

## Description and application

External exhaust wall louvres is ending of ventilation ducts rectangular and circular cross section, with the installation of fans designed to discharge exhaust air outside the building, in industrial, office or warehouse ventilation systems. The opening of the louvre is caused by the incoming air stream. The angle of deviation of the blades depends on the efficiency of the ventilation system on which end is louvre. Thanks to gravity falling blades, wall louvres prevent the formation of reverse string in the installation, so it reduce the heat loss and protect the inside of duct from the weather.

External exhaust louvres has Hygienic Certificate HK/K/0522/03/2016

## Material and workmanship

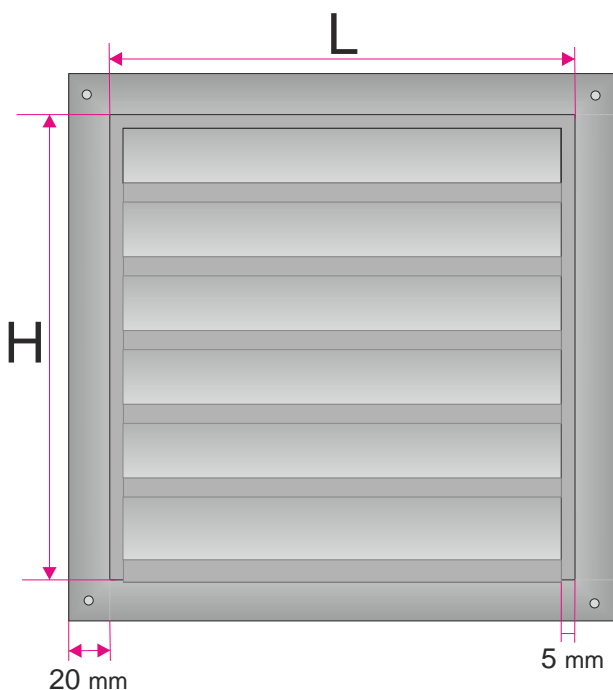
Louvre WSR-2 has one row of louvres gravity moving horizontally. Thanks to the frame made on "flat", the exhaust louvre performs its task during the ejecting circular cross section. Shutters are made of aluminum, making it easier to open under the influence of the incoming stream of air, and freely falling during work stop of the ventilator. Frame exhaust louvre is made of galvanized steel. All is powder coated to any color RAL (by the customer request). Possibility of louvre to made of stainless steel.

## Size

Louvres are manufactured to order. Louvre dimension by the customer request.

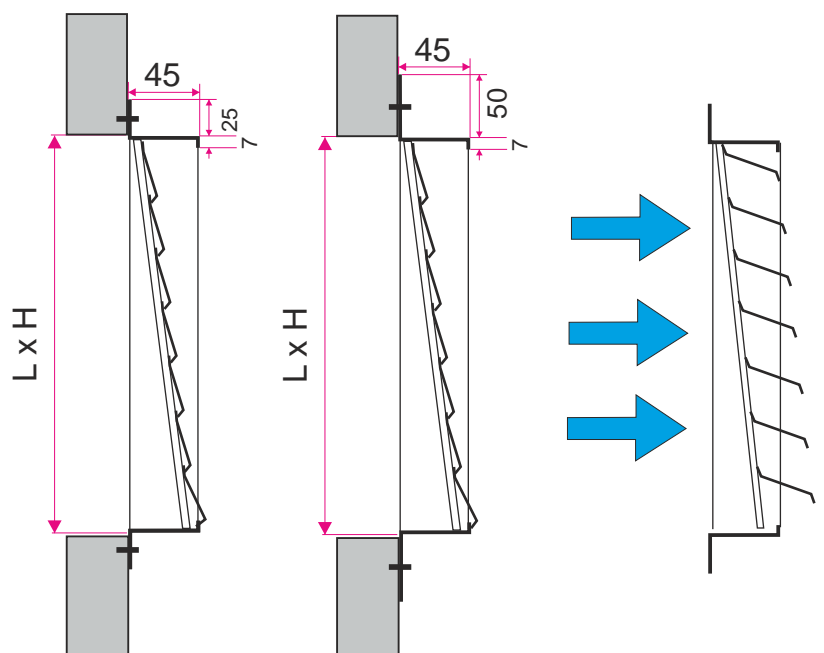
L - width of the mounting hole

H - height of the mounting hole



For  
L,H<1000mm

For  
L,H>1000mm



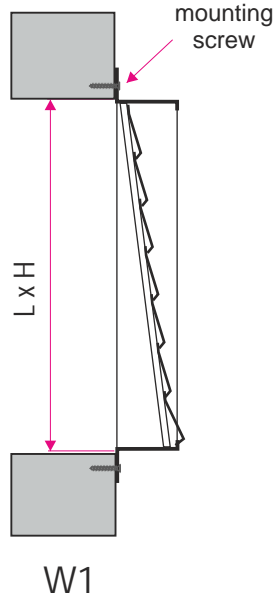
Frame width:

25mm for L or H ≤ 1000mm

50mm for L or H > 1000mm

## Methods of mounting

Louvres are mounted using the screws and the mounting holes in the frame (W1)



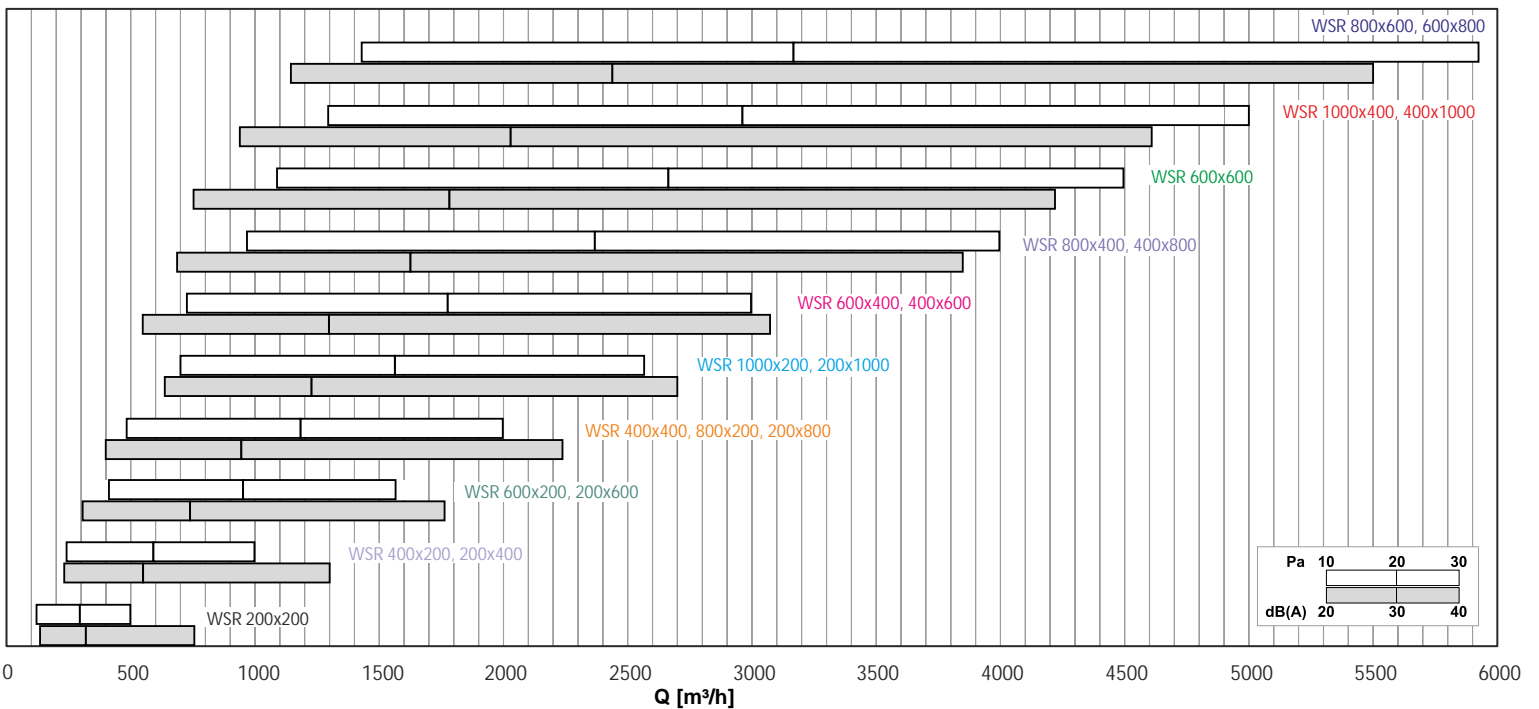
Assembling visible through screws and mounting holes in the louvre frame

## Effective area $A_{ef}$ louvre (when it's complete open)

$H_{[mm]} \backslash L_{[mm]}$	200	400	600	800	1000	1200	1600	2000
$A_{ef}$ (m <sup>2</sup> ) effective area external exhaust wall louvres WSR								
200	0,036	0,073	0,109	0,145	0,181	0,21	0,28	0,36
400	0,073	0,145	0,218	0,291	0,363	0,43	0,57	0,72
600	0,109	0,218	0,327	0,436	0,545	0,64	0,86	1,08
800	0,145	0,291	0,436	0,581	0,727	0,86	1,15	1,44
1000	0,181	0,363	0,545	0,727	0,909	1,08	1,44	1,80
1200	0,21	0,43	0,64	0,86	1,08	1,29	1,72	2,16
1600	0,28	0,57	0,86	1,15	1,44	1,72	2,30	2,88
2000	0,36	0,72	1,08	1,44	1,80	2,16	2,88	3,60

## Technical data

The dependence of pressure drop  $p$ (Pa) and acoustic power  $L_{WA}$ (dB) depending on the air flow  $Q$ (m<sup>3</sup>/h)



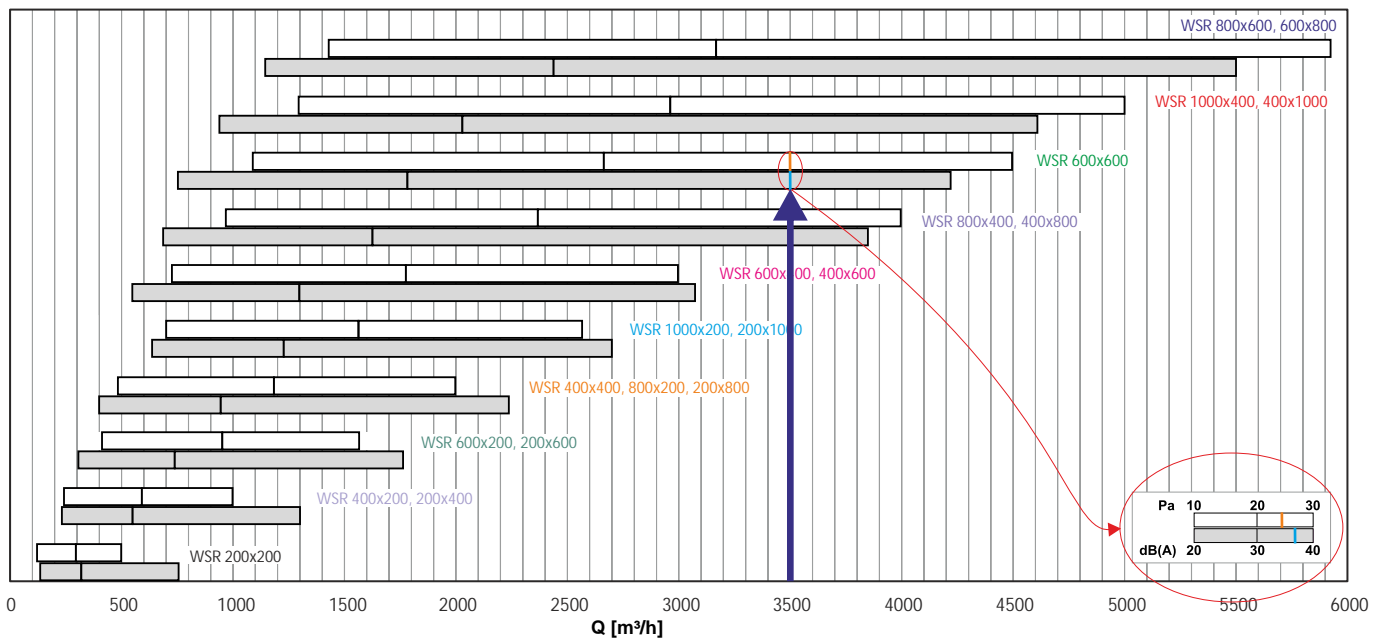
### EXAMPLE

- Air volume flow  $Q=3500 \text{ m}^3/\text{h}$
- dimensions of louvre:  $600 \times 600$  ( $A_{\text{ef}} = 0,327 \text{ m}^2$ )

Reading from the graph:

- pressure drop on the louvre  $p=24 \text{ Pa}$
- acoustic power  $L_{\text{wa}}=37 \text{ dB(A)}$

$H_{[\text{mm}]}$ \ $L_{[\text{mm}]}$	200	400	600
	$A_{\text{ef}} \text{ (m}^2\text{)}$		
200	0,036	0,073	0,109
400	0,073	0,145	0,218
600	0,109	0,218	0,327



### The method of placing an order

Please make orders according to the following formula:

WSR-2 / 'LxH' / 'RAL' / 'M' / 'W'

- 'LxH' - mounting hole size (width x height) in mm
- 'RAL' - louvre color according to RAL palette (standard RAL9006\*)
- 'M' - material (frame):
  - OC - powder coated steel\*
  - AL - aluminum
  - KO - stainless steel / acid proof steel (gat. 1.4301 or 1.4404)
- 'W' - mounting option:
  - W1 - visible assembly with screws through the holes in louvre front frame\*

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