

FIDi

Self-acting back draught damper for combustion gases, with commissioning function



FIRE SAFETY



21/01/2020

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FIDi



Quick facts

- Sizes from Ø 100 to 250 mm
- Commissioning function
- Available in MagiCAD

FIDi - self-acting back draught damper with commissioning function

FIDi is a self-acting back draught damper designed to prevent the spread of combustion gas via the intake air system in ventilation systems. FIDi is equipped with measurement and commissioning functions, thus it can also be used as an adjustment damper.

Measurement and commissioning

The commissioning unit is integrated in the insert, which means the setting does not change when the insert is dismantled. There is a metering socket, knob and K-factors on the outside.

Use

The back draught damper should be used in combination with a fan in use solution, smoke venting via exhaust air or the like and to maintain its function requires the supply air fan to be operational during the fire. The fire protection functions work for all design fire scenarios that can be expected to occur with traditionally used fire development rates. Planning and fire protection analysis are to be made by fire experts.

Inspection/maintenance

Inspection/maintenance shall occur every third year, during the compulsory ventilation inspection (OVK), cleaning of ducts and for rebuilding.

Certificate of conformity

SC0031-10

Planning

Planning shall be carried out in accordance with the related planning instructions. There is a checklist with items concerning the intake air system, exhaust air system and the ventilation system in general, that must be met. In addition, the ventilation system should be fire protection analysed in its entirety to prevent the spread of combustion gases. This should be conducted by fire experts.

Installation

FIDi shall be located in the intake air duct for the served fire compartment. The back draught damper can be installed vertically or horizontally and placed in the fan room, in the shaft, in the fire compartment, or outside the fire compartment. If the back draught damper is placed in the fire compartment, it must be protected for external fire impact, for example, above the ceiling.

Function

FIDi has a simple pull-out insert with a membrane that closes very quickly with overpressure in the room. The design of FIDi means that the back draught damper has a low build height, but also that the insert is easy to remove. Removing the insert also allows access for inspection and cleaning of the duct in both directions.

Dimensions

FIDi is available from Ø 100 to 250 mm



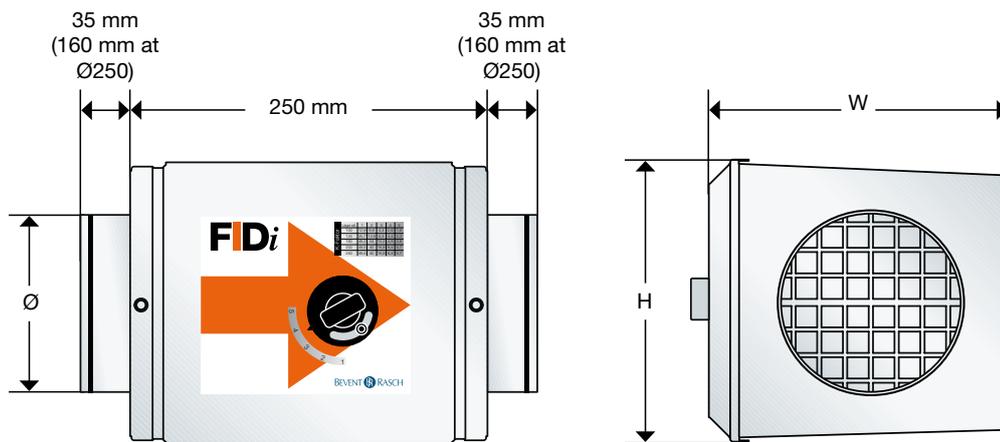
Specifications

Examples:

Self-acting back draught damper FIDi - 125

Size _____

Dimensions and weight

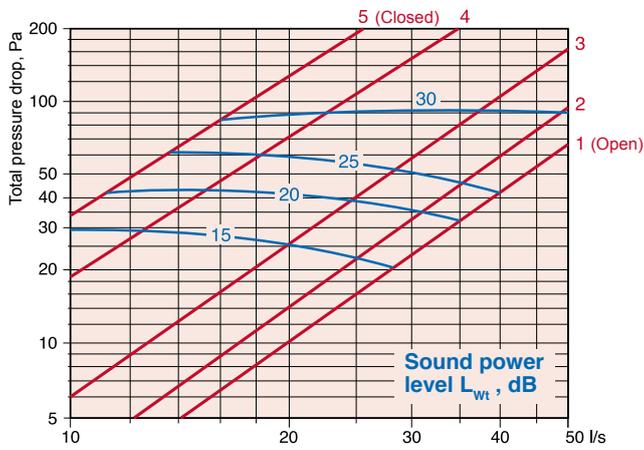


Size Ø	H	W	Weight kg
100	155	200	2,6
125	195	200	3
160	215	270	3,9
200	260	310	4,7
250	260	310	5,1

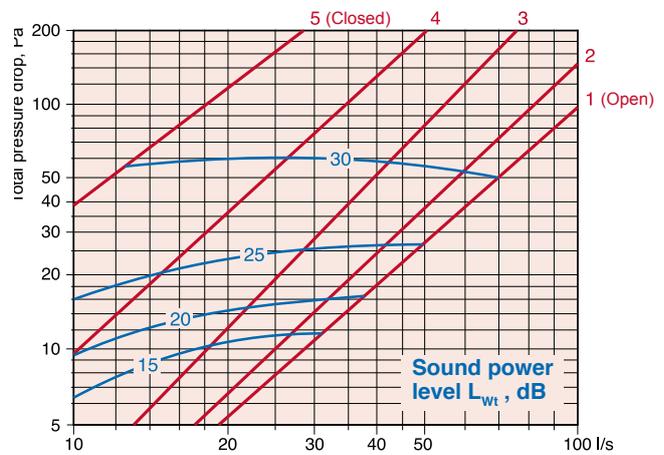


Size chart

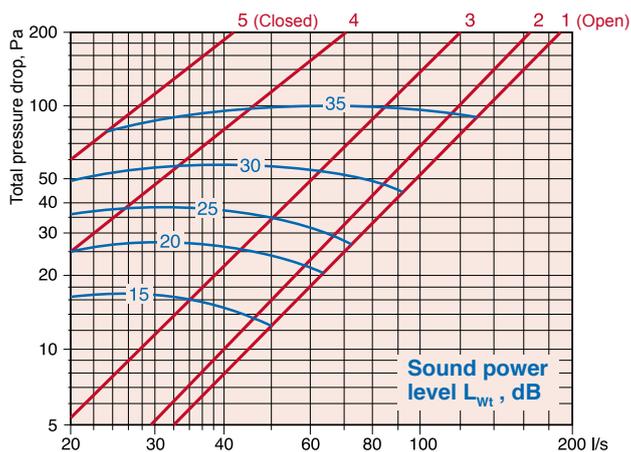
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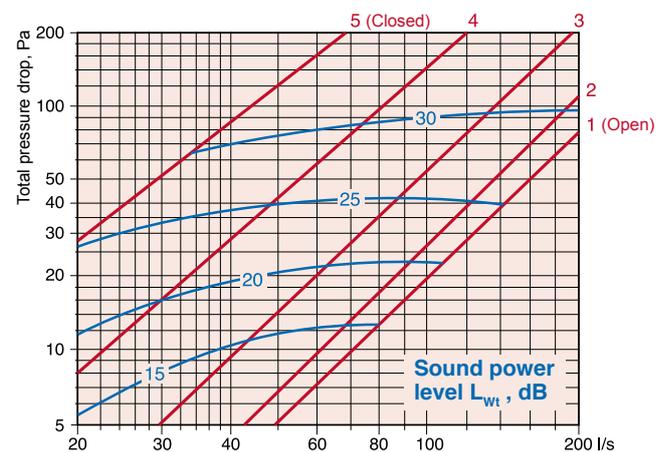
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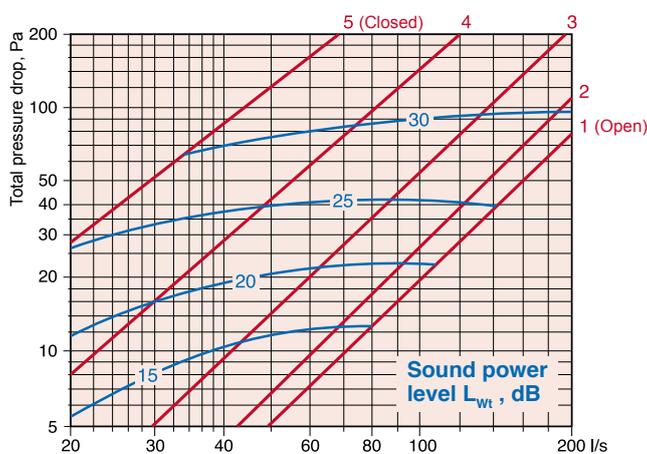
Size - 160



Size - 200



Size - 250



Sound data

Correction of sound power level, L_{Wok} , in octave band

$$L_{Wok} = L_{Wt} + K_{ok}$$

Correction, K_{ok} at opening angle of 90°

Dim. Ø mm	Mittfrekvens Hz							
	63	125	250	500	1000	2000	4000	8000
100	-18	-7	-9	-7	-12	-17	-21	-21
Tol. dB	±9	±4	±5	±4	±8	±11	±13	±13
125	-16	-7	-9	-8	-14	-17	-19	-20
Tol. dB	±6	±5	±5	±5	±5	±7	±9	±10
160	-18	-5	-9	-13	-16	-15	-20	-23
Tol. dB	±8	±4	±5	±7	±6	±8	±11	±14
200	-18	-8	-6	-11	-13	-14	-18	-20
Tol. dB	±9	±6	±4	±5	±5	±6	±8	±10
250	-18	-8	-6	-11	-13	-14	-18	-20
Tol. dB	±9	±6	±4	±5	±5	±6	±8	±10