

FIDb

Self-acting back draught damper for smoke, without commissioning function



FIRE SAFETY



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FIDb



Quick facts

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

FIDb - Self-acting back draught damper

FIDb is a self-acting back draught damper without commissioning functionality, designed to prevent the spread of smoke via the intake air system in ventilation systems.

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 intake 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, discharge 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

FIDb 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

FIDb has a simple pull-out insert with a membrane that closes very quickly with overpressure in the room. The design of FIDb 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

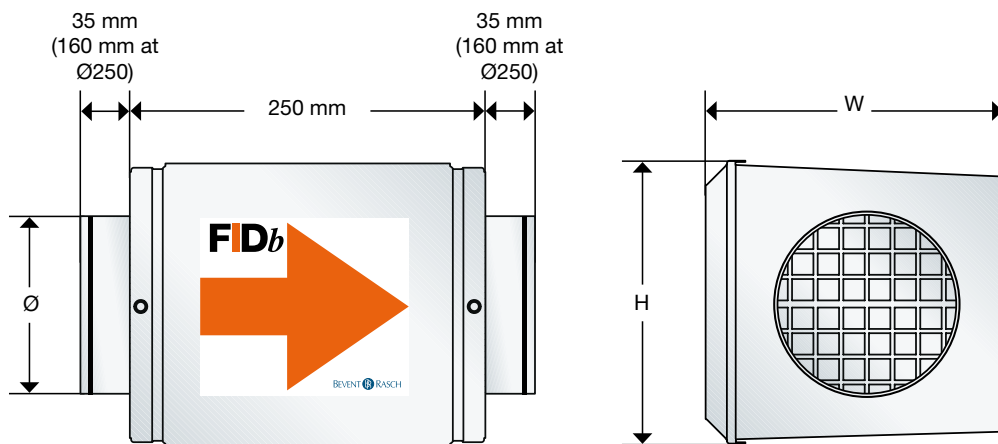
FIDb is available from Ø 100 to 250 mm.



Specifications

Examples:
Self-acting back draught damper FIDb - 125
 Size _____

Dimensions and weight

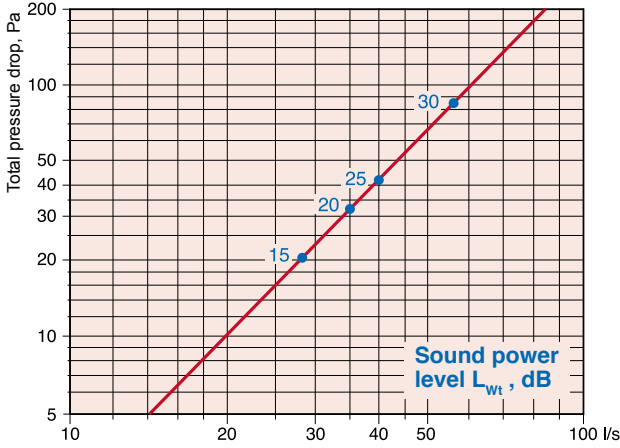


| Size Ø | H | W | Weight kg |
|-----------|-----|-----|--------------|
| 100 | 155 | 200 | 2,6 |
| 125 | 195 | 200 | 3 |
| 160 | 215 | 270 | 3,9 |
| 200 | 260 | 310 | 4,7 |
| 250 | 260 | 310 | 5,1 |

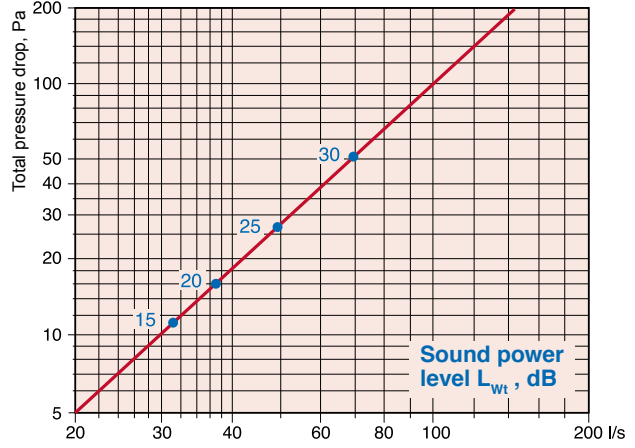


Size chart

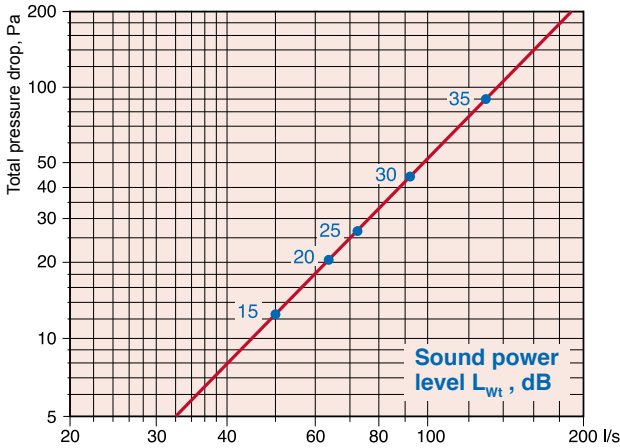
Size - 100



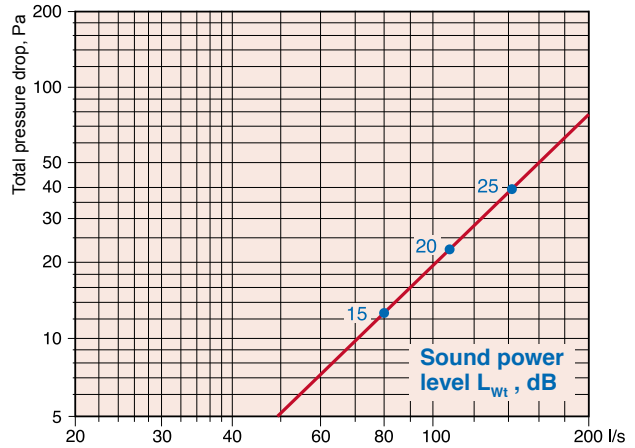
Size - 125



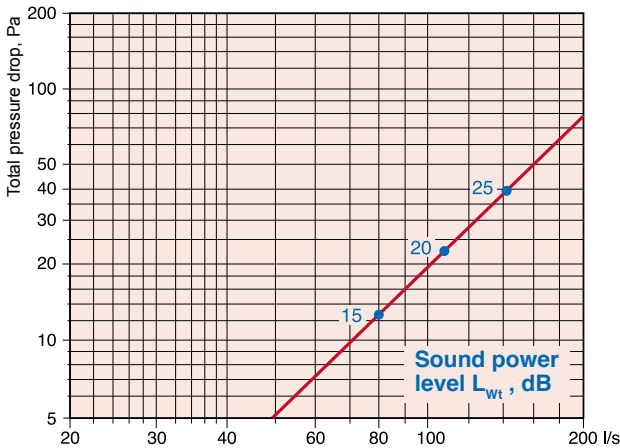
Size - 160



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 | Mid frequency 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 |