FIDm

Self-acting back draught damper for combustion gases, with actuator

FIRE SAFETY

21/01/2020

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Self-acting back draught damper FIDm – with actuator

FIDm

Quick facts

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

FIDm - self-acting back draught damper, motorised

FIDm is a self-acting back draught damper designed to prevent the spread of combustion gases via the intake air system in ventilation systems. FIDm is equipped with an actuator and is suitable for systems where you adjust the ventilation as required.

Motorisation

The back draught damper can be controlled with the on/off function or continuously regulated 0-10 V. The end position can be limited for max/min positions. FIDm is also equipped with a metering socket for commissioning.

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, 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

FIDm 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

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

FIDm is available from Ø 100 to 250 mm.

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Specifications

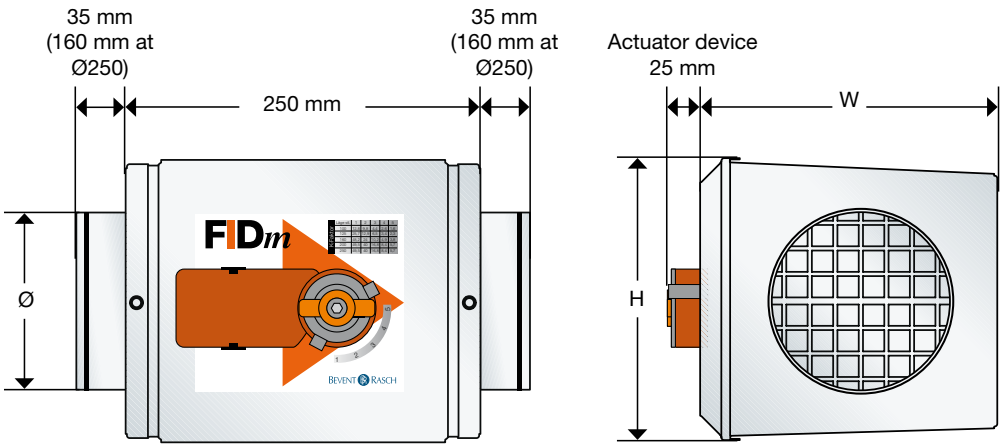
Examples:
Self-acting back draught damper FIDm - 125 - 1

Size

Motor
24V On/Off = 1
230V On/Off = 2
24V Regulating = 3

Accessories:
Temperature regulator TR24-M
Timer TEL
Air quality sensor aSence-VAV

Dimensions and weight



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

Technical data

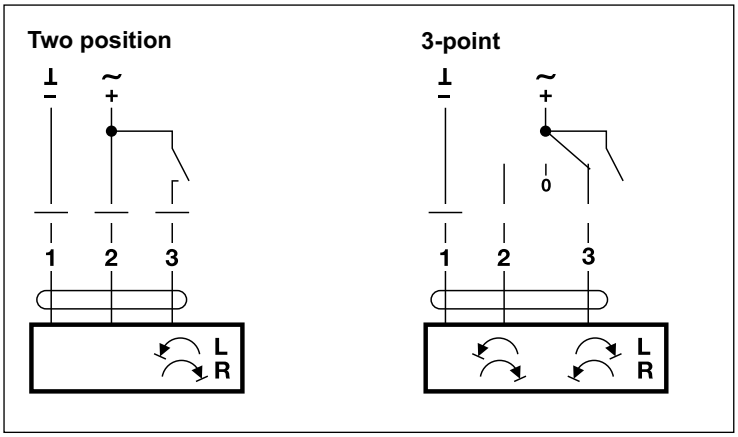
Sound level max: 35 dB(A)
Adjustable stop lugs 0-90°
Ambient temperature: -10° to +50°C

FIDm - 1

Voltage: AC 24 V, DC 24 V
Output: 0.2/0.5 W
Design: 1 V A
Two position or 3-point control

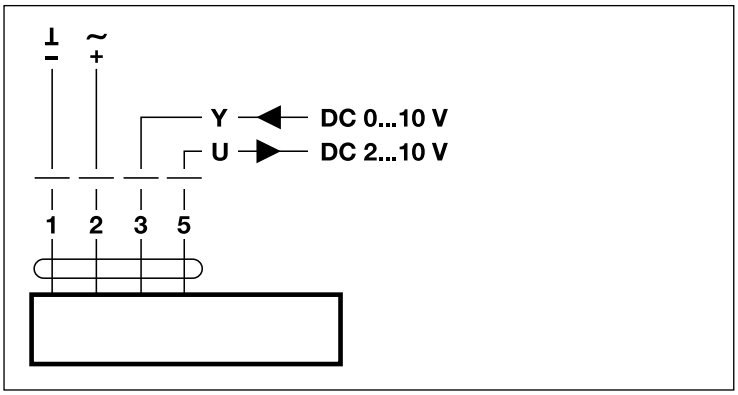
FIDm - 2

Voltage: AC 230 V
Output: 1/1.5 W
Design: 3 V A
Two position or 3-point control



FIDm - 3

Voltage: AC 24 V, DC 24 V
Output: 0.5/1 W
Design: 2 VA
Control signal: 0-10 V



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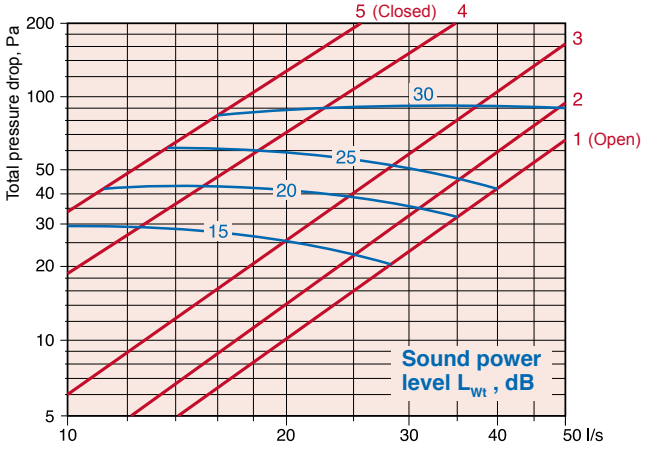
Size chart

Size - 100



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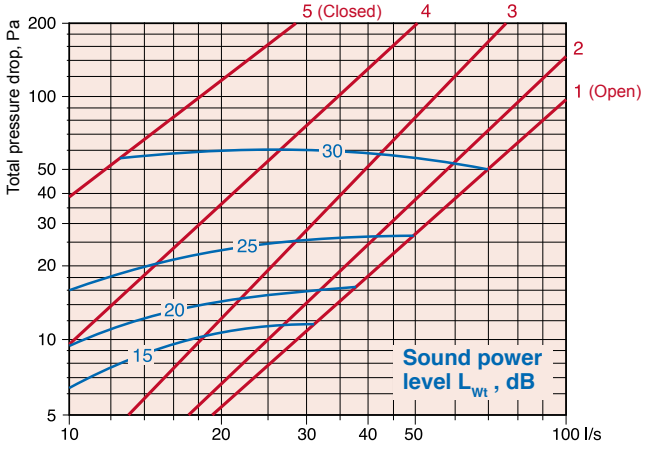

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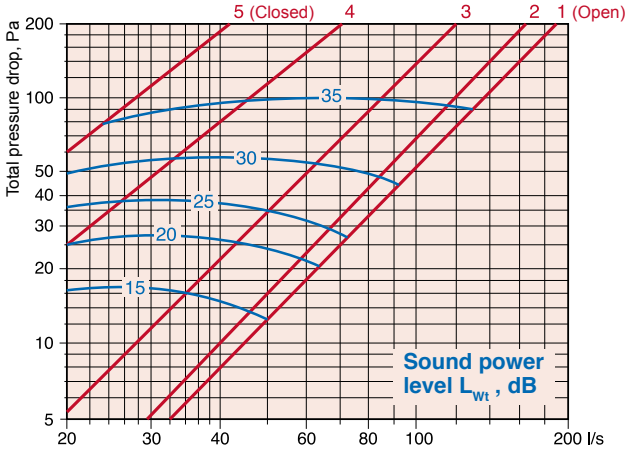

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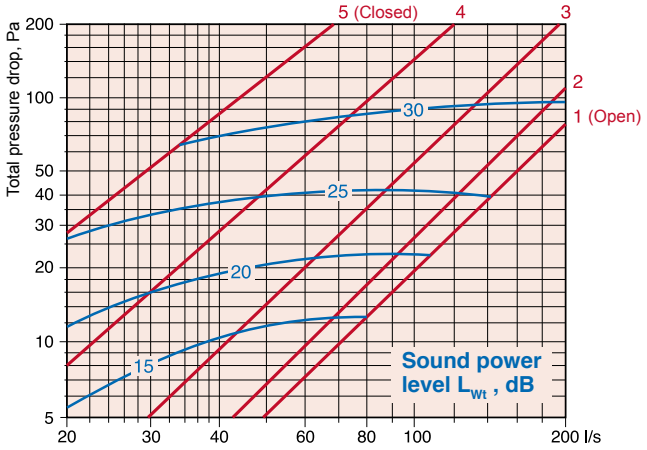

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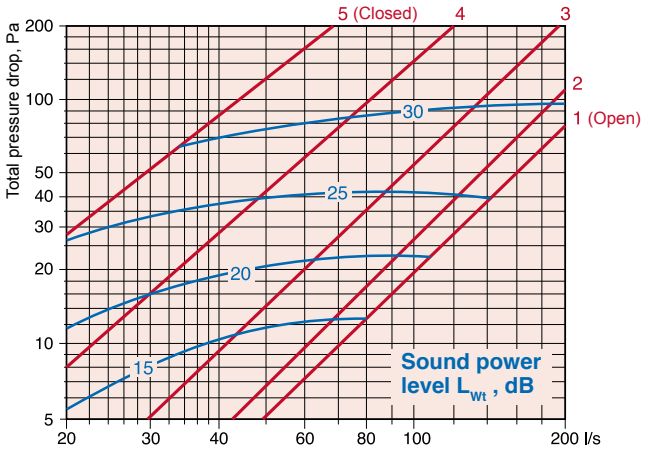

Sound data

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

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