

Description and application

Wall external intake louvre round used in ventilation installation intake and exhaust as ending wires and ventilation holes in the walls of buildings or directly on round ducts. The special shape of the louvres / blades protects air intake hole before atmospheric precipitations. In standard used is protective mesh that protects before the bird, rodent and larger impurities (like the leaves) inside the installation.

External intake louvres has Hygienic Certificate HK/K/0522/02/2016

Material and workmanship

Execution intake louvre, depending on its size, we offer two variants. For smaller dimensions of louvre has the form of mold aluminum with mesh, all powder coated in selected RAL color. Larger sizes are made of galvanized steel, aluminum or stainless steel (1.4301 or 1.4404), powder coated in selected RAL color. Type of louvre is shown in the drawings below.

Size

Intake louvres are manufactured to order. Dimension louvre according to the table (in mm).

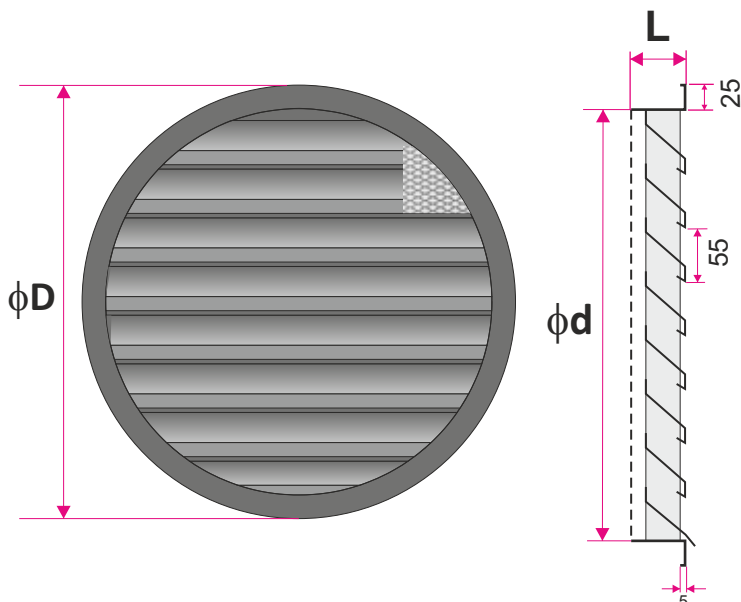
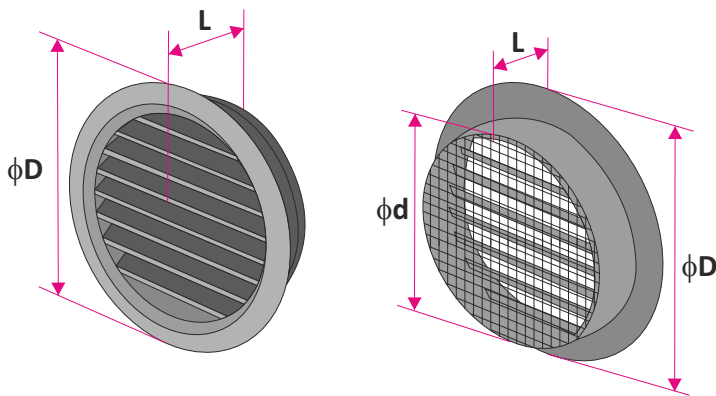
LOUVRE aluminum (mold)

Size	ϕd	ϕD	L
100	99	130	26
125	124	150	26
160	158	185	26
200	196	227	26
250	247	275	29
315	313	342	23
400	398	440	40

All dimensions can be slightly different from the actual dimensions (+/-)

LOUVRE galvanized steel

Size	ϕd	ϕD	L
500	490	540	60
630	620	670	60
800	790	840	60
1000	990	1040	60



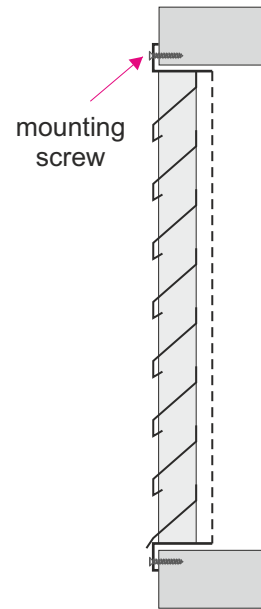
Methods of mounting

W1

Intakes louvres are mounted using screws and the mounting holes in the frames.

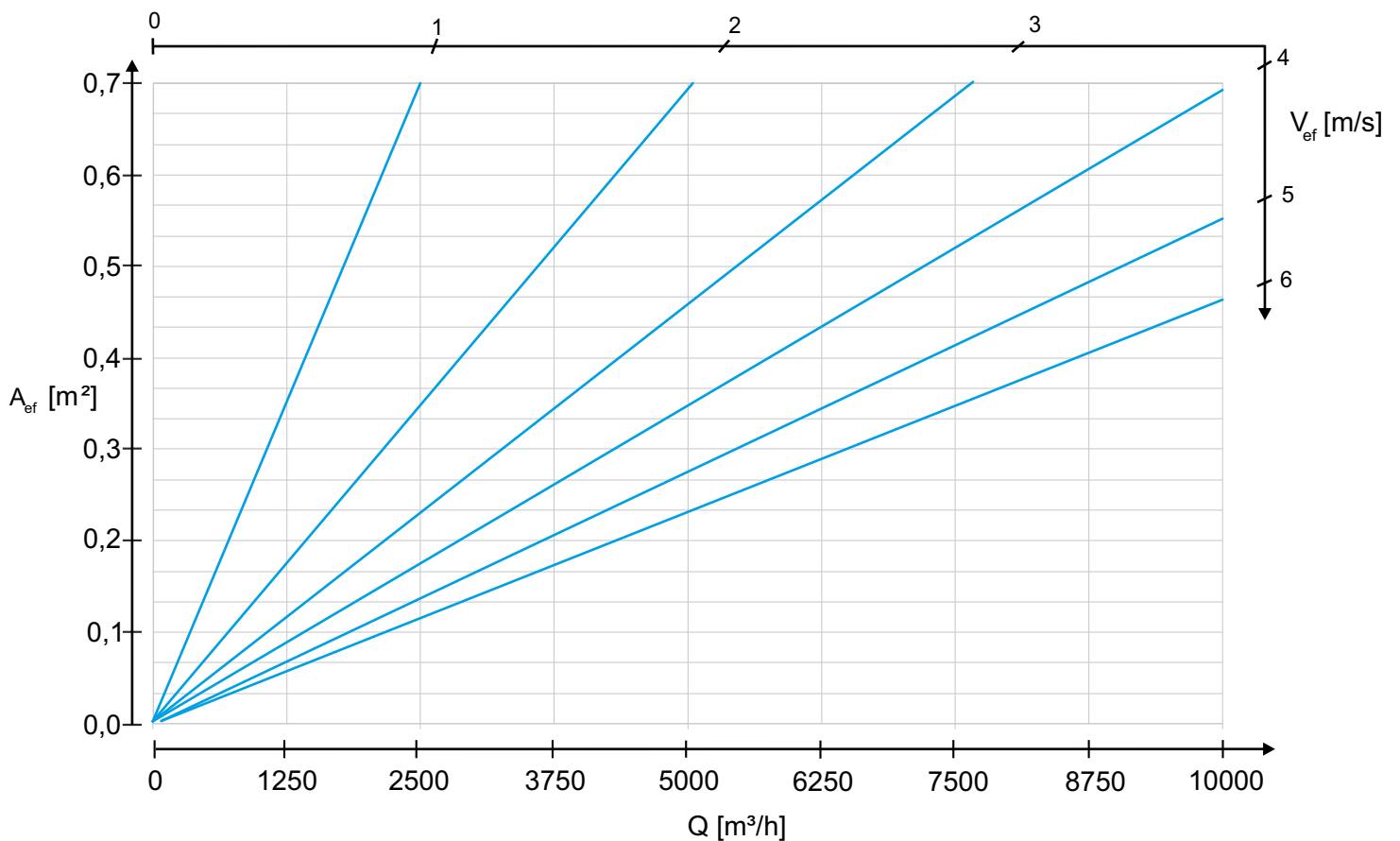
W2

With smaller dimensions, it is possible installation of louvre with mounting glue (invisible assembling).



Assembling visible through screws and mounting holes in the louvre frame

Technical data - Effective speed depending on the flow of air and the effective surface area



Marking:

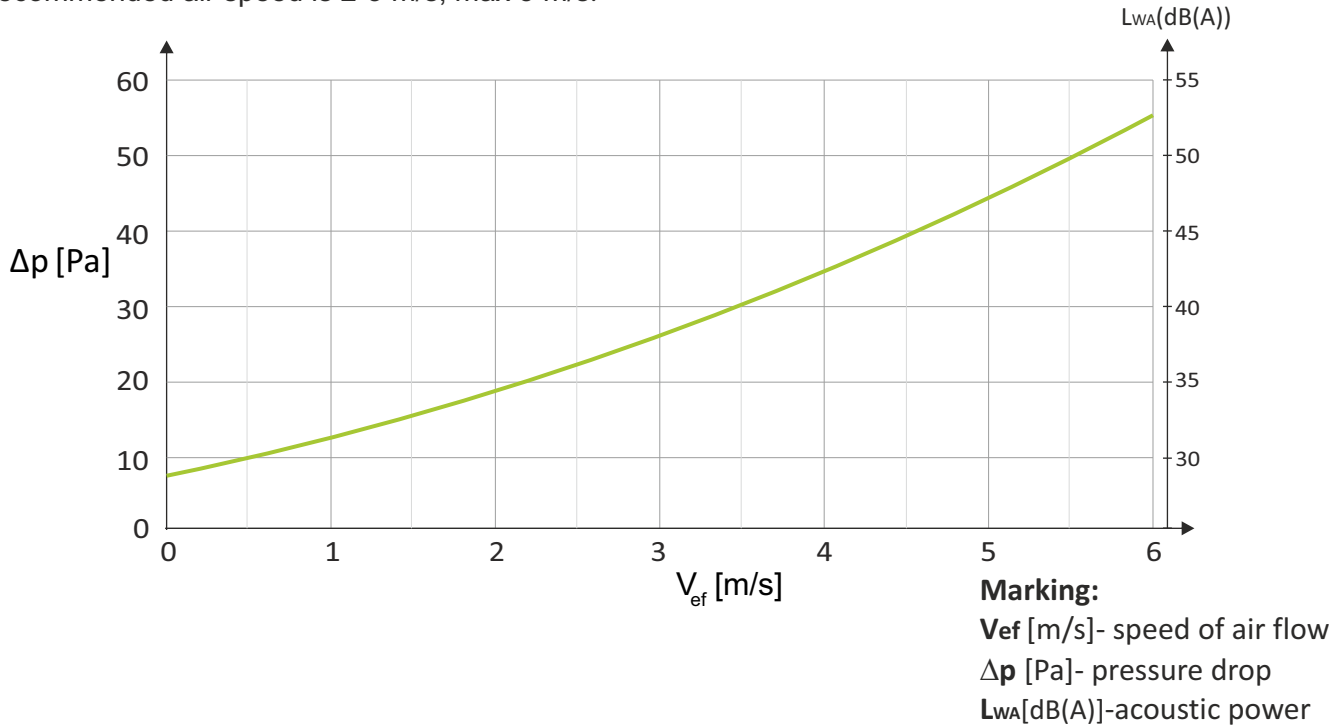
Q [m³/h]- air volume flow

A_{ef} [m²]- effective area of louvre

V_{ef} [m/s]- speed of air flow

Dependence of the pressure drop and acoustic power depending on the speed of air on intake louvre

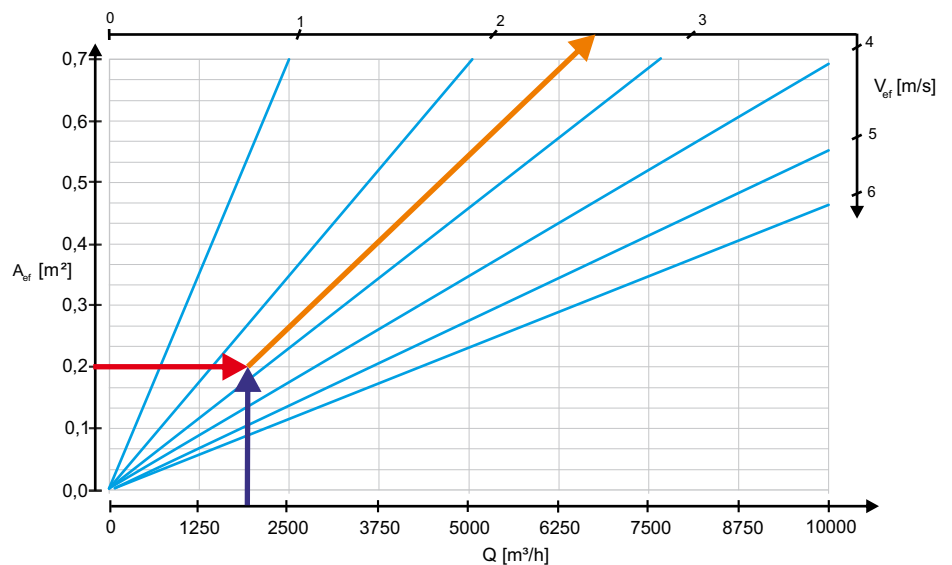
The recommended air speed is 2-3 m/s, max 5 m/s.



EXAMPLE

LOUVRES - steel

Wielkość	A_{ef} [m ²]
500	0,126
630	0,201
710	0,254
800	0,323
900	0,409
1000	0,507



EXAMPLE

• air volume flow $Q=1800$ m³/h

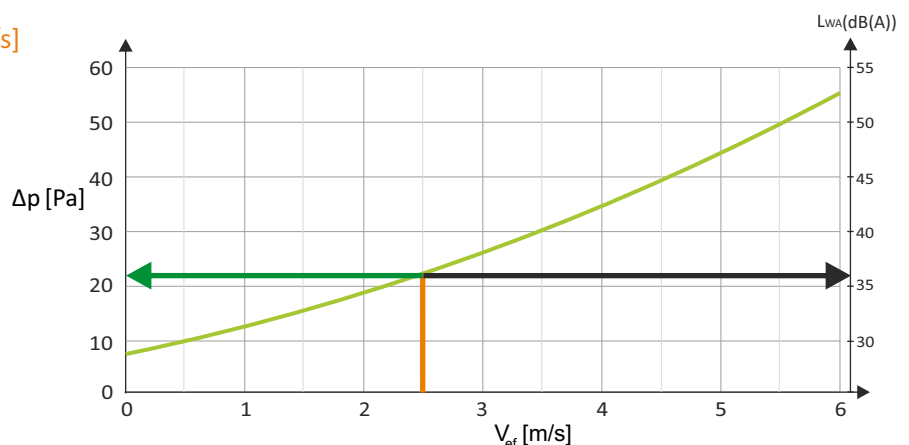
For speed 2-3m/s chosen air intake $\phi 630$

• $A_{ef}=0,201$ m²

$v=Q/(A_{ef} \cdot 3600)=1800/(0,201 \cdot 3600) \approx 2,5$ [m/s]

Reading from the graph:

- effective speed: $v_{ef}=2,5$ m/s
- pressure drop on the louvre $\Delta p=23$ Pa
- acoustic power $L_{WA}=36$ dB(A)



The method of placing an order

Please make orders according to the following formula:

CzS-B / 'φd' / 'RAL' / 'M' / 'W'

'φd'	- mounting hole size (width x height) in mm
'RAL'	- louvre color according to RAL palette (standard RAL9006*)
'M'	- material: OC - powder coated steel* AL - aluminum powder coated 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* W2 - invisible assembly using mounting glue

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