

Description and application

Rectangular wall external intake acoustic damping louvre used in ventilation installation intake and exhaust as the end of air intake pipes and ventilation holes in the walls of buildings or directly on the duct. Thanks to a specially designed louvres, ideal where apart from protection against weather conditions required are elevated acoustic parameters. As the material used for silencing was here mineral wool with a veil of fiberglass. In standard used is protective mesh that protects before the bird, rodent and larger impurities (like the leaves) inside the installation.

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

Material and workmanship

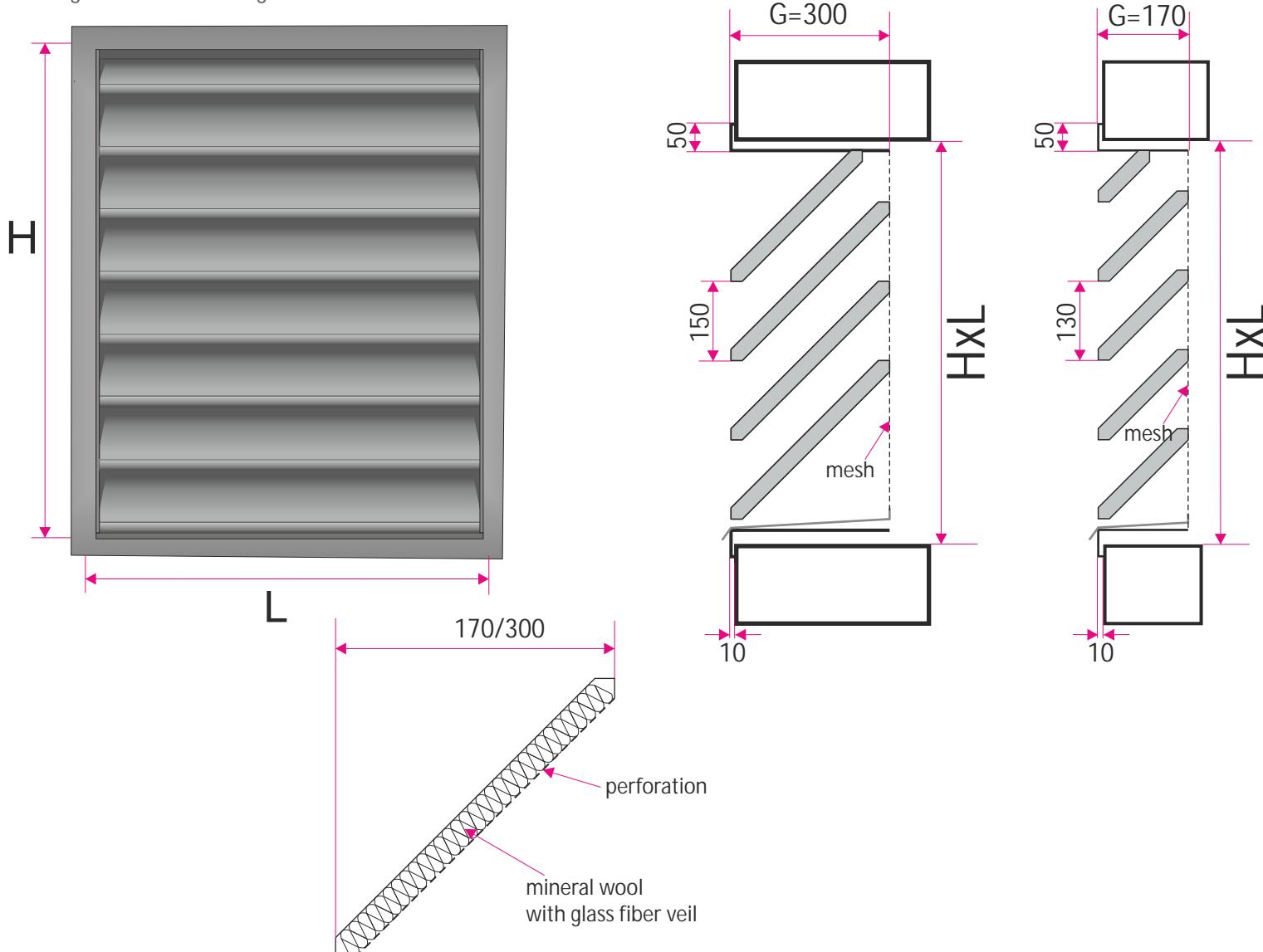
External intake louvre frame is made of galvanized steel powder coated to any RAL color (standard RAL 9006). The blades are made of profiled galvanized steel and perforation, powder coated to any RAL color (standard RAL 9006). As the material used for silencing is mineral wool with a veil of fiberglass. Directly behind the intake louvre is a steel mesh expanded metal (standard N16). On request it is possible to make a special external intake louvres of aluminum and stainless steel (1.4301 lub 1.4404).

Size

Intake acoustic damping louvres are manufactured to order. Louvre dimension by the customer request.

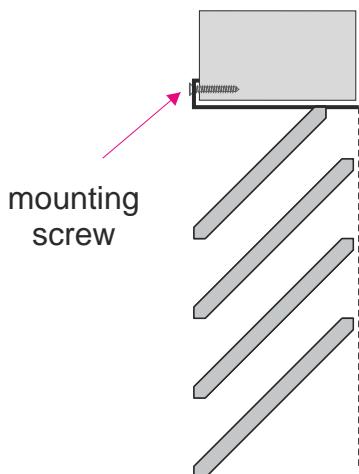
L - width of the mounting hole

H - height of the mounting hole



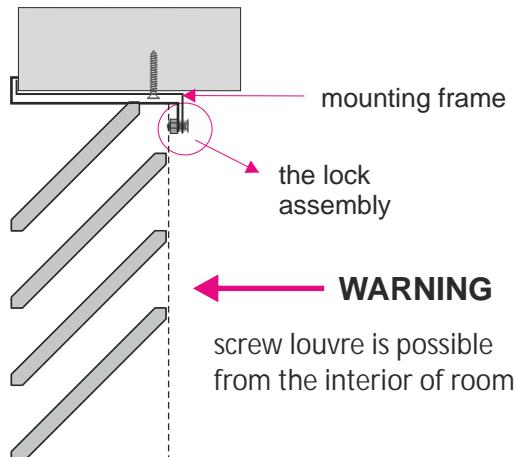
Methods of mounting

W1

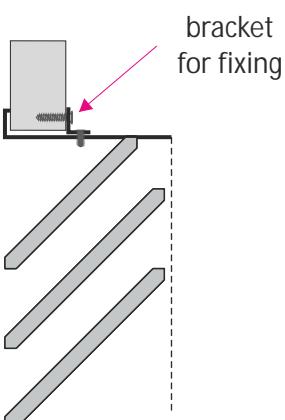


Assembling visible through screws and mounting holes in the louvre frame.

W2

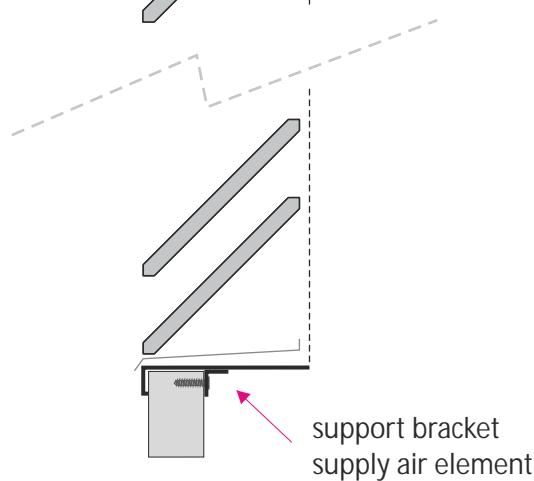


Assembling invisible by screws and lock assembly in mounting frame
RM - the preferred option in the case of split air intake louvre with the substructure.



W3

Installation invisible by brackets screwed from the inside of the room.
The preferred option where the width partition / wall is less than the depth of the louvre.



Is possible to make intake in other depths (size G) (negotiable)

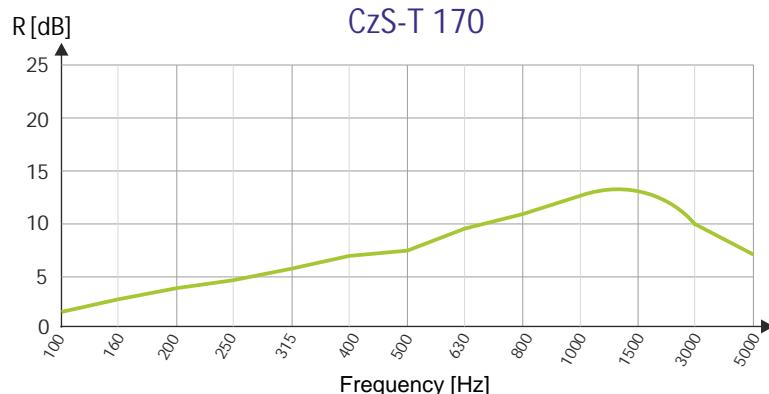
Other mounting options to be negotiated.

Technical data

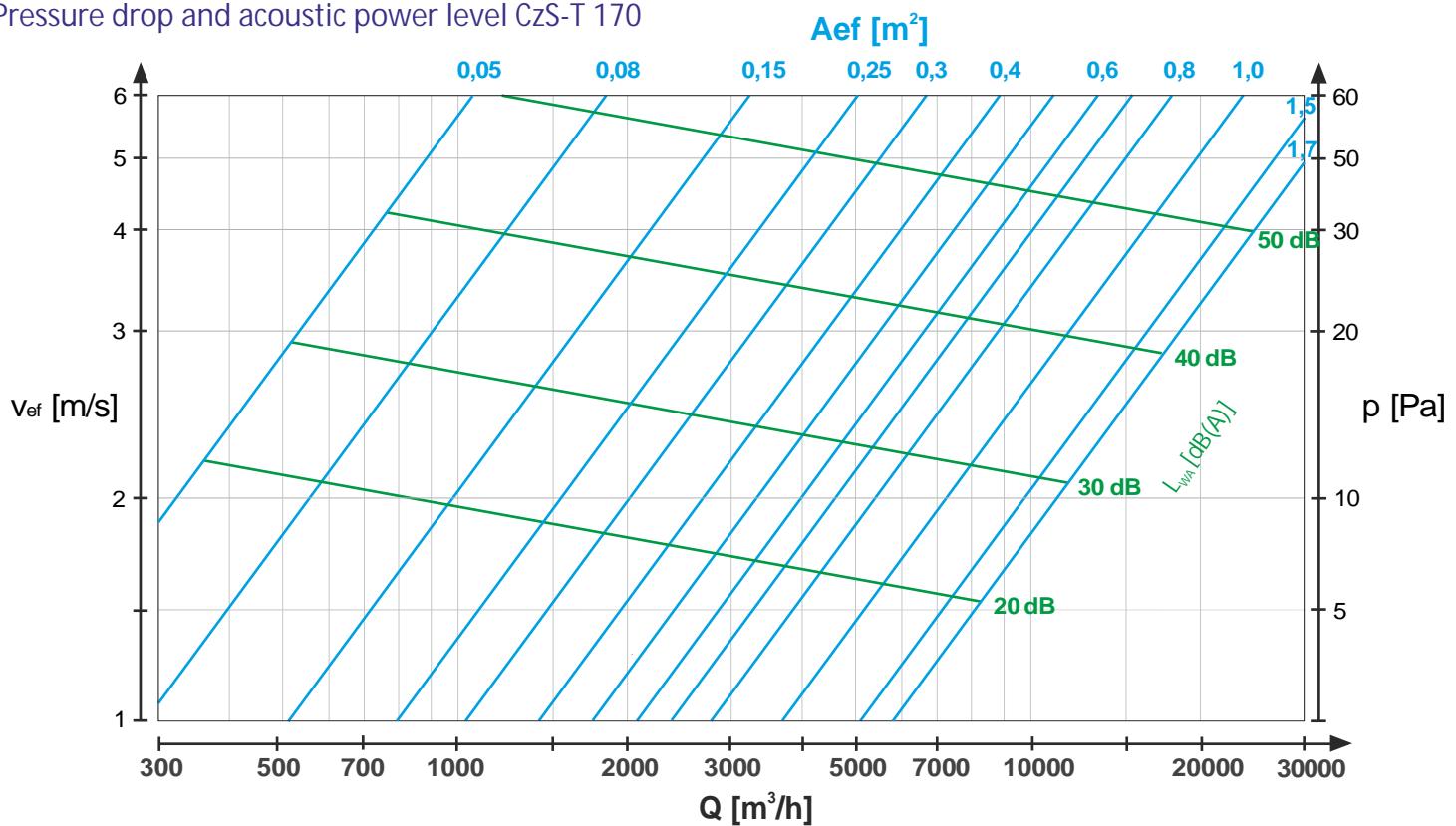
Effective flow area (sample dimensions)

H \ L	300	400	500	600	800	1000	1200	1400	1600	1800	2000
mm	Aef (m^2) effective area										
450	0,03	0,04	0,05	0,06	0,08	0,10	0,12	0,14	0,16	0,18	0,20
600	0,05	0,07	0,09	0,11	0,15	0,19	0,23	0,27	0,31	0,35	0,40
750	0,08	0,11	0,14	0,17	0,23	0,29	0,35	0,41	0,47	0,53	0,59
900	0,10	0,14	0,18	0,22	0,30	0,38	0,46	0,54	0,62	0,70	0,78
1050	0,13	0,18	0,23	0,28	0,38	0,48	0,58	0,68	0,78	0,88	0,98
1200	0,16	0,22	0,28	0,34	0,46	0,58	0,70	0,82	0,94	1,06	1,18
1800	0,26	0,36	0,46	0,66	0,76	1,06	1,16	1,36	1,56	1,76	1,96

Sound insulation R[dB]



Pressure drop and acoustic power level CzS-T 170



Symbol:

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

Dp [Pa]- pressure drop

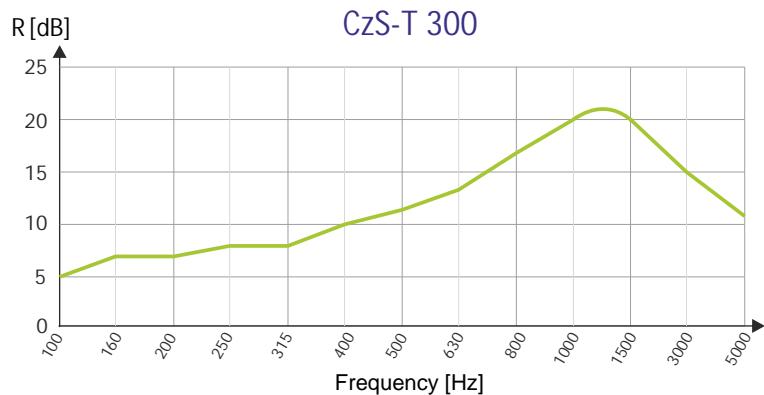
 L_{WA} [dB(A)]- acoustic power level

 A_{ef} [m^2]- effective area louver

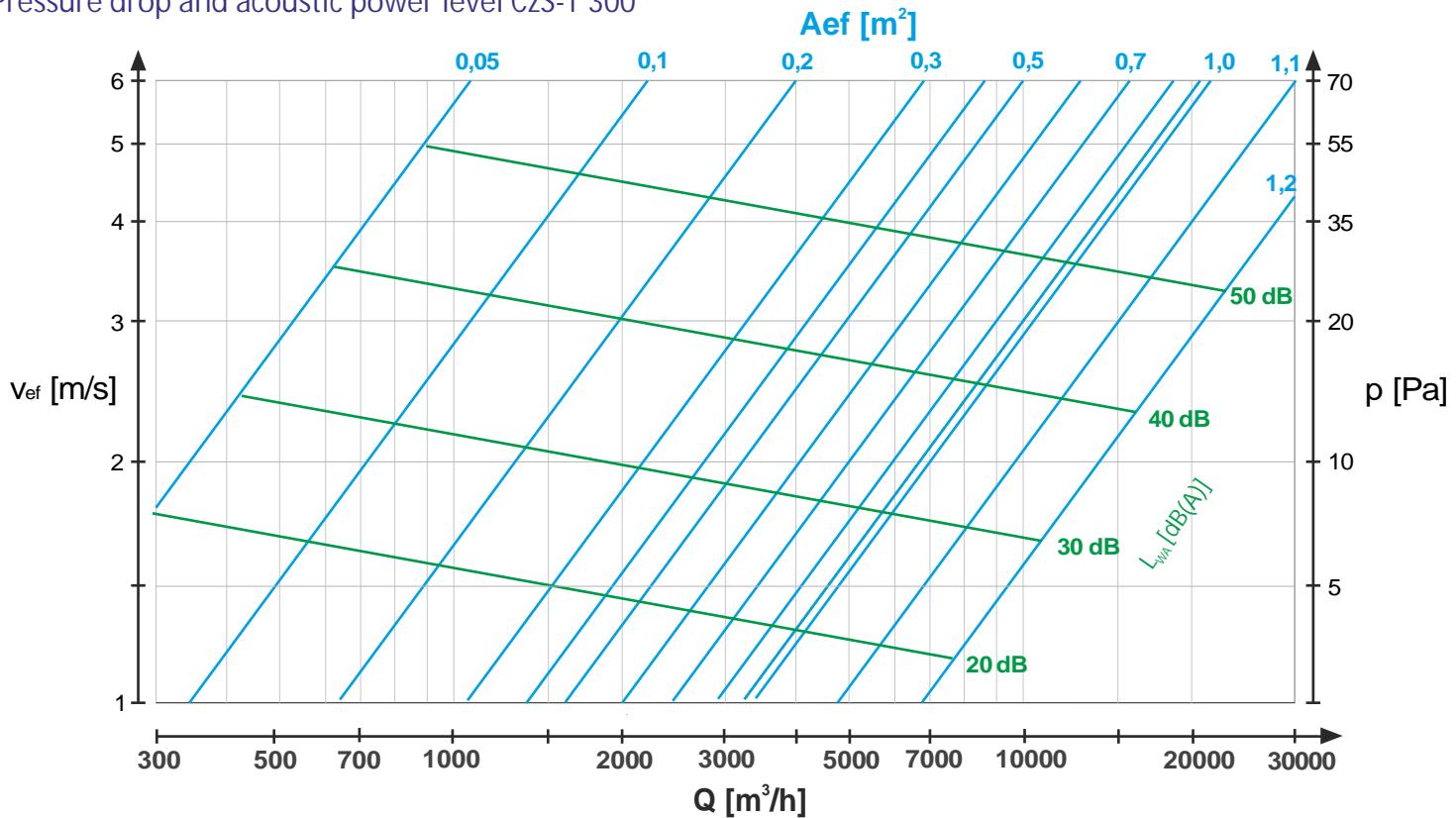
 v_{ref} [m/s]- effective speed

Technical data

Sound insulation R[dB]



Pressure drop and acoustic power level CzS-T 300



Symbol:

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

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

 v_{ref} [m/s]- effective speed

Dp [Pa]- pressure drop

 A_{ef} [m^2]- effective area louver

EXAMPLE

EXAMPLE for CzS-T 300

Size: 1000x1050

- $A_{ef}=0,48 \text{ [m}^2\text{]}$

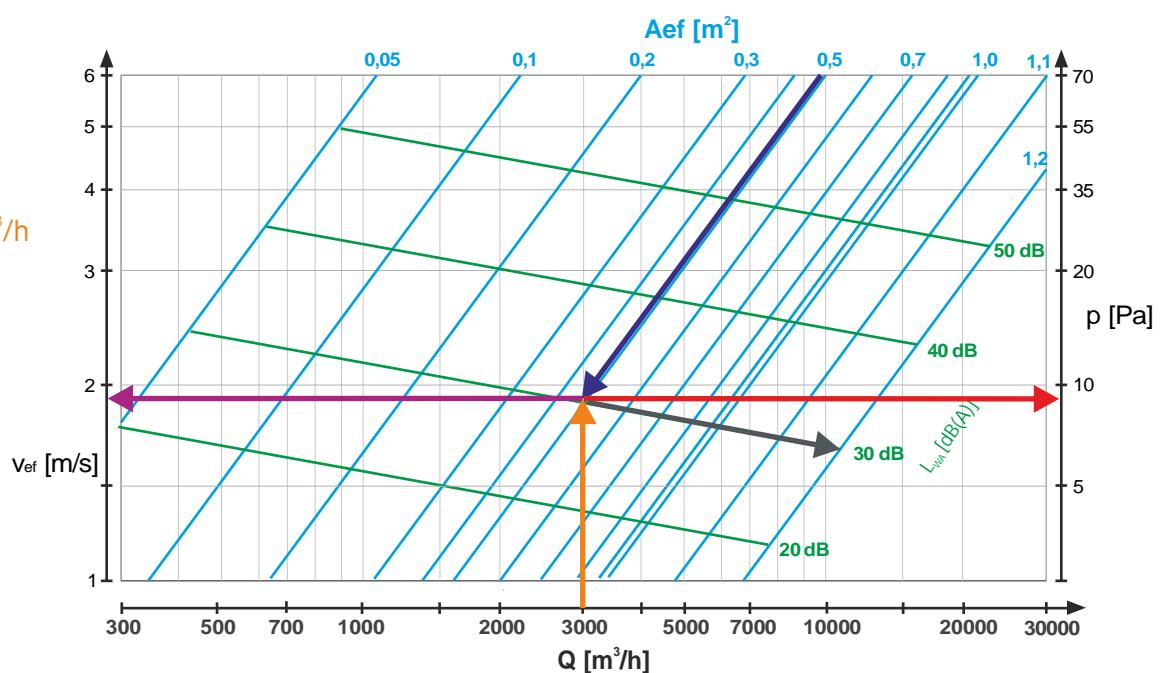
- efficiency louvre $Q=3000 \text{ m}^3/\text{h}$

Reading from the graph:

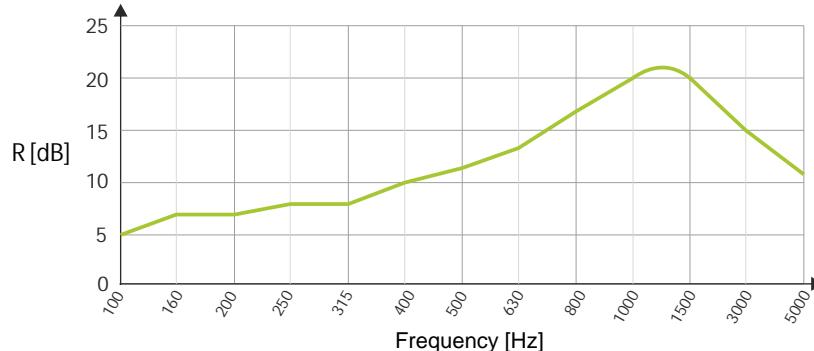
- acoustic power $L_{WA}=30 \text{ dB}$

- drop pressure $p<10 \text{ Pa}$

- effective speed $v_{ef}=1,9 \text{ m/s}$



Dampening bandwidth CzS-T 300



The method of placing an order

Please make orders according to the following formula:

CzS-T / 'LxH' / 'G' / 'RAL' / 'M' / 'W'

'LxH'

- mounting hole size (width x height) in mm

'G'

- depth of the louvre (eg. 170, 300)

'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 (1.4301 or 1.4404)

'W'

- mounting option:

W1 - visible assembly with screws through the holes in louvre front frame *

W2 - invisible assembly using screws, and an additional mounting frame

W3 - invisible assembly using screws, and additional support brackets (L)

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