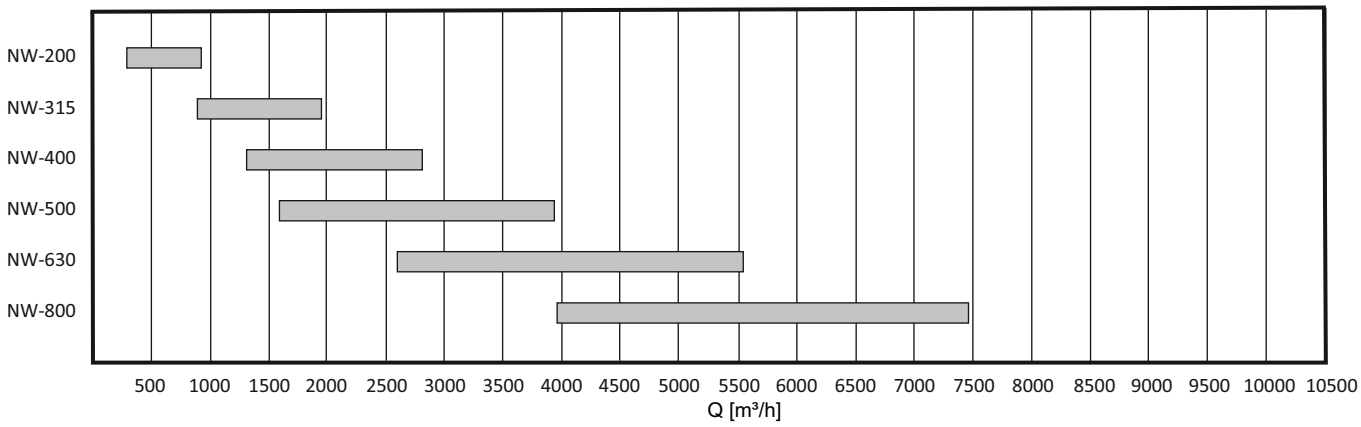
standing version
without base



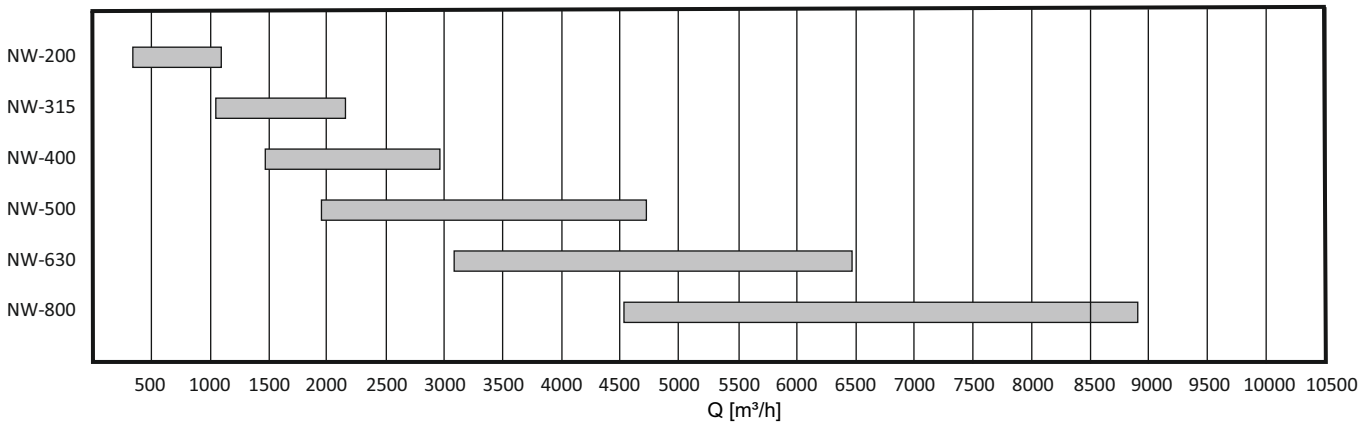




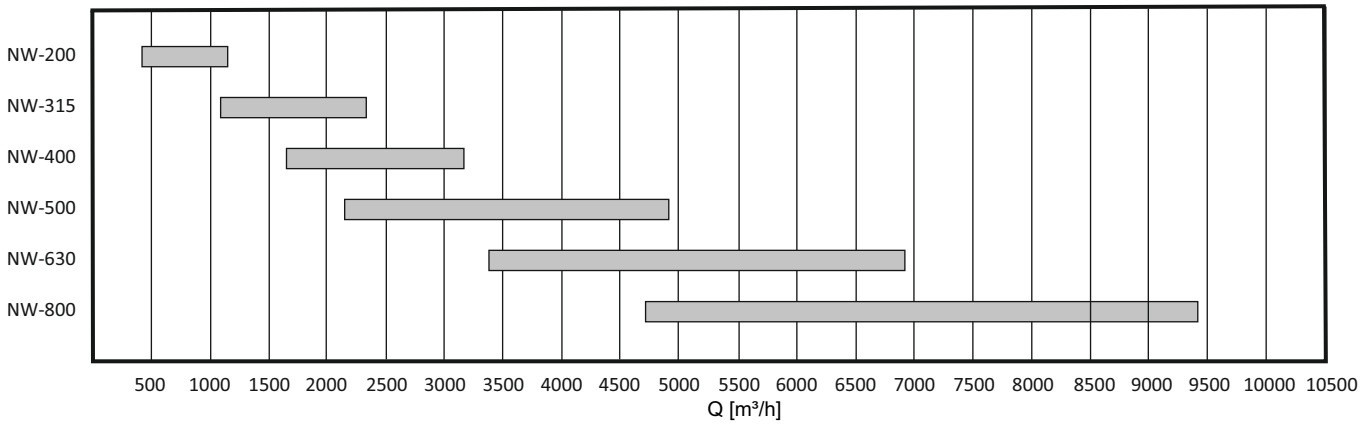
Displacement flow diffuser height H=750



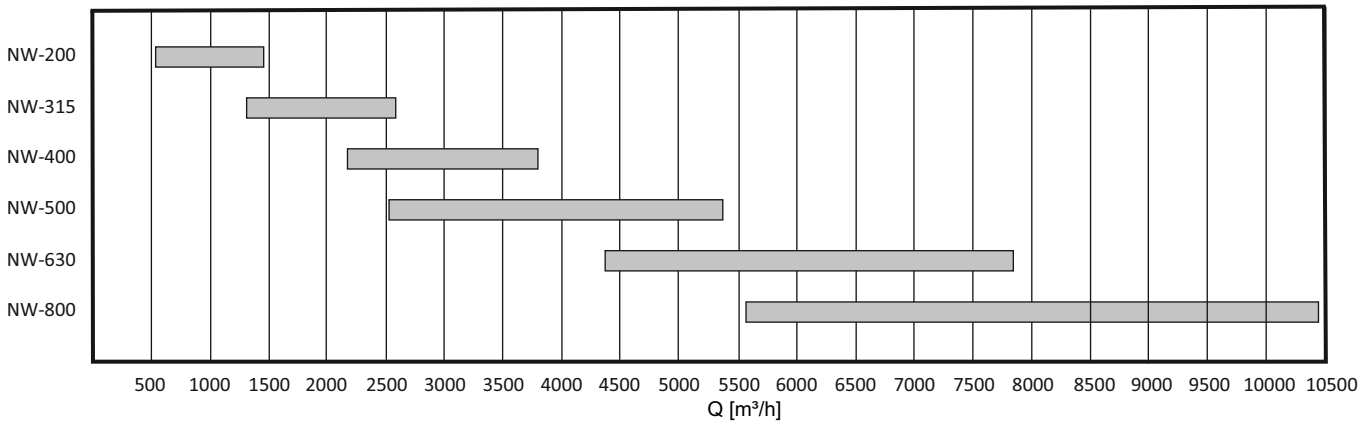
Displacement flow diffuser height H=1200



Displacement flow diffuser height H=1500



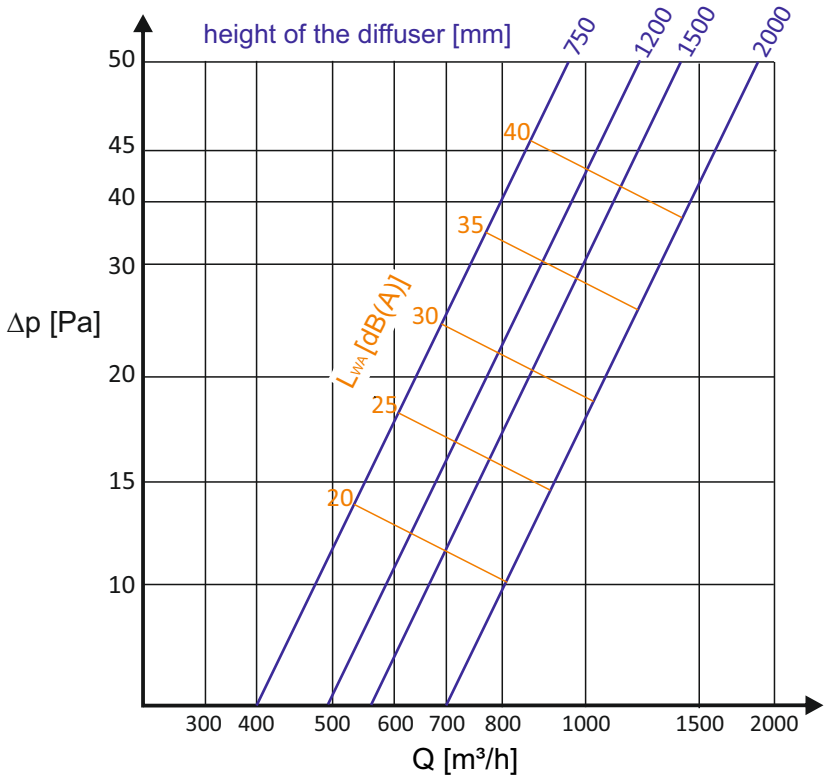
Displacement flow diffuser height H=2000



Round displacement flow diffuser NW-200

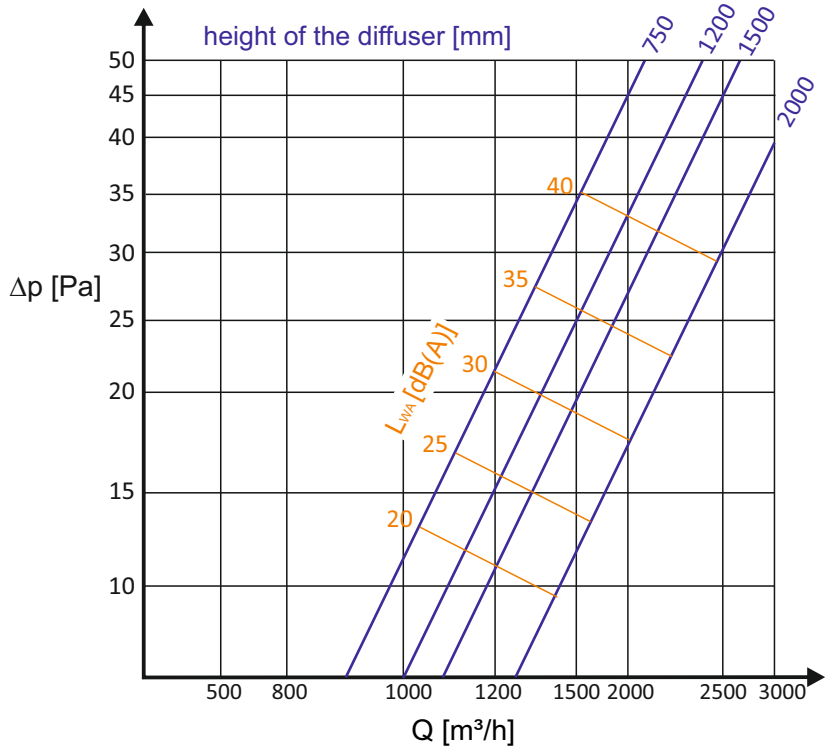
TECHNICAL DATA

Dependence of pressure drop Δp[Pa] and acoustic power level L_{WA}[dB(A)] from air volume flow Q [m³/h].



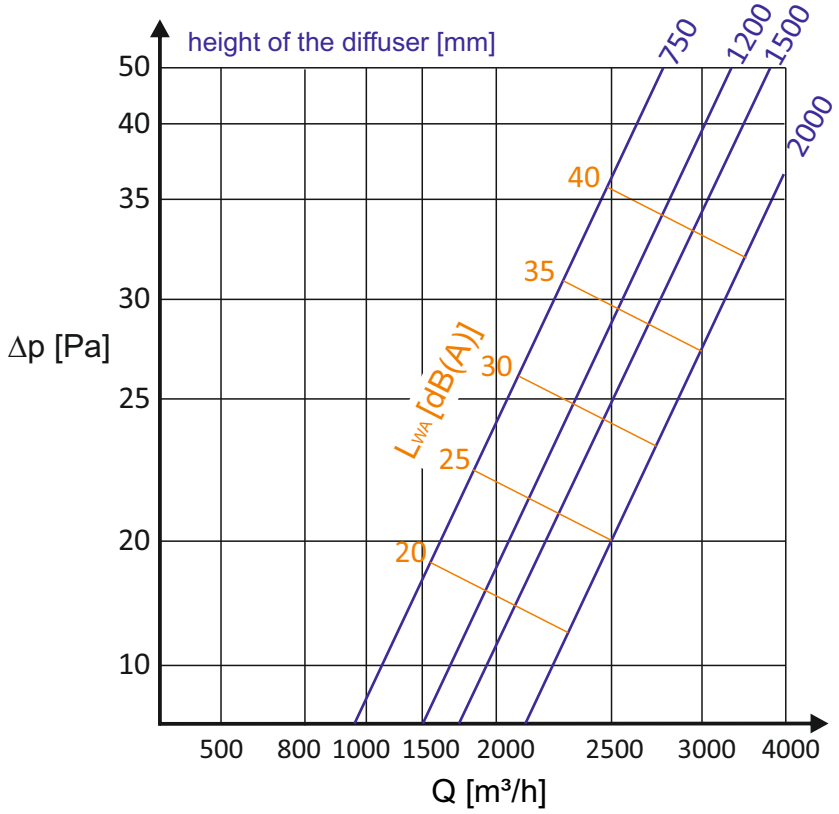
Round displacement flow diffuser NW-315

Dependence of pressure drop Δp[Pa] and acoustic power level L_{WA}[dB(A)] from air volume flow Q [m³/h].



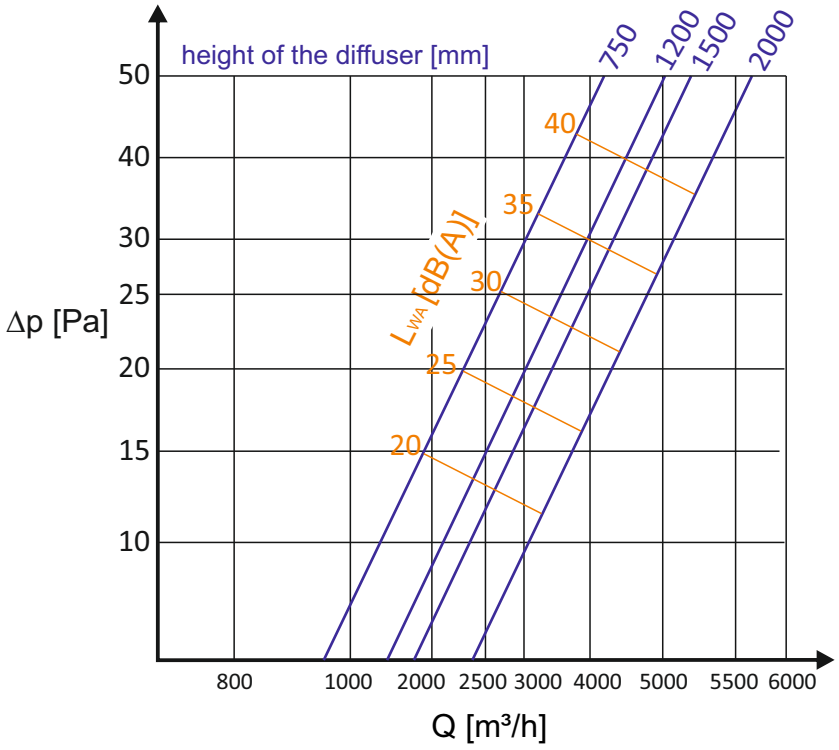
Round displacement flow diffuser NW-400

Dependence of pressure drop Δp[Pa] and acoustic power level L_{WA}[dB(A)] from air volume flow Q [m^3/h].



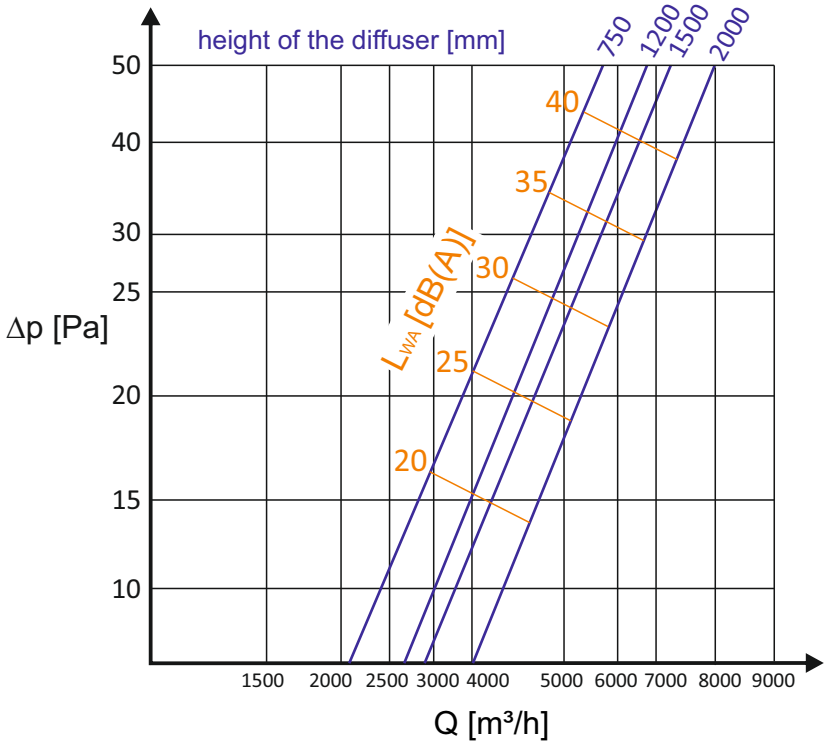
Round displacement flow diffuser NW-500

Dependence of pressure drop Δp[Pa] and acoustic power level L_{WA}[dB(A)] from air volume flow Q [m^3/h].



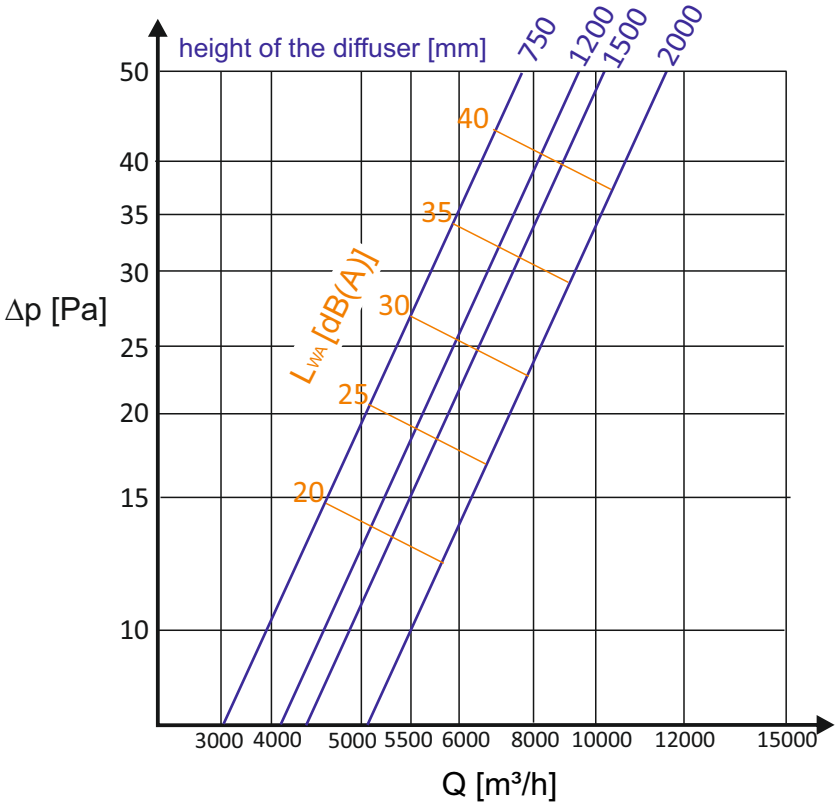
Round displacement flow diffuser NW-630

Dependence of pressure drop Δp[Pa] and acoustic power level L_{WA}[dB(A)] from air volume flow Q [m^3/h].

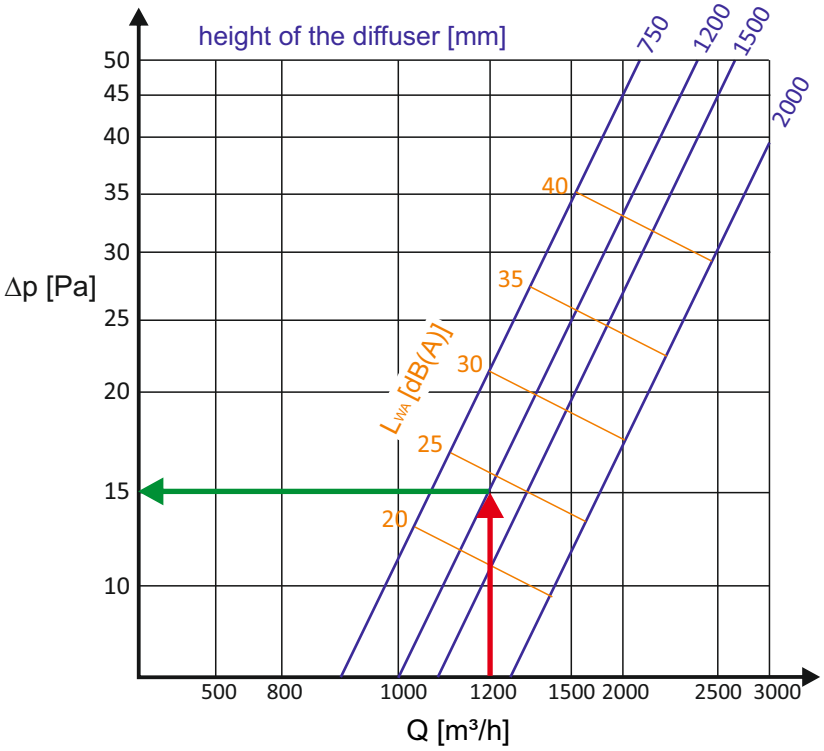


Round displacement flow diffuser NW-800

Dependence of pressure drop Δp[Pa] and acoustic power level L_{WA}[dB(A)] from air volume flow Q [m^3/h].



Round displacement flow diffuser NW-315



EXAMPLE

- air volume flow Q=1200 m^3/h
- external diameter of the diffuser ϕD=500 mm
  diameter internal ϕd=315 mm (reading from NW-315)
- height of the diffuser H=1,2 m= 1200 mm
  (for H=1500 and H=2000 better parameters Δp)

Reading from the graph:

- acoustic power L_{WA}<25 dB
- pressure drop on the diffuser Δp=15 Pa

The method of placing an order

Please make orders according to the following formula:

NW/ 'W' / 'K' / 'ϕd' / 'H' / 'RAL' / 'M'

'W'	- Variants realization / location:
	1 - round diffuser free-standing / free-hanging (perforation 360°)
	2 - round diffuser at wall (perforation 240°)
'K'	- position of connection spigot:
	G - spigot from top (standing diffuser)*
	D - bottom spigot (diffuser hanging)
'ϕd'	- diameter of diffuser connection spigot **200, 250, 315, 355 ...**
'H'	- height of the diffuser *
'RAL'	- diffuser color RAL
'M'	- material:
	OC - galvanized steel*
	AL - aluminum powder coated
	KO - stainless steel (type 1.4301 or 1.4404)
'C'	- accessories:
	null *
	C - base (standing version)

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