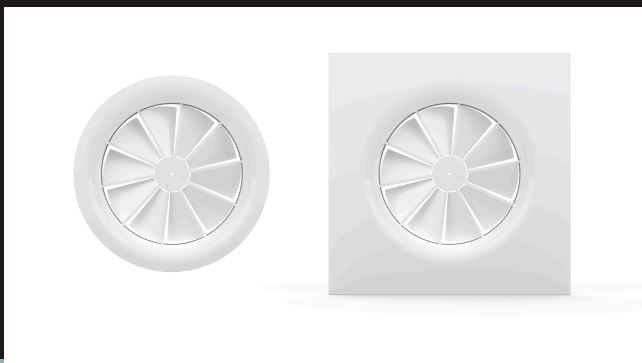


## SWIRL DIFFUSER WITH FIXED VANES



### Characteristics:

Rectangular or circular steel swirl diffuser with fixed vanes.

SL

RAL

version: 18/02/25

### Intended use

NWMH and NWMR diffusers are designed for low- and medium-pressure ventilation systems. They provide a swirling air supply and are particularly recommended for premises from 2 to 4 m in height.

### Design

The NWMH diffuser front panel is square and can be manufactured in the standard size of a 596 x 596 suspended ceiling module. The front panel of the NWMR diffuser is round. Both types are equipped with fixed vanes that generate the swirling airflow. The blades are fitted to the front panel with socket joints. NWMH and NWMR diffusers are made of steel coated in white, RAL9010. They can also be coated on request in another RAL colour.

### Installation

- NWMH – Square panel:
  - To the plenum box or mounting bracket with a single bolt in the central part of the diffuser
  - Direct installation in the suspended ceiling (with 596 x 596 front panel only)
- NWMR – Round panel:
  - To the plenum box or mounting bracket with a single bolt fastened through a hole in the central part of the diffuser

### Dimensions

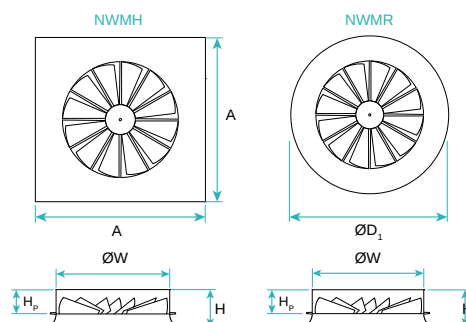


Figure 1. Dimensions of the NWMH/NWMR diffuser front panel.

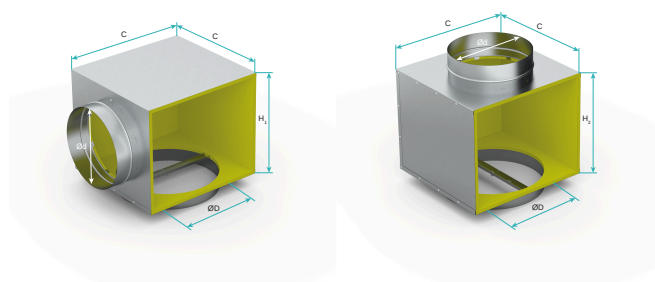


Figure 2. Dimensions of SR rectangular plenum boxes for NWMH/NWMR diffusers.

Table 1. Standard dimensions of NWMH/NWMR diffusers and plenum boxes.

Size	A [mm]	ØD <sub>1</sub> [mm]	ØW [mm]	H [mm]	HP [mm]	Ød [mm]	C [mm]	ØD [mm]	H <sub>1</sub> [mm]	H <sub>2</sub> [mm]
125	225	190	123	85	55	98	248	125	270	220
160	250	250	158	85	55	123	248	160	270	220
200	300	300	198	85	55	158	298	200	270	220
250	350	350	248	85	55	198	348	250	330	280
315	415	415	313	85	55	248	398	315	330	280
355	596	455	353	100	65	248	398	355	330	280
400	596	520	398	106	65	248	448	400	370	280

Technical data

Stream range

Note: Parameters apply to diffuser with plenum box with side spigot. Stream range  $L_{0,2}$  for terminal velocity 0,2 m/s and horizontal stream of isothermal air.

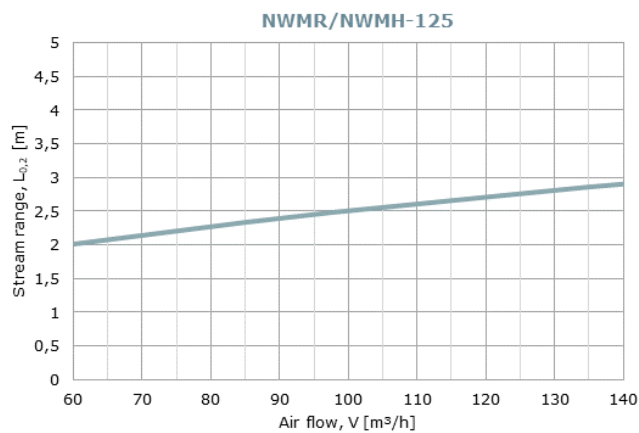


Chart 1. Stream range NWMR/NWMH-125.

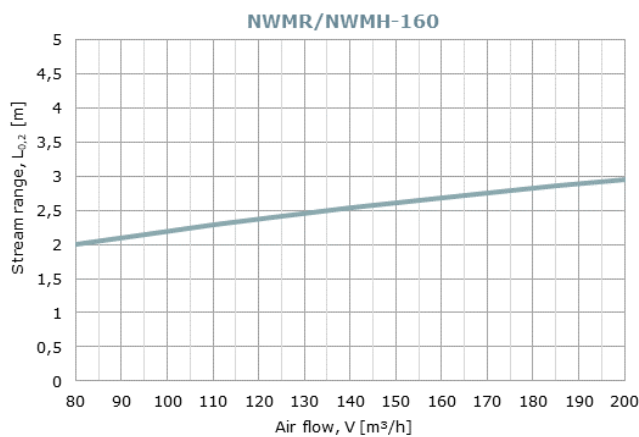


Chart 2. Stream range NWMR/NWMH-160.

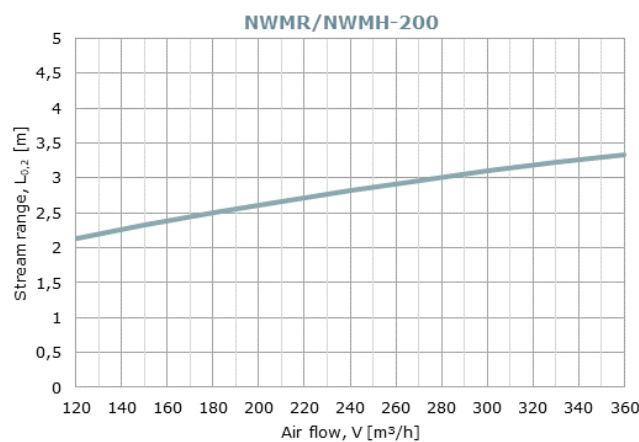


Chart 3. Stream range NWMR/NWMH-200.

Pressure drop and acoustic data

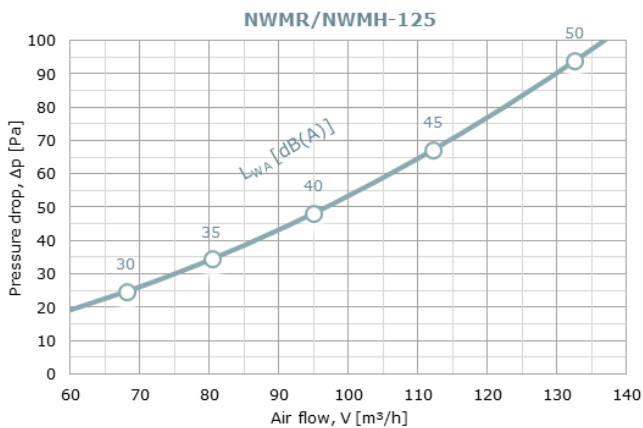


Chart 4. Pressure drop and sound power level of NWMR/NWMH-125.

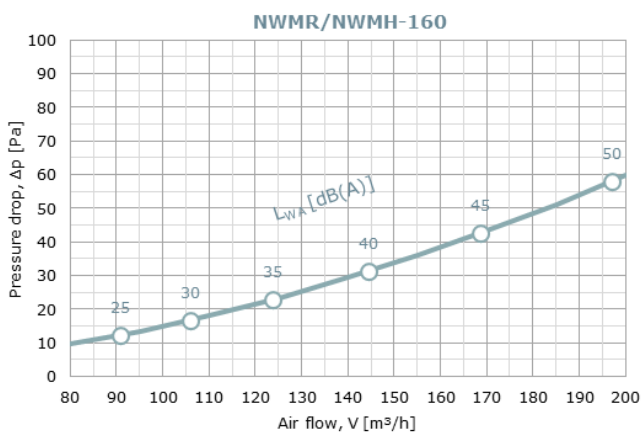


Chart 5. Pressure drop and sound power level of NWMR/NWMH-160.

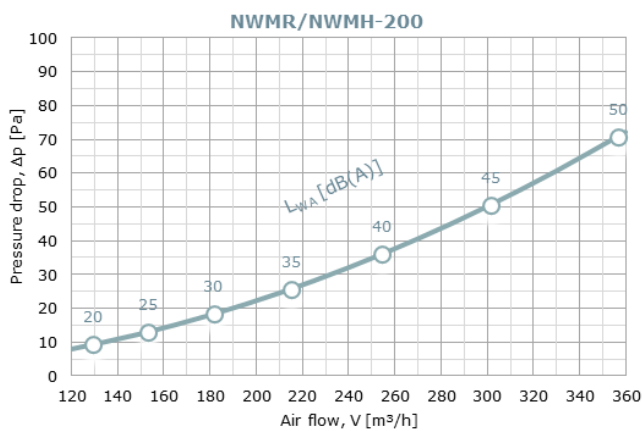


Chart 6. Pressure drop and sound power level of NWMR/NWMH-200.

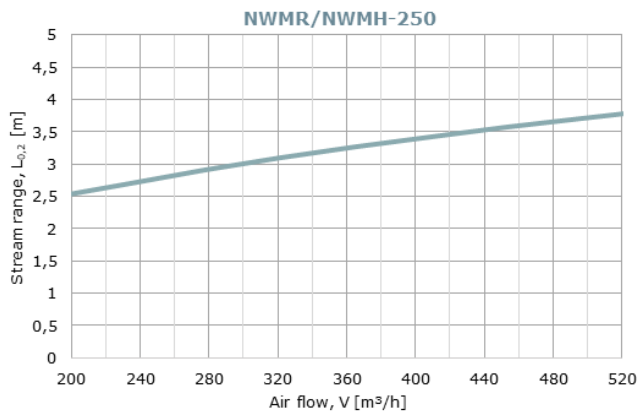


Chart 7. Stream range NWMR/NWMH-250.

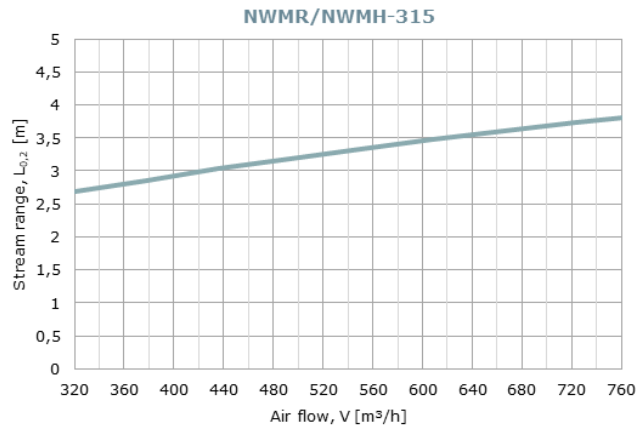


Chart 8. Stream range NWMR/NWMH-315.

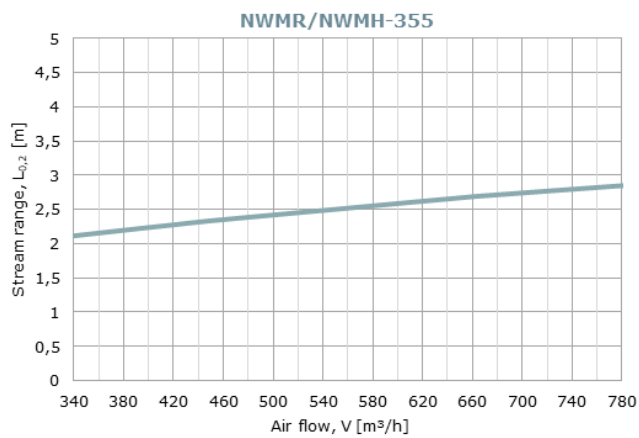


Chart 9. Stream range NWMR/NWMH-355.

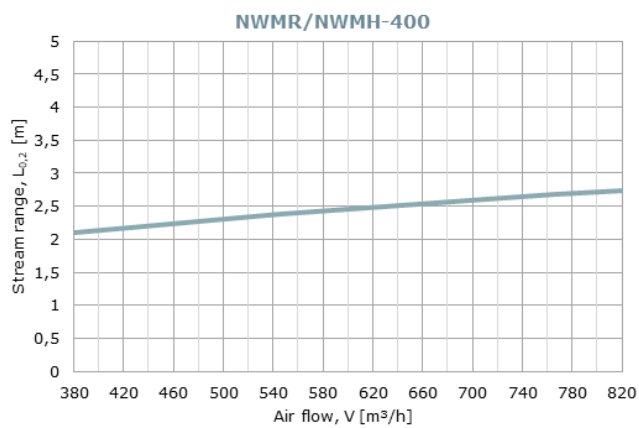


Chart 10. Stream range NWMR/NWMH-400.

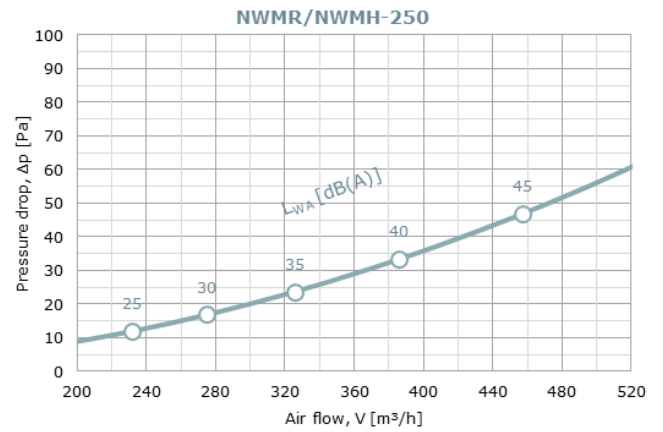


Chart 11. Pressure drop and sound power level of NWMR/NWMH-250.

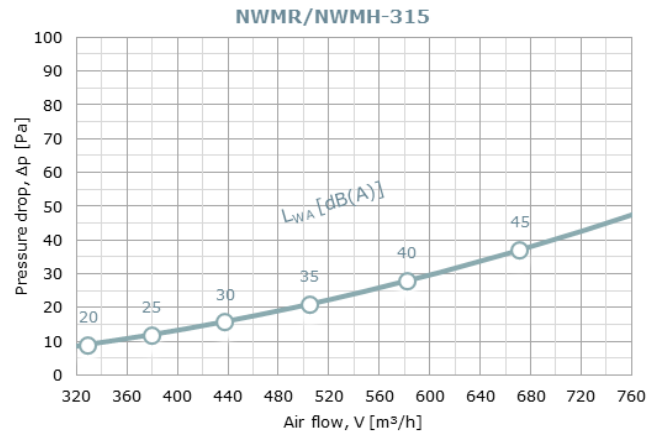


Chart 12. Pressure drop and sound power level of NWMR/NWMH-315.

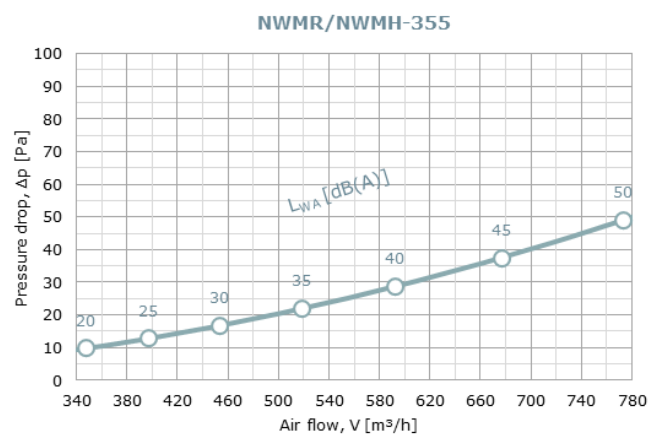


Chart 13. Pressure drop and sound power level of NWMR/NWMH-355.

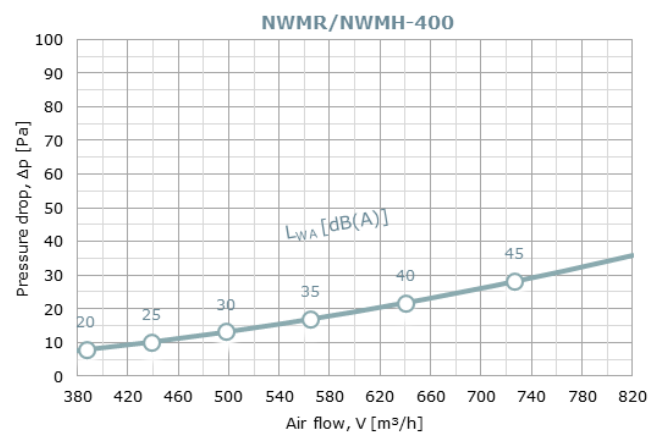


Chart 14. Pressure drop and sound power level of NWMR/NWMH-400.

# NWMH/NWMR - Swirl diffuser with fixed vanes

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

NWMH - <W> - <S> - SL <RAL> / <ADD>

NWMR - <S> - SL <RAL> / <ADD>

Where:

W	Diffuser version
	<b>none</b> - Standard square front panel
596x596	- 596 x 596 square front panel – made to order (does not apply to 355 and 400 sizes)
S	Diffuser diameter: 125, 160, 200, 250, 315, 400
SL	Finish: coated steel
RAL	colour according to RAL colour chart *

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

\*\* For more information, see the accessories sheet

Sample order: NWMH-596x596-200-SL9010/SRt-270-b160P

Plenum box as per the configuration below\*\*:

SR <I> <W> - <H> - <K> <D> <R>>

Where:

I	Insulation*
	<b>none</b> - No insulation
	t - Insulated
W	Screen deflector*
	<b>none</b> - No deflector (default for exhaust)
	s - With a deflector (default for supply)
H	Plenum box height *
K	Connection pipe position *
	<b>b</b> - Side
	g - Top
D	Connection pipe diameter in mm*
R	Damper in a connection pipe*
	<b>none</b> - No damper
	P - Damper adjusted from outside the box
	Pc - Damper adjusted from inside the box with a cord
	Pd - Damper adjusted from inside the box with a lever (for the boxes with no deflector only)