



Floor displacement air diffuser PILB



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Floor displacement air diffuser PILB

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Floor displacement air diffuser PILB

Description

The SCHAKO floor displacement air diffuser type PILB in **rectangular design** is suitable **for installation in double floors in rooms of high thermal loads** such as computer centres. The **air flows horizontally** out of the floor displacement air diffuser. This flow results in a **rapid reduction of the temperature and velocity** near the diffuser.

The rectangular floor displacement air diffuser PILB consists of a faceplate and a support frame and, at an extra charge, it can be fitted with a dirt collection basket. The basket bottom of the dirt collection basket is height-adjustable. This allows the supply air volume of each diffuser to be set to different values if there are different diffuser resistances.

Instead of the dirt collection basket, the floor displacement air diffuser can also be fitted with a plenum box for optimum air distribution over the entire diffuser. The plenum box can be additionally fitted with a damper. This serves for air volume regulation and is easy to adjust. For easy mounting, an installation frame can be delivered at an extra charge.

To maintain the local thermal ambient climate, we recommend selecting a supply air temperature $\geq 19^{\circ}\text{C}$.

Please also observe EN ISO 7730, 6.2007 and DIN EN 15251, 8.2007

Load-carrying capacity of the faceplate

The floor displacement air diffuser type PILB can be subjected to the following loads according to DIN-EN 13264:

| | PILB |
|----|------|
| kN | 3 |

Manufacture

Faceplate

- Stainless steel (V2A) without paint (-V2-0000)

Support frame

- made of sheet steel painted to RAL 9005 (black)

Model

- PILB-... - rectangular design, faceplate with perforation and back-fitted support frame
- PILB-Q-... - square model
- PILB-E-... - rectangular model
- PILB-...-1-... - one-way throw.
- PILB-...-2-... - two-way throw.
- PILB-...-A-... - faceplate with perforation $\varnothing 5$ mm (standard).
- PILB-...-B-... - faceplate with perforation 8x8 mm.
- PILB-...-C-... - faceplate with perforation 12x5 mm.
- PILB-...-D-... - faceplate with perforation 18x6 mm.
- PILB-...-N-... - single design

Accessories

Dirt collection basket (-SFK0 / -SFK1)

- without dirt collection basket (-SFK0) (standard).
- with dirt collection basket (-SFK1), made of galvanised sheet steel (not for use with plenum box).

Installation frame (-ER0 / -ER1), without flange

- without installation frame (-ER0) (standard).
- with installation frame (-ER1), made of stainless steel 1.4301 (V2A) in the colour sand silver.

plenum box (-SK-...-73), only for PILB-Q-...

- square model, for supply air (-Z) (not for use with dirt collection basket).
- Nominal size:
 - NW 300 (-300) (for diffuser LxB = 0300x300)
 - NW 400 (-400) (for diffuser LxB = 0400x400)
 - NW 500 (-500) (for diffuser LxB = 0500x500)
 - NW 600 (-600) (for diffuser LxB = 0600x600)
- Mounting:
 - without fastening (-00) (standard)
- Material:
 - made of galvanised sheet steel (-SV) (standard)
- Damper
 - Without damper (-DK0) (standard)
 - with damper (-DK1), made of galvanised sheet steel, damper fastening made of plastic material, adjustable, in the plenum box housing, for simple air volume regulation.

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- Rubber lip seal:
 - without rubber lip seal (-GDO) (standard)
 - with rubber lip seal (-GD1), made of special rubber, at the connection spigot.
- Volumetric flow meter:
 - Without volumetric flow meter (-VME0) (standard)
- ROB version:
 - without ROB version (-ROB0) (standard)
- Insulation:
 - without insulation (-I0) (standard)
 - with internal insulation (-Ii), thermal insulation inside the plenum box.
 - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
- Height of plenum box:
 - standard height of plenum box (-KHS)
 - Height of plenum box in mm, freely selectable (-xxx) (minimum height [KHS] = spigot diameter $\varnothing D + 72$ mm, but at least 170 mm, always with 3 digits)
- Spigot diameter:
 - Standard spigot diameter (-SDS)
 - Spigot diameter in mm, freely selectable (-xxx, always with 3 digits).
- Spigot position:
 - 1 lateral spigot on the plenum box (-S1) (standard)
 - 2 spigots offset by 90° (-S2)
 - 2 spigots offset by 180° (-S3)
 - 2 spigots arranged next to each other (-S5)

plenum box (-AK-...-52), only for PILB-E-...

- rectangular model, for supply air (-Z), in single design (-N), installation without fastening (-00) (not for use with dirt collection basket).
 - Length:
 - Length 1000 mm (-1000) (can be combined with any width)
 - Width:
 - 150 mm (-150) (not possible for model -S4)
 - 300 mm (-300)
 - 400 mm (-400)
 - 500 mm (-500)
 - 600 mm (-600)
 - Material:
 - made of galvanised sheet steel (-SV) (standard)
 - Damper
 - Without damper (-DK0) (standard)
 - with damper (-DK1), made of galvanised sheet steel, damper fastening made of plastic material, adjustable, in the plenum box housing, for simple air volume regulation.

- Rubber lip seal:
 - without rubber lip seal (-GDO) (standard)
 - with rubber lip seal (-GD1), made of special rubber, at the connection spigot.
- Insulation:
 - without insulation (-I0) (standard)
 - with internal insulation (-Ii), thermal insulation inside the plenum box.
 - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
- Height of plenum box:
 - standard height of plenum box (-KHS)
 - Height of plenum box in mm, freely selectable (-xxx) (minimum height [KHS] = spigot diameter $\varnothing D + 62$ mm, but at least 200 mm, always with 3 digits)
- Spigot diameter:
 - Standard spigot diameter (-SDS)
 - Spigot diameter in mm, freely selectable (-xxx, always with 3 digits).
- Spigot position:
 - Lateral spigot on the plenum box (-S1) (standard)
 - 1 spigot front side (available only upon request)

Mounting

without fastening (-00) (standard)

Attention!

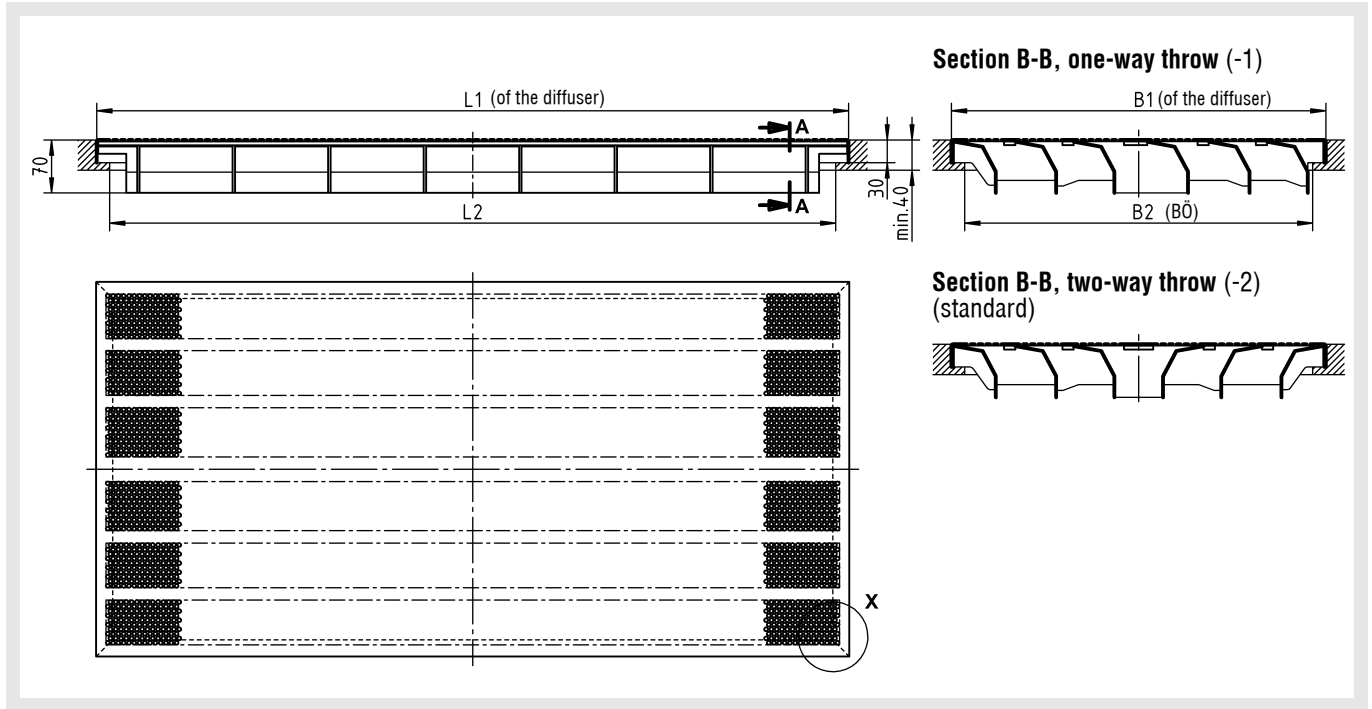
We would like to point out that for cleaning stainless steel models, only suitable cleaning materials may be used!

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Models and dimensions

Dimensions

PILB-..., rectangular design

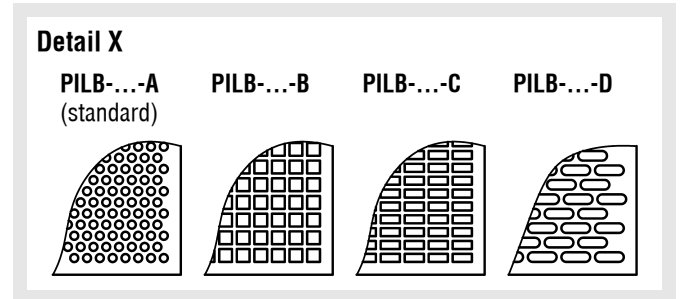


Options

| | | Length | | | | |
|--------|-----|--------|------|------|--------|------|
| | | 0300 | 0400 | 0500 | 0600 | 1000 |
| Width | 150 | -- | -- | -- | -- | X |
| | 300 | X | -- | -- | -- | X |
| | 400 | -- | X | -- | -- | X |
| | 500 | -- | -- | X | -- | X |
| | 600 | -- | -- | -- | X | X |
| PILB-Q | | | | | PILB-E | |

x = available / -- = not available

Faceplate models



Available sizes

| B | B1 | B2 | L | L1 | L2 |
|-----|-----|-----|------|-----|-----|
| 150 | 145 | 110 | 0300 | 295 | 260 |
| 300 | 295 | 260 | 0400 | 395 | 360 |
| 400 | 395 | 360 | 0500 | 495 | 460 |
| 500 | 495 | 460 | 0600 | 595 | 560 |
| 600 | 595 | 560 | 1000 | 995 | 960 |

Floor opening = B1 + 2 mm / L1 + 2 mm

B0 = Floor opening

PILB-Q = square model

PILB-E = rectangular model

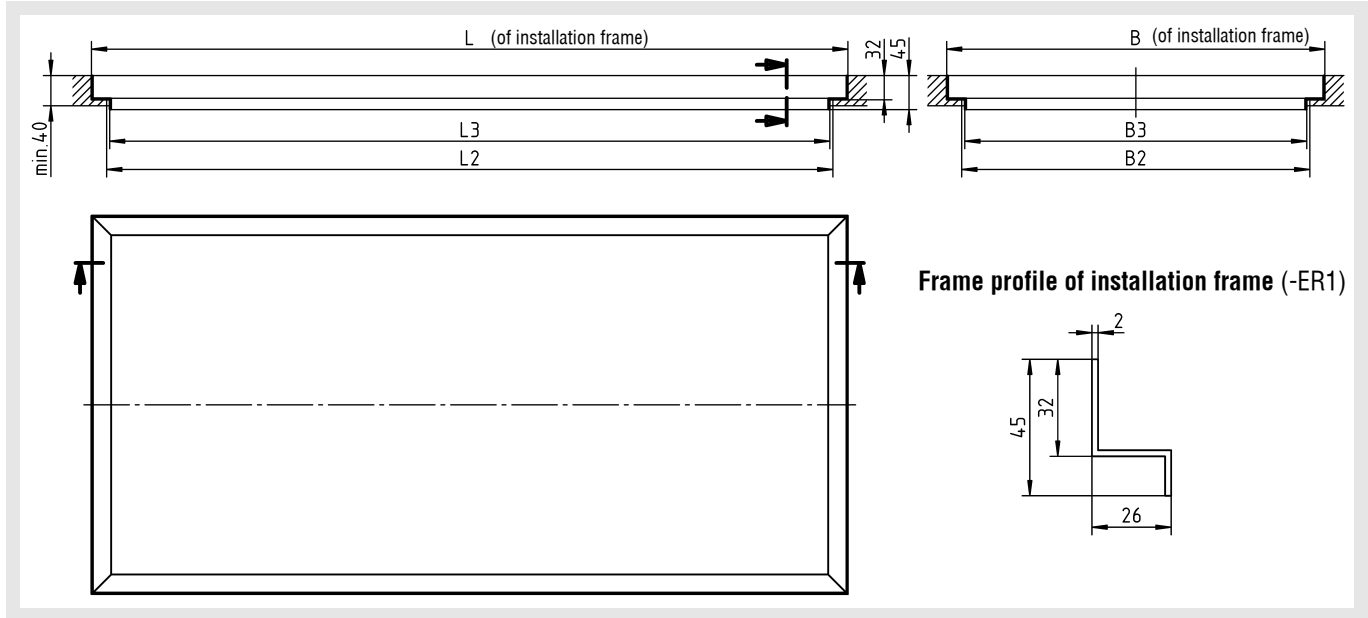
Floor displacement air diffuser PILB

Dimensions of accessories

Installation frame (-ER0 / -ER1)

ER0 = Without installation frame (standard)

ER1 = With installation frame



Options

| | | Length | | | | |
|--------|-----|--------|------|------|--------|------|
| | | 0300 | 0400 | 0500 | 0600 | 1000 |
| Width | 150 | -- | -- | -- | -- | X |
| | 300 | X | -- | -- | -- | X |
| | 400 | -- | X | -- | -- | X |
| | 500 | -- | -- | X | -- | X |
| | 600 | -- | -- | -- | X | X |
| PILB-Q | | | | | PILB-E | |

x = available / -- = not available

Available sizes of the installation frame (-ER1)

| B | B2 | B3 | L | L2 | L3 |
|-----|-----|-----|------|-----|-----|
| 150 | 110 | 102 | 0300 | 260 | 252 |
| 300 | 260 | 252 | 0400 | 360 | 352 |
| 400 | 360 | 352 | 0500 | 460 | 452 |
| 500 | 460 | 452 | 0600 | 560 | 552 |
| 600 | 560 | 552 | 1000 | 960 | 952 |

Floor opening = B + 2 mm / L + 2 mm

PILB-Q = square model

PILB-E = rectangular model

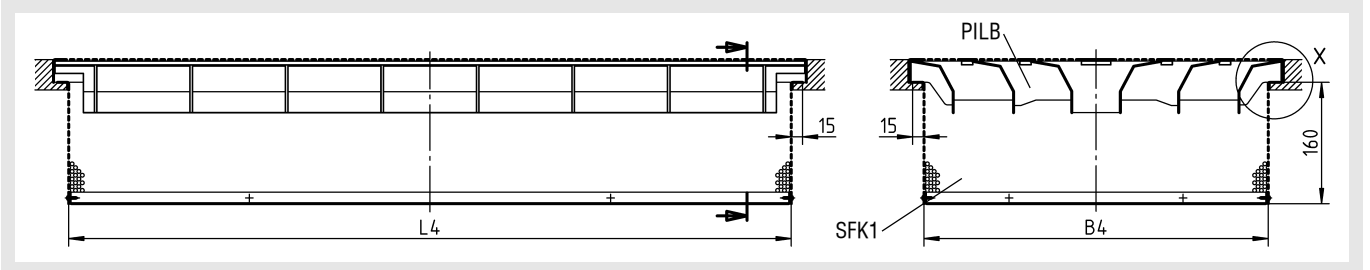
Floor displacement air diffuser PILB

Dirt collection basket (-SFK0 / -SFK1)

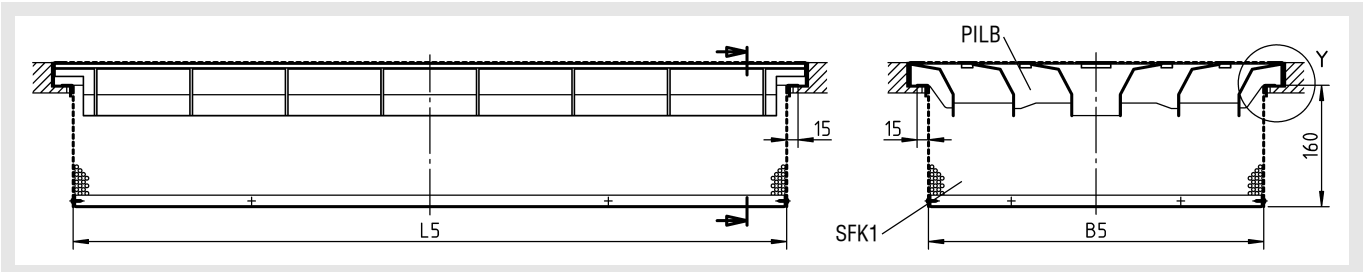
SFK0 = without dirt collection basket (standard)

SFK1 = with dirt collection basket (only possible without plenum box)

PILB-...-SFK1-ER0 (without installation frame)



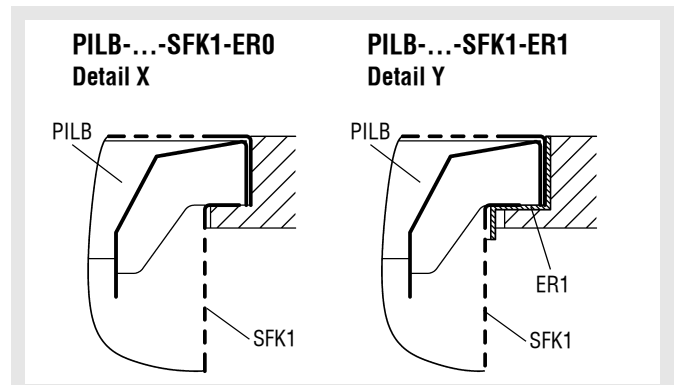
PILB-...-SFK1-ER1 (with installation frame)



Options

| | | Length | | | | |
|--------|-----|--------|------|------|--------|------|
| | | 0300 | 0400 | 0500 | 0600 | 1000 |
| Width | 150 | -- | -- | -- | -- | X |
| | 300 | X | -- | -- | -- | X |
| | 400 | -- | X | -- | -- | X |
| | 500 | -- | -- | X | -- | X |
| | 600 | -- | -- | -- | X | X |
| PILB-Q | | | | | PILB-E | |

x = available / -- = not available



Available sizes of dirt collection basket (-SFK1)

| B | B4 | B5 | L | L4 | L5 |
|-----|-----|-----|------|-----|-----|
| 150 | 105 | 93 | 0300 | 255 | 243 |
| 300 | 255 | 243 | 0400 | 355 | 343 |
| 400 | 355 | 343 | 0500 | 455 | 443 |
| 500 | 455 | 443 | 0600 | 555 | 543 |
| 600 | 555 | 543 | 1000 | 955 | 943 |

PILB-Q = square model

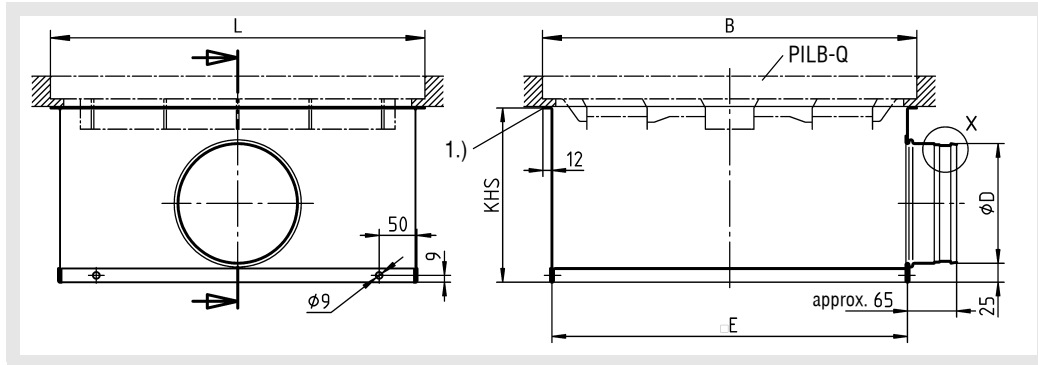
PILB-E = rectangular model

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Plenum box (-SK-Q-73-...)

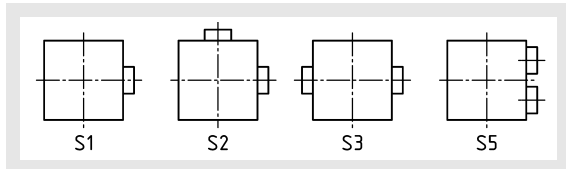
only possible for PILB-Q-... (square model)

SK-...-73-...



1.) leak proofing on site

Spigot position SK-...-73-...



Available sizes of SK-...-73-...

| B | L | NW | □ E | ∅D | KHS |
|-----|-----|-----|-----|-----|-----|
| 300 | 300 | 300 | 270 | 98 | 170 |
| 400 | 400 | 400 | 370 | 138 | 210 |
| 500 | 500 | 500 | 470 | 158 | 230 |
| 600 | 600 | 600 | 570 | 198 | 270 |

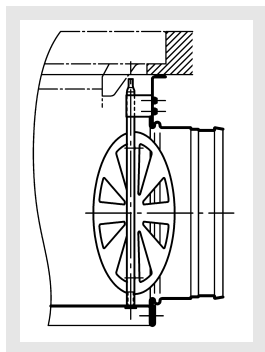
Minimum height [KHS] = spigot diameter ∅D + 72 mm, but at least 170 mm.

Special box width = ∅D + 30 mm, but at least ceiling opening B2 (see page 6).

Damper (-DK0 / -DK1), for SK-...-73-...

DK0 = without damper (standard)

DK1 = with damper

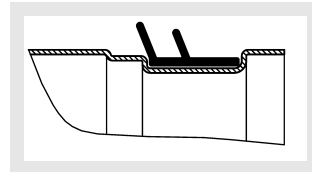


Rubber lip seal (-GD0 / -GD1), for SK-...-73-...

GD0 = without rubber lip seal (standard)

GD1 = with rubber lip seal

Detail X



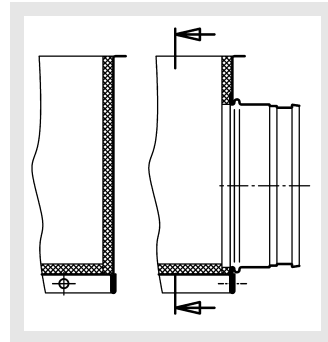
Insulation (-I0 / -Ii / -Ia), for SK-...-73-...

I0 = without insulation (standard)

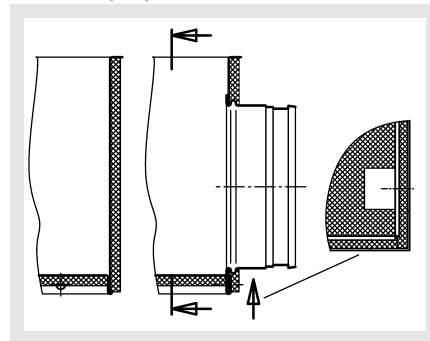
Ii = with internal insulation

Ia = with external insulation

internal (-Ii)



external (-Ia)

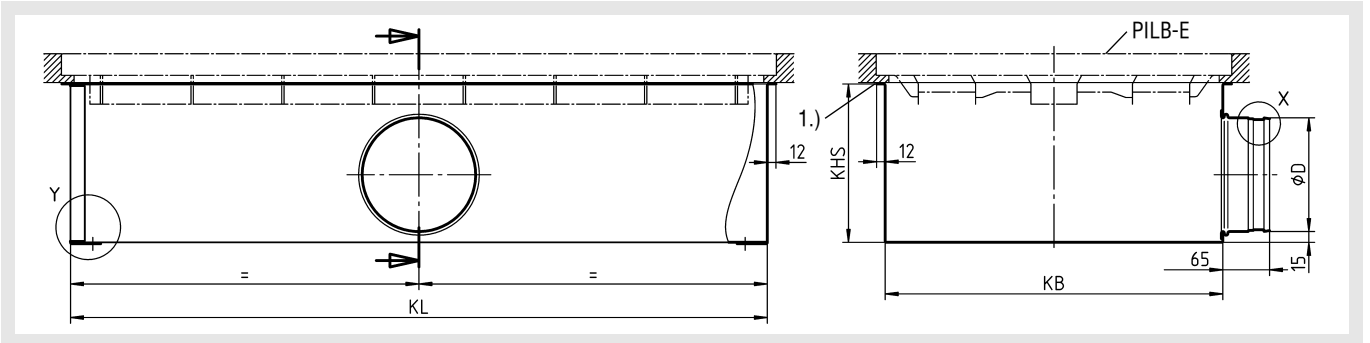


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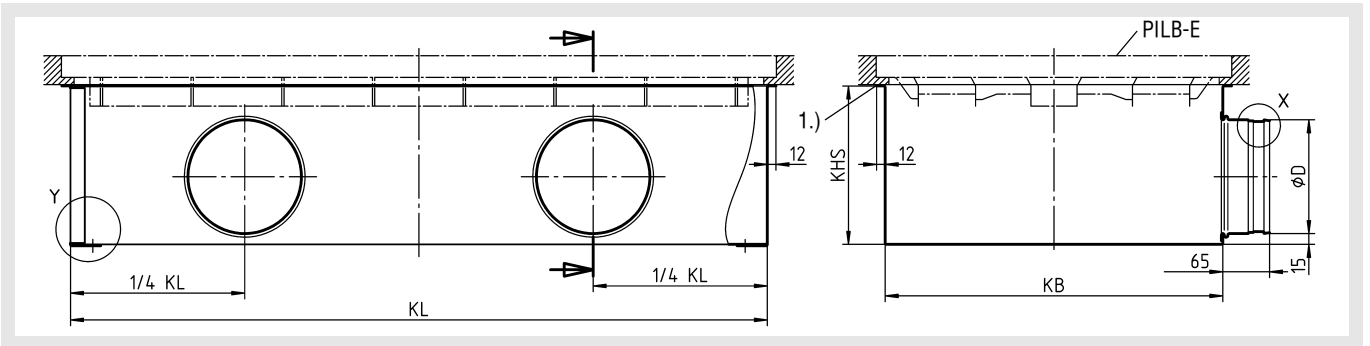
Plenum box (-AK-52...)

only possible for PILB-E... (rectangular model)

AK-52-...-S1 (with 1 lateral spigot) (only for width B = 150 / 300 / 400)

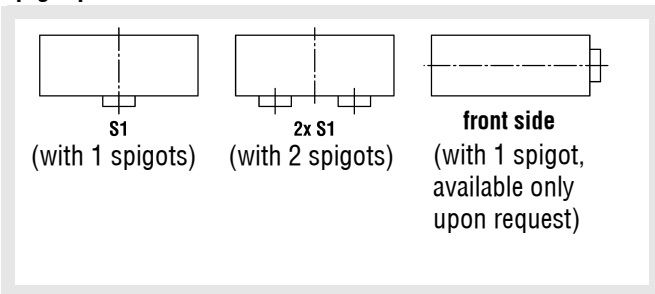


AK-52-...-S1 (with 2 lateral spigots) (only for width B = 500 / 600)



1.) leak proofing on site
See page 10 for detail X.

Spigot position on AK-52-...

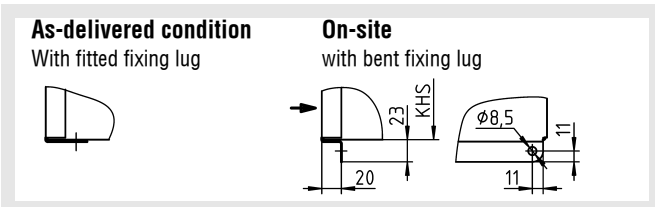


Available sizes AK-52-...

| B | L | KL | KBS | øD | KHS |
|-----|------|-----|-----|--------|-----|
| 150 | 1000 | 970 | 120 | 138 | 200 |
| 300 | | | 270 | 178 | 240 |
| 400 | | | 370 | 198 | 260 |
| 500 | | | 470 | 2x 158 | 220 |
| 600 | | | 570 | 2x 178 | 240 |

Minimum height [KHS] = spigot diameter øD + 62 mm, but at least 200 mm.

Detail Y

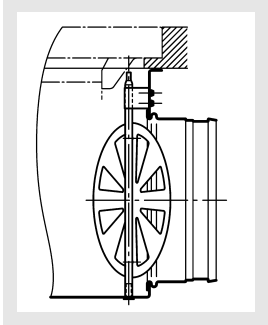


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Damper (-DK0 / -DK1), for AK-52-...

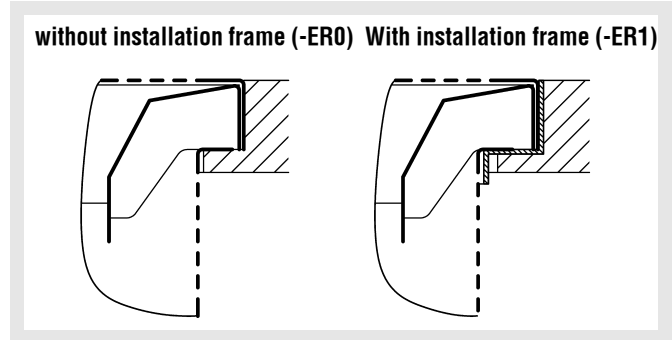
DK0 = without damper (standard)

DK1 = with damper



Mounting

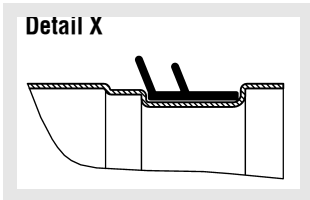
without fastening (-00)



Rubber lip seal (-GD0 / -GD1), for AK-52-...

GD0 = without rubber lip seal (standard)

GD1 = with rubber lip seal



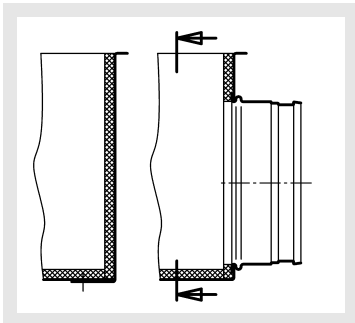
Insulation (-I0 / -Ii / -Ia), for AK-52-...

I0 = without insulation (standard)

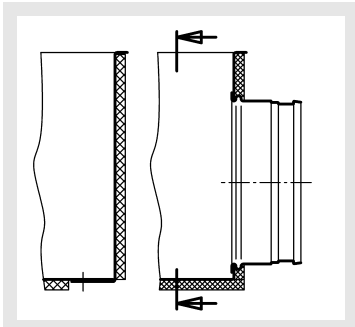
Ii = with internal insulation

Ia = with external insulation

internal (-Ii)



external (-Ia)



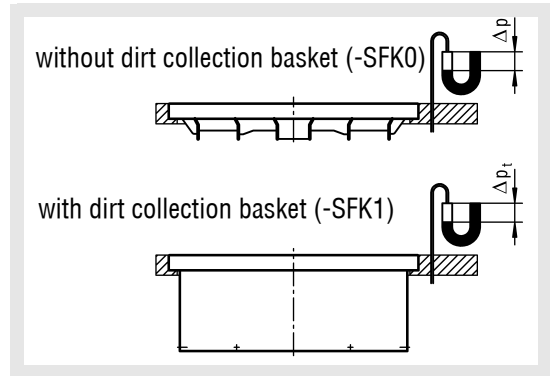
Floor displacement air diffuser PILB

Technical data

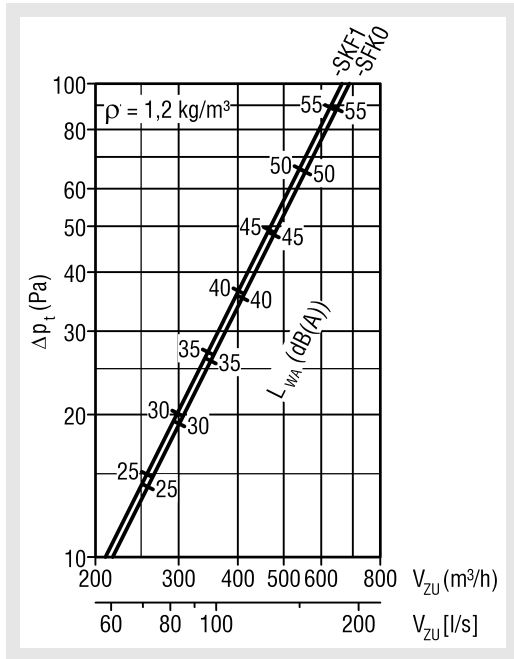
Pressure loss and noise level

in pressure floor

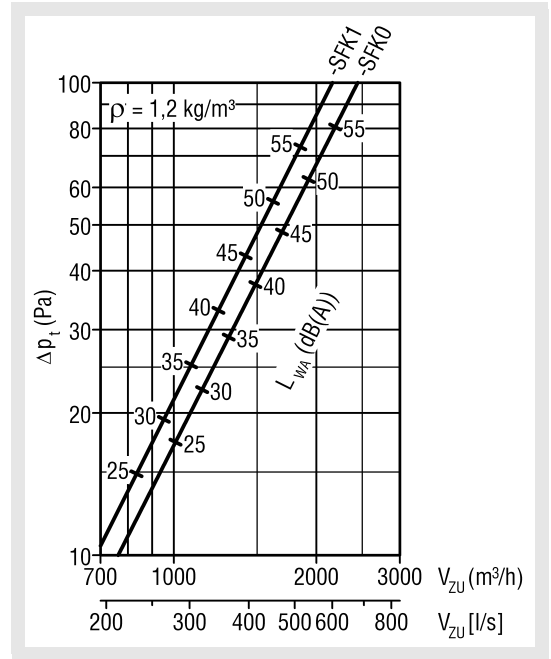
applies to the models -A, -B, -C, -D



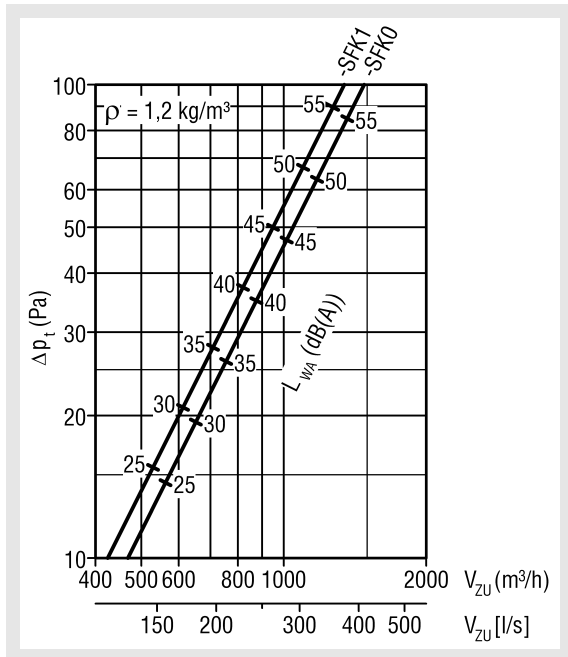
PILB-Q-...-0300-300



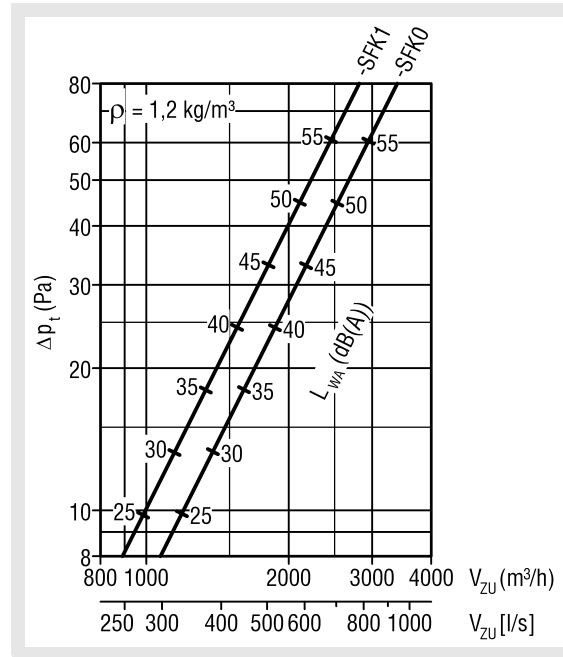
PILB-Q-...-0500-500



PILB-Q-...-0400-400

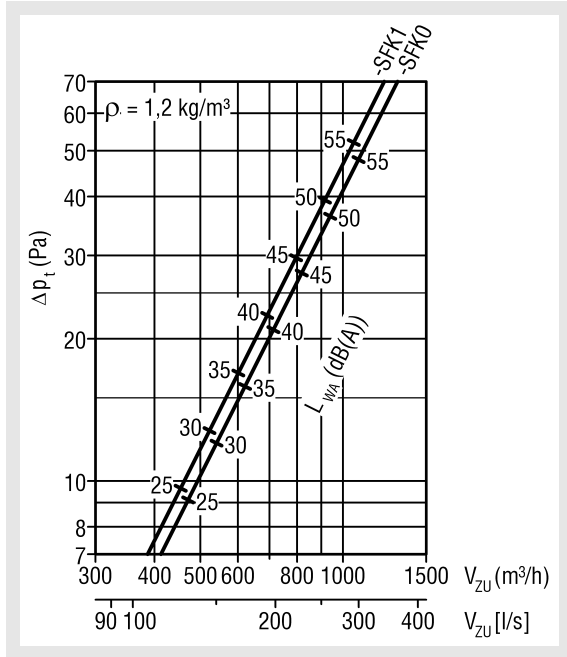


PILB-Q-...-0600-600

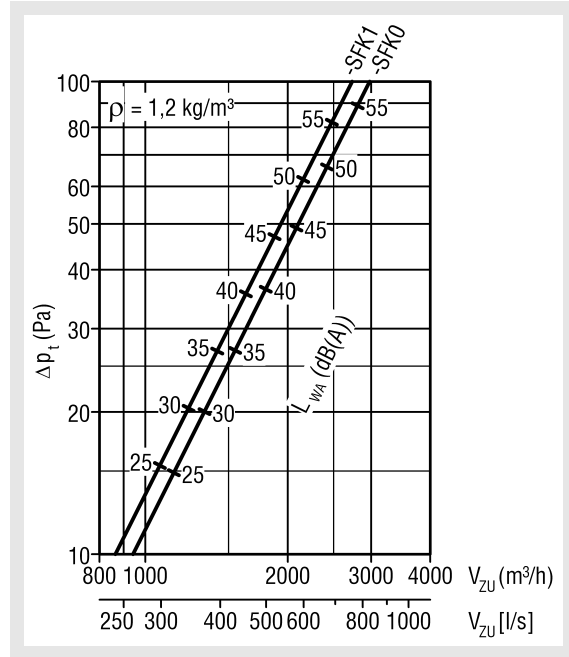


Floor displacement air diffuser PILB

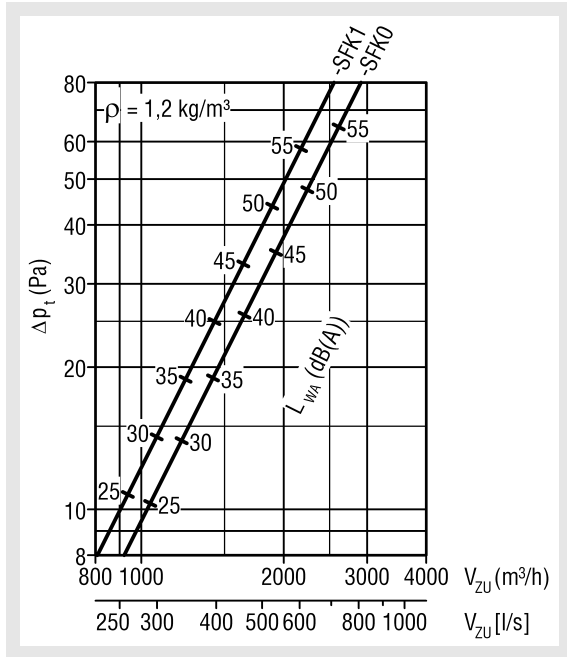
PILB-E-...-1000-150



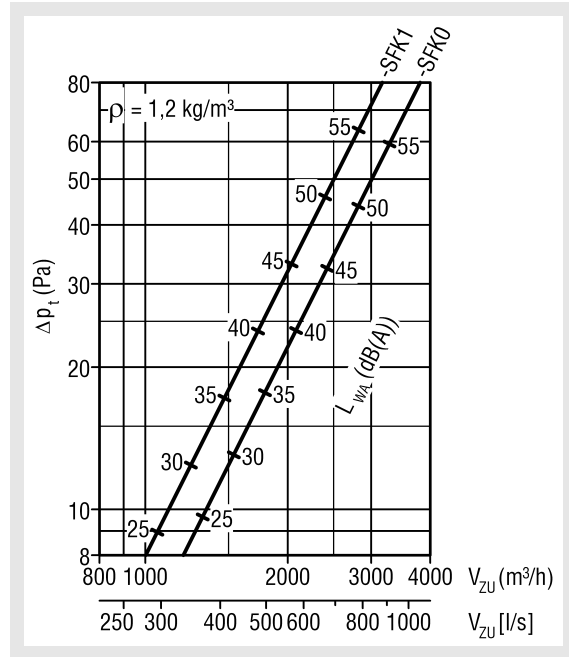
PILB-E-...-1000-400



PILB-E-...-1000-300

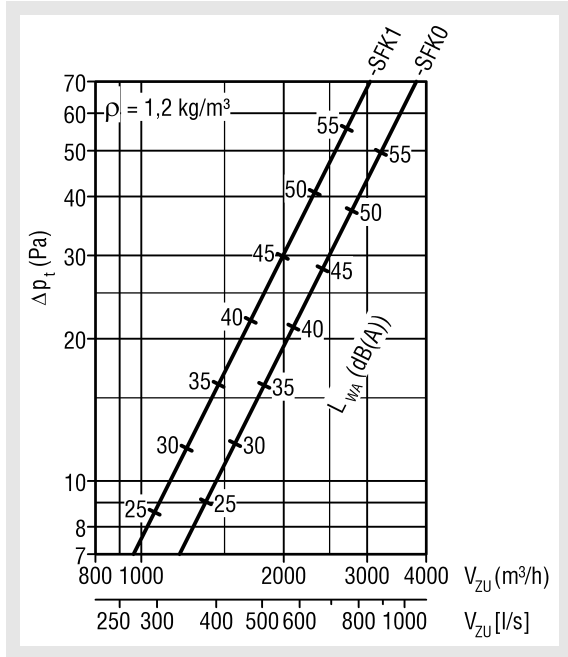


PILB-E-...-1000-500



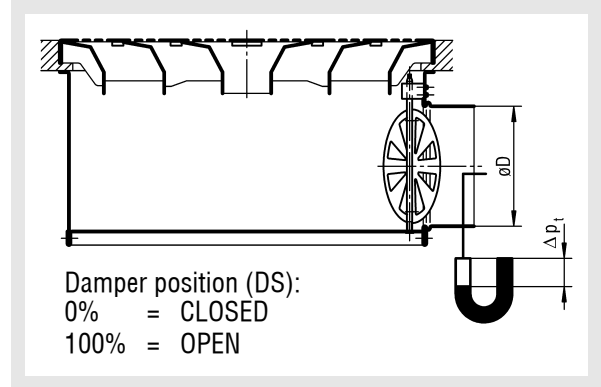
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PILB-E-...-1000-600

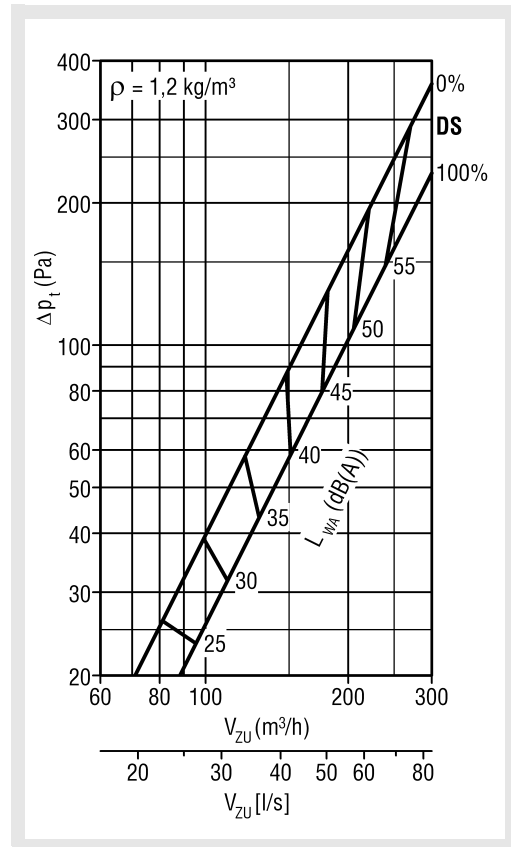


Pressure loss and noise level of PILB-Q-...-SK

with plenum box (-SK) and damper (-DK1)
applies to the models -A, -B, -C, -D

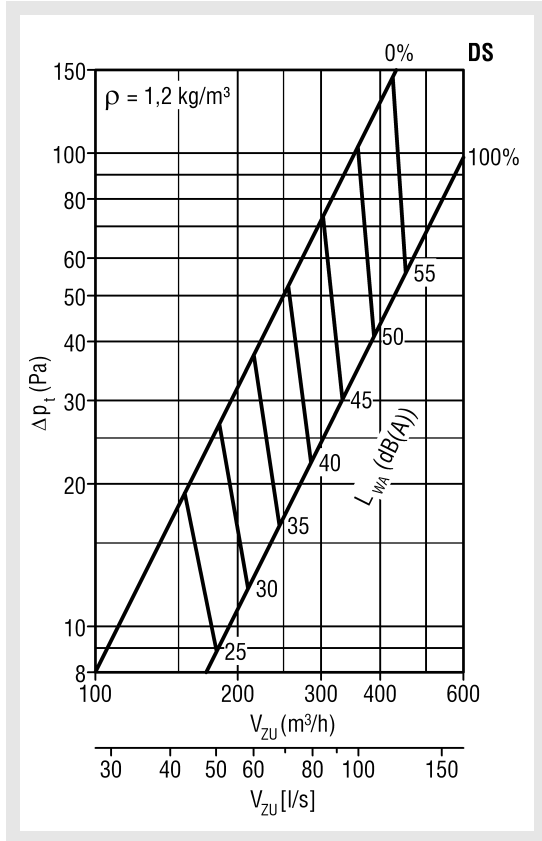


PILB-Q-...-0300-300-...-SK-...-DK1

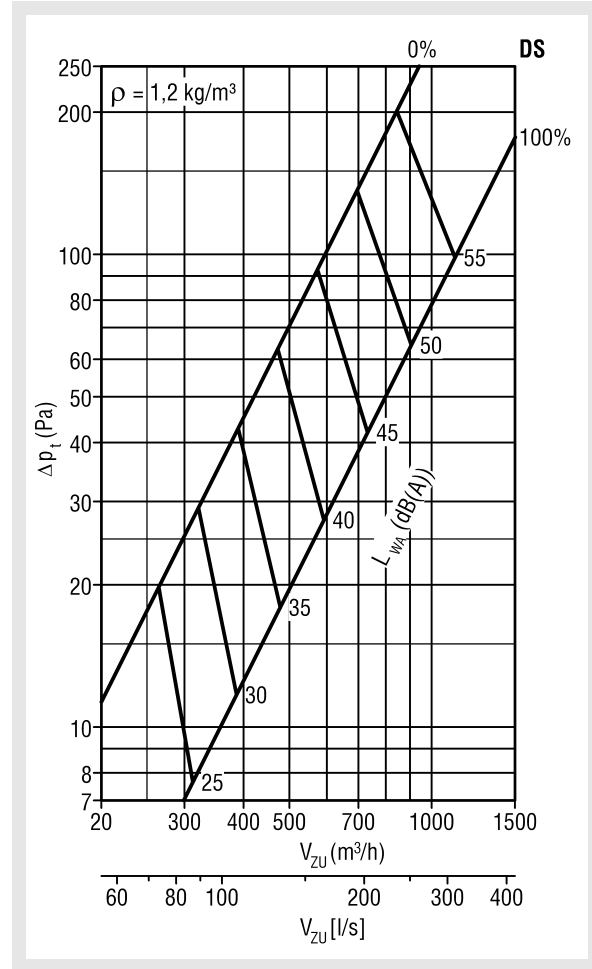


Floor displacement air diffuser PILB

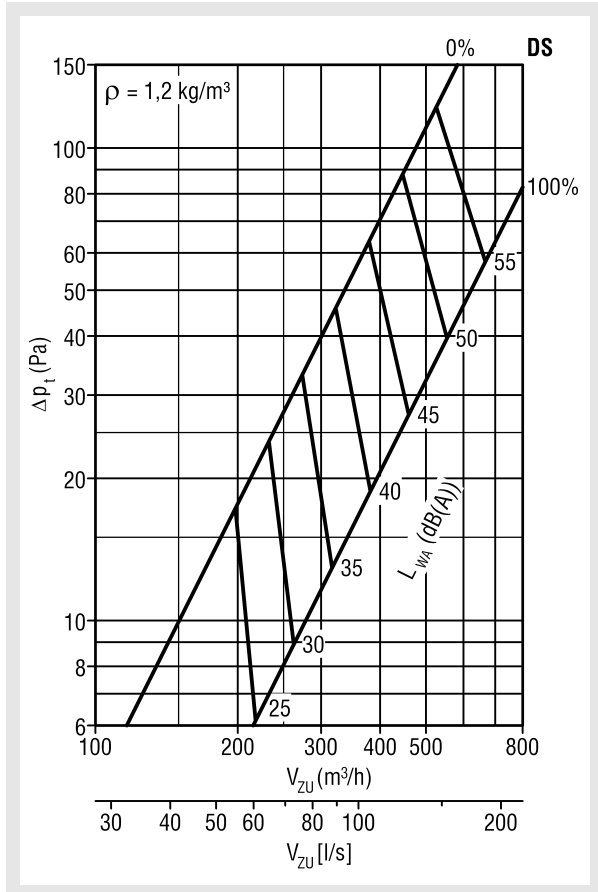
PILB-Q-...-0400-400-...-SK-...-DK1



PILB-Q-...-0600-600-...-SK-...-DK1



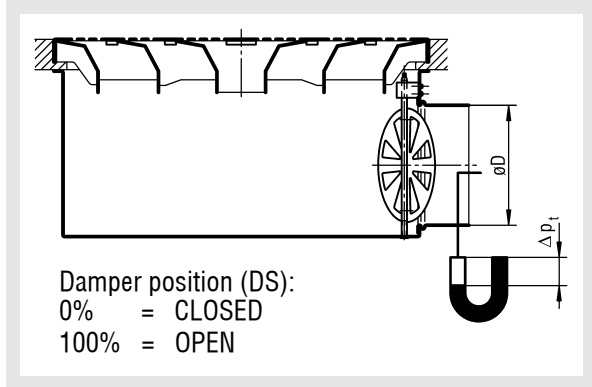
PILB-Q-...-0500-500-...-SK-...-DK1



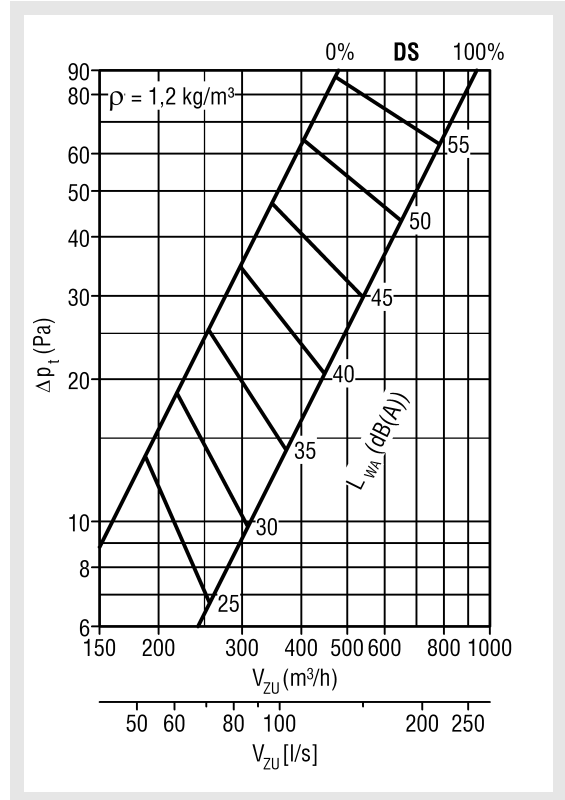
Floor displacement air diffuser PILB

Pressure loss and noise level of PILB-E-...-AK

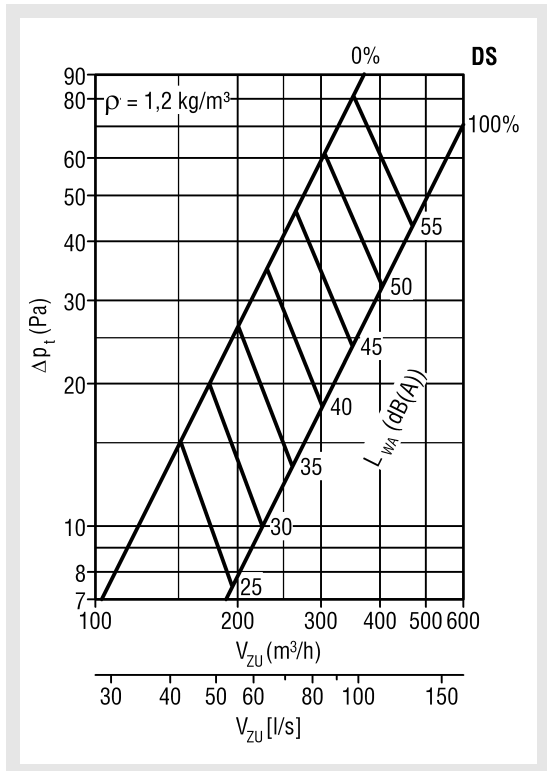
with plenum box (-AK) and damper (-DK1)
applies to the models -A, -B, -C, -D



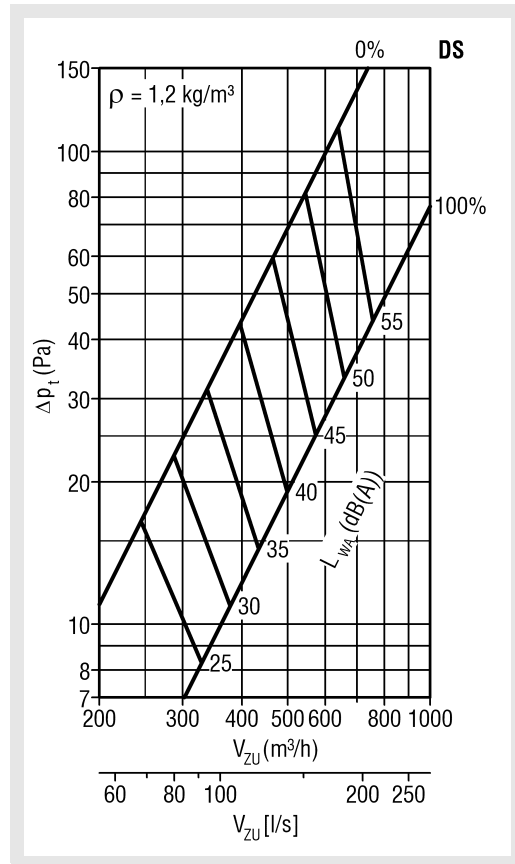
PILB-E-...-1000-300-...-AK-...-DK1



PILB-E-...-1000-150-...-AK-...-DK1

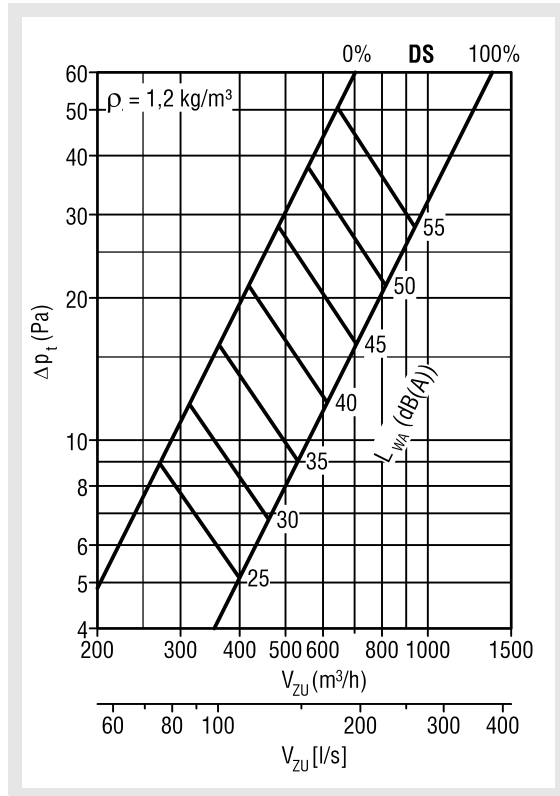


PILB-E-...-1000-400-...-AK-...-DK1

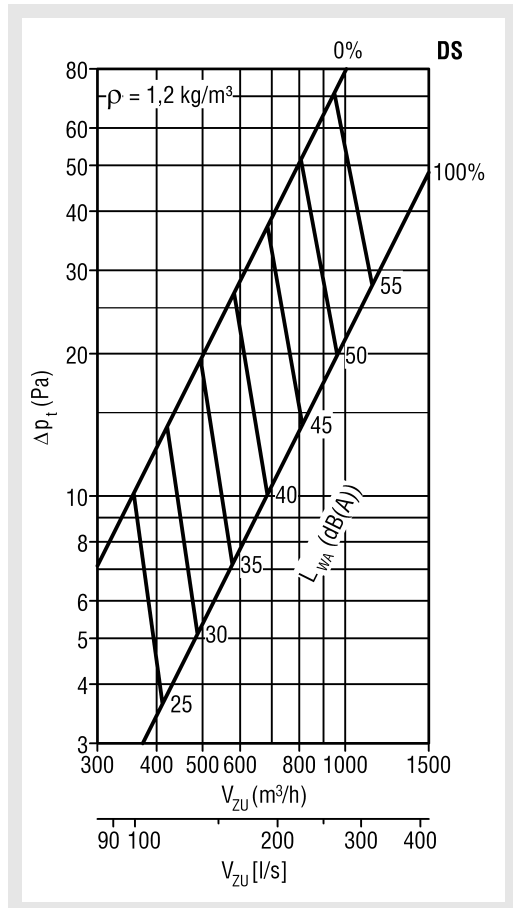


Floor displacement air diffuser PILB

PILB-E-...-1000-500-...-AK-...-DK1



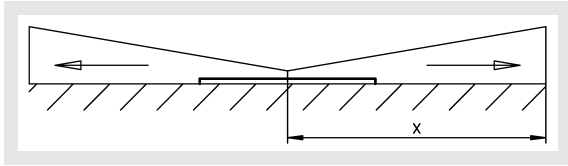
PILB-E-...-1000-600-...-AK-...-DK1



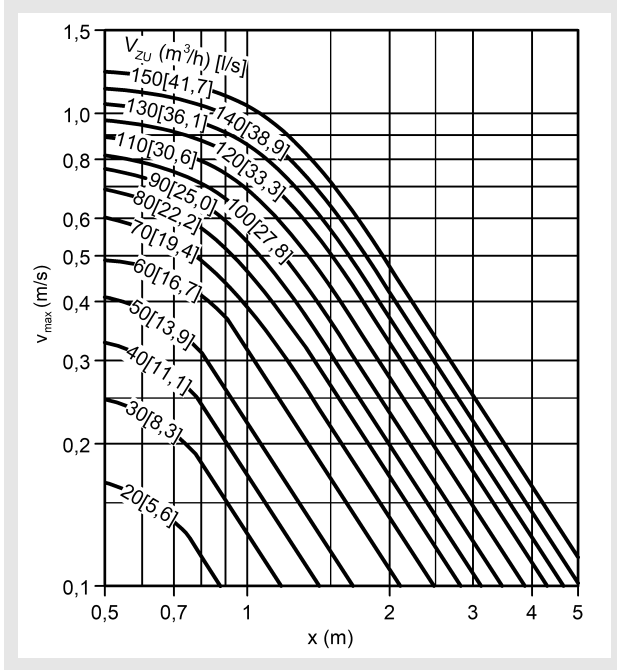
Floor displacement air diffuser PILB

Maximum end velocity of jet

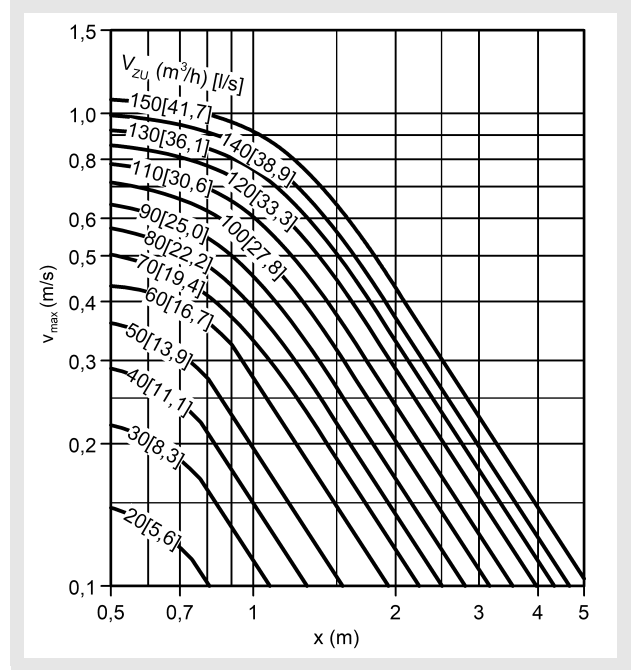
applies to the models A, B, C, D



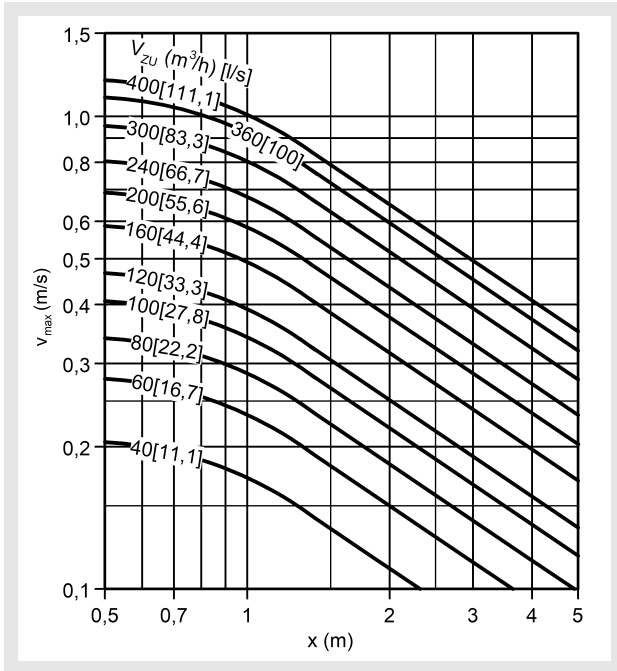
PILB-Q-1-...-0300-300, one-way throw



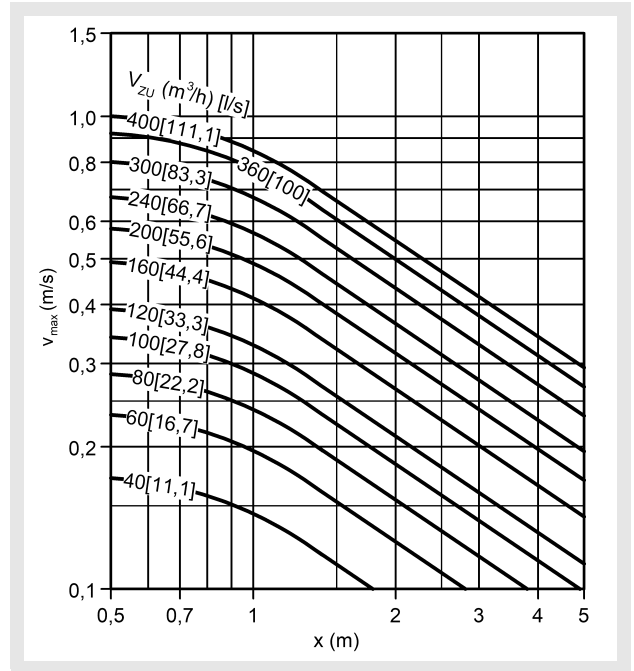
PILB-Q-2-...-0300-300, two-way throw



PILB-Q-1-...-0400-400, one-way throw

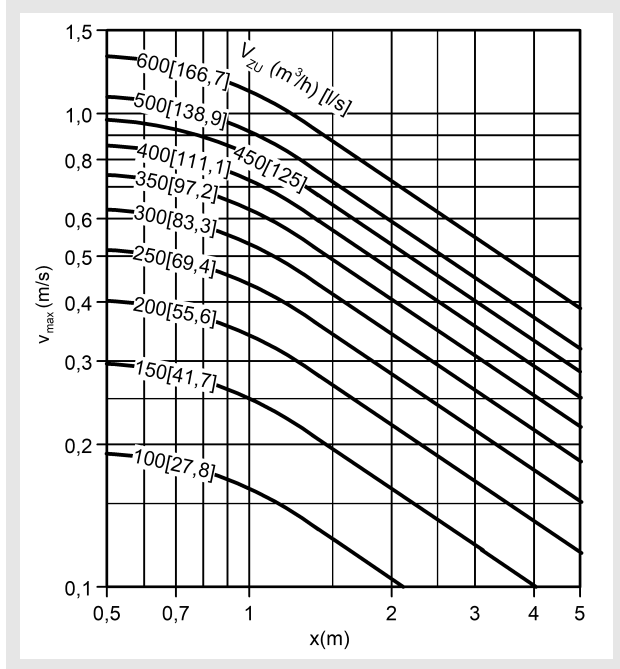


PILB-Q-2-...-0400-400, two-way throw

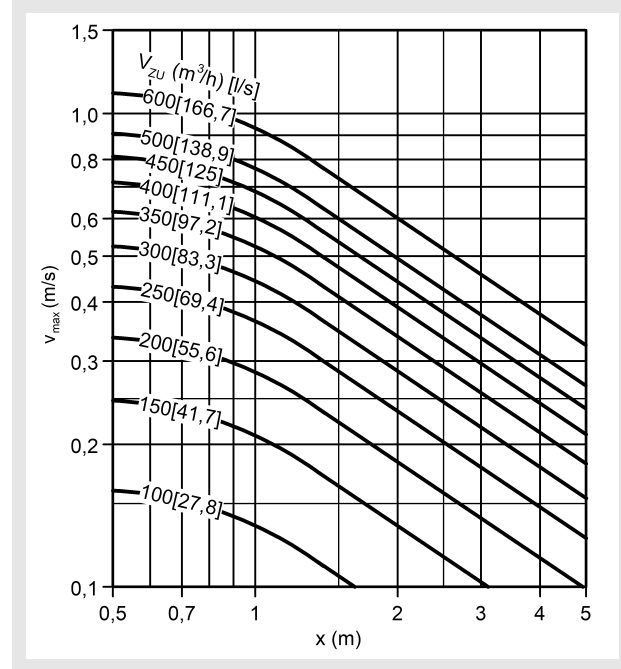


Floor displacement air diffuser PILB

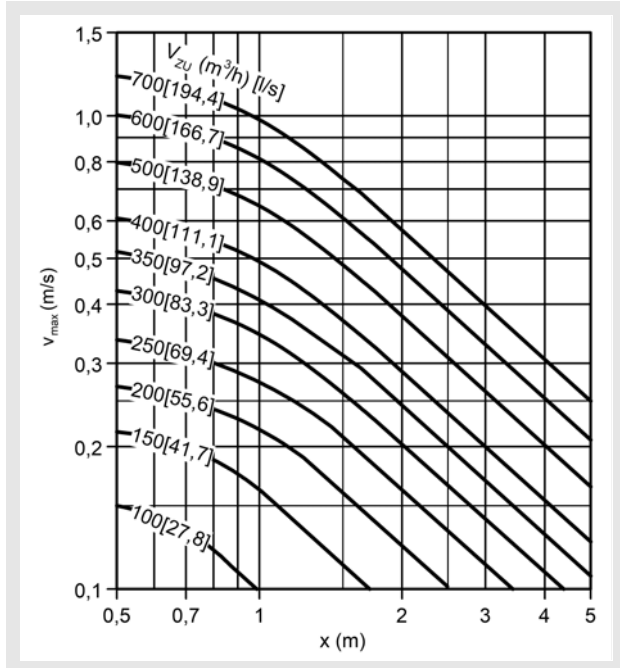
PILB-Q-1-...-0500-500, one-way throw



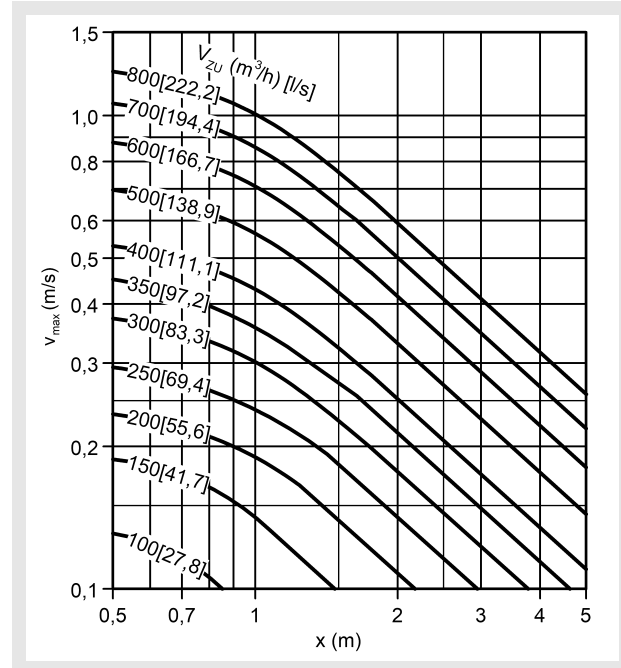
PILB-Q-2-...-0500-500, two-way throw



PILB-Q-1-...-0600-600, one-way throw

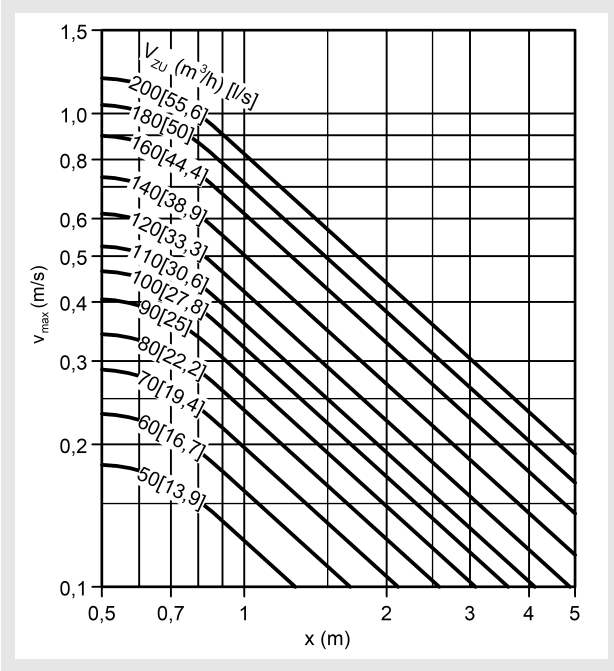


PILB-Q-2-...-0600-600, two-way throw

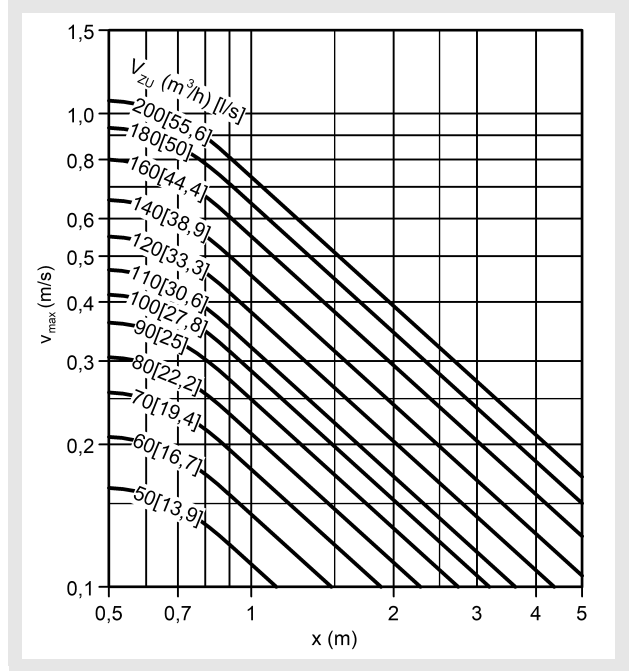


Floor displacement air diffuser PILB

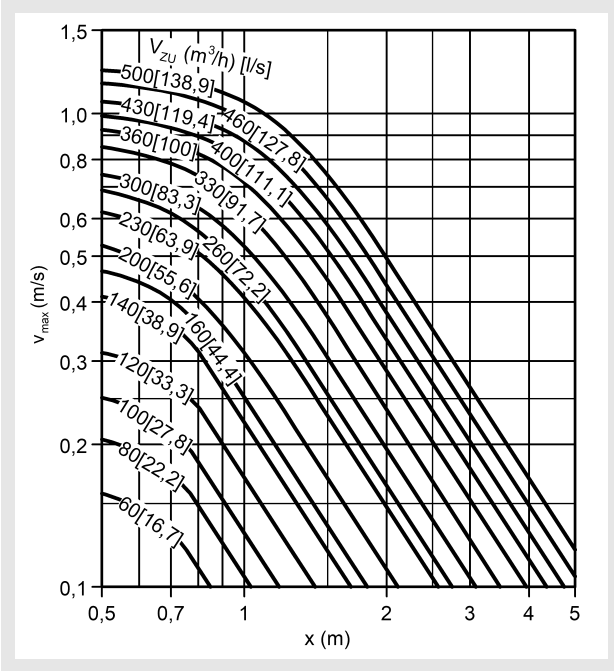
PILB-E-1-...-1000-150, one-way throw



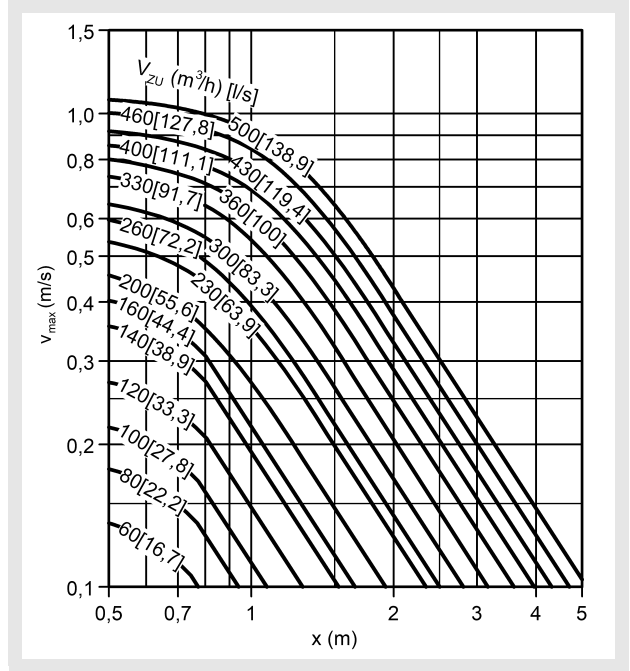
PILB-E-2-...-1000-150, two-way throw



PILB-E-1-...-1000-300, one-way throw

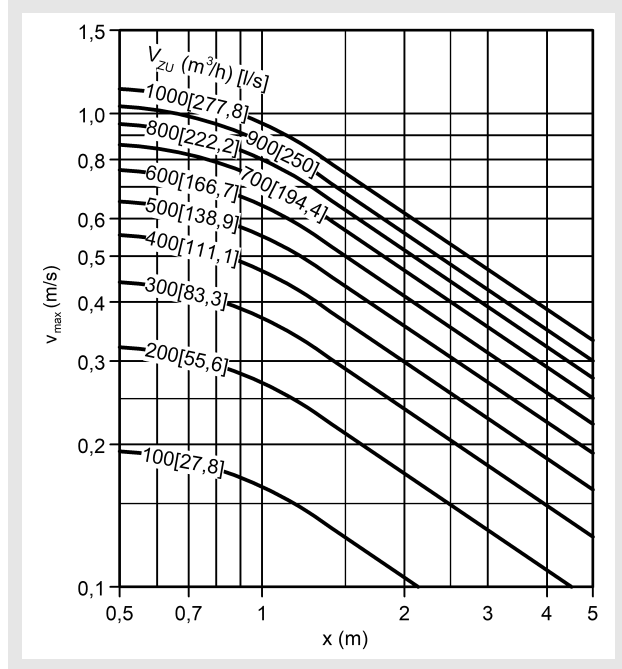


PILB-E-2-...-1000-300, two-way throw

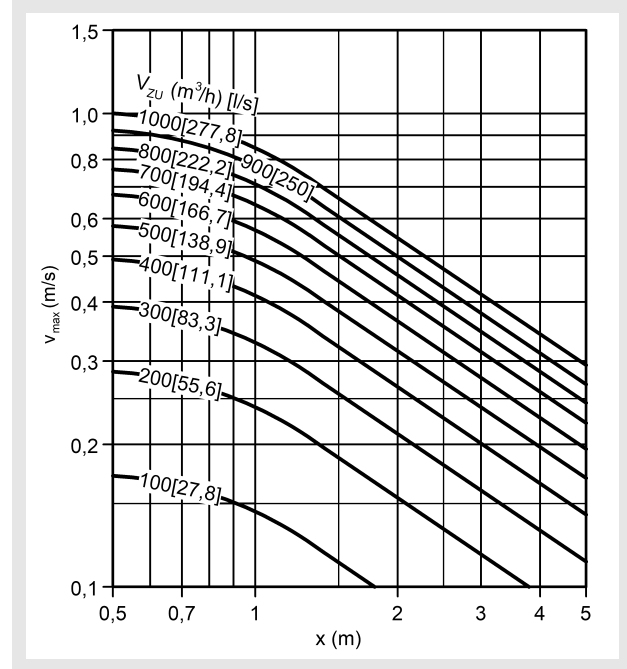


Floor displacement air diffuser PILB

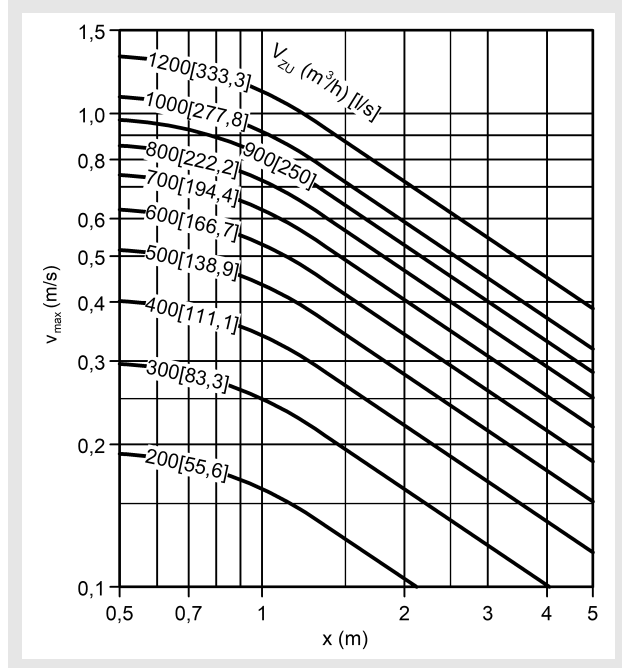
PILB-E-1-...-1000-400, one-way throw



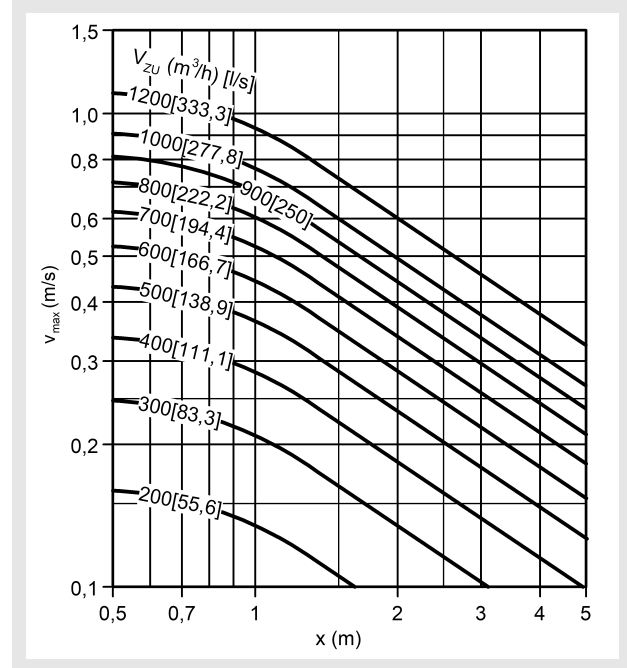
PILB-E-2-...-1000-400, two-way throw



PILB-E-1-...-1000-500, one-way throw

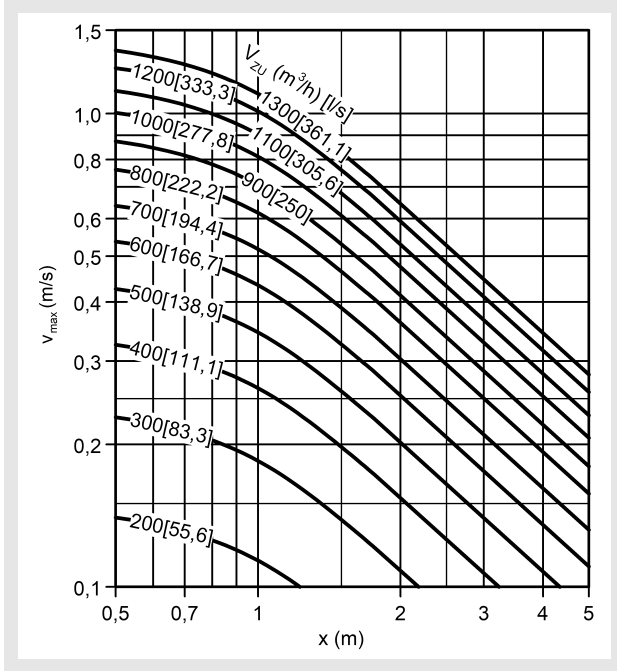


PILB-E-2-...-1000-500, two-way throw

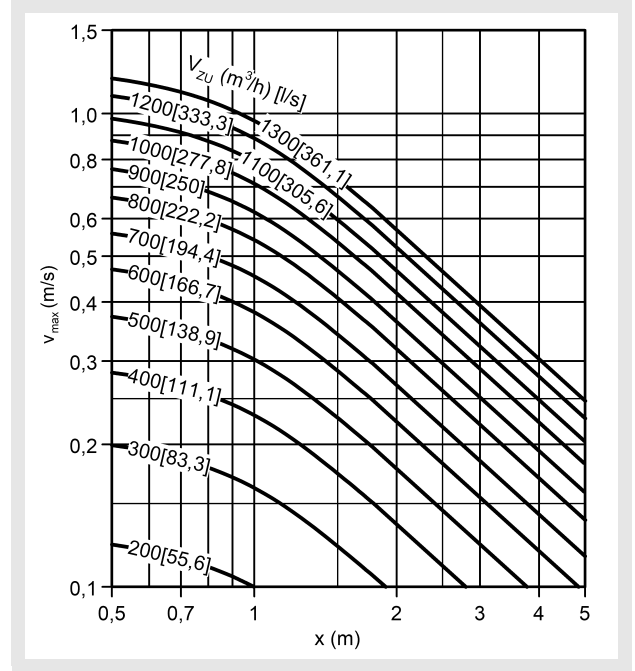


Floor displacement air diffuser PILB

PILB-E-1-...-1000-600, one-way throw



PILB-E-2-...-1000-600, two-way throw

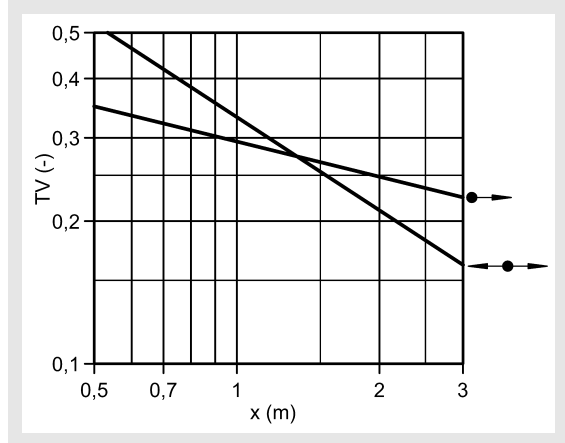


Floor displacement air diffuser PILB

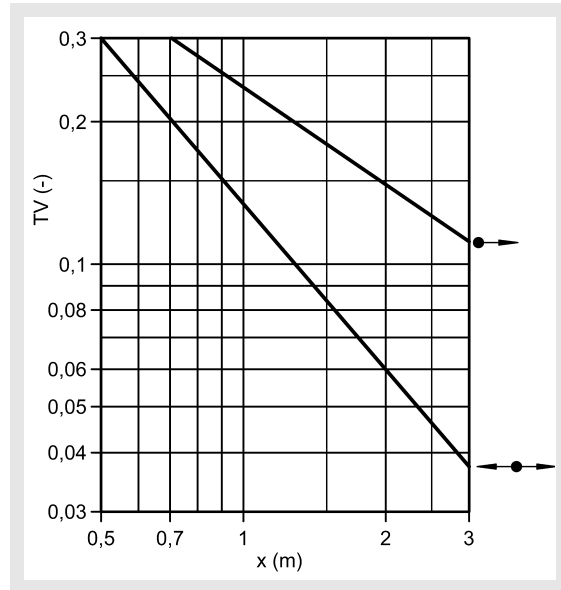
Temperature and induction ratios

Temperature ratio

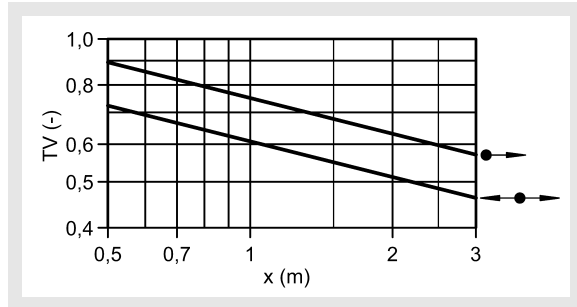
PILB-Q-...-0300-300



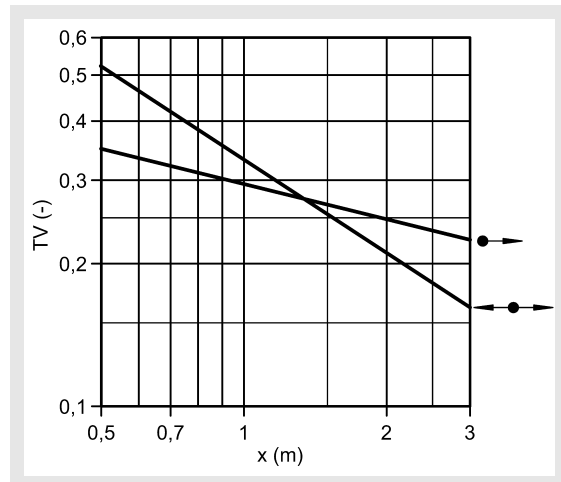
PILB-E-...-1000-150



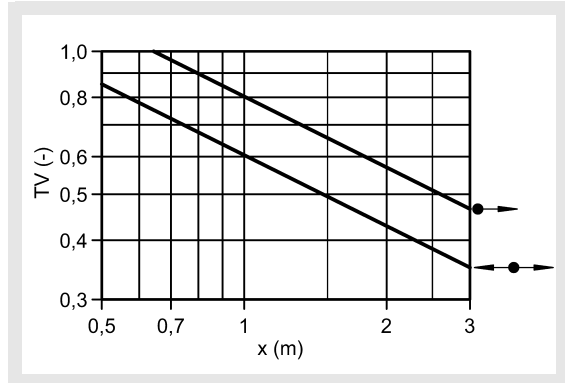
PILB-Q-...-0400-400



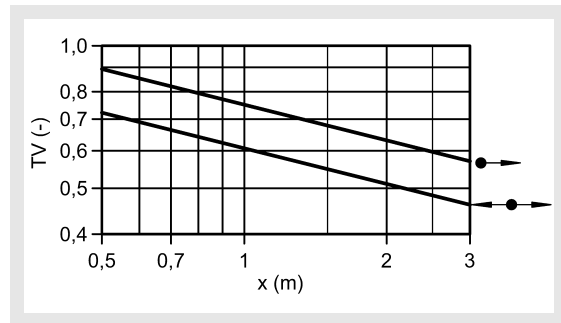
PILB-E-...-1000-300



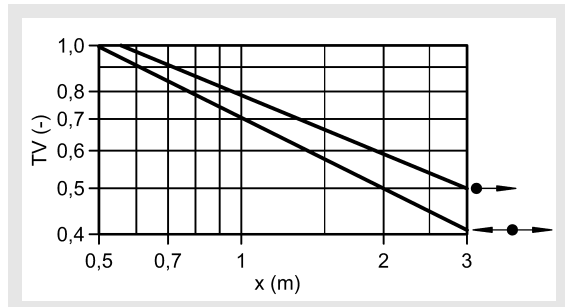
PILB-Q-...-0500-500



PILB-E-...-1000-400

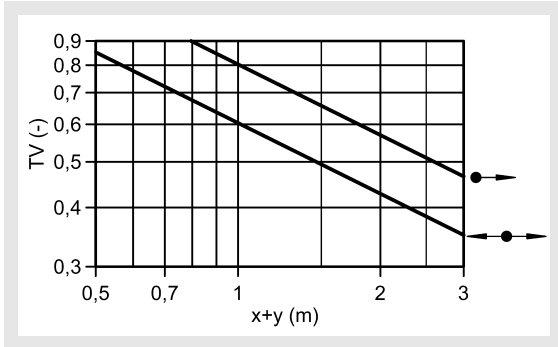


PILB-Q-...-0600-600

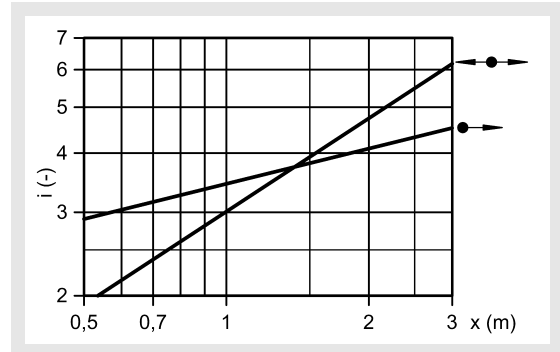


Floor displacement air diffuser PILB

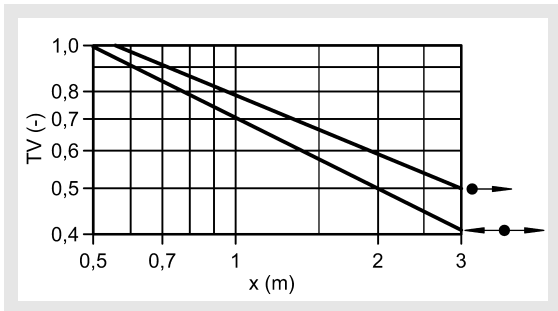
PILB-E-...-1000-500



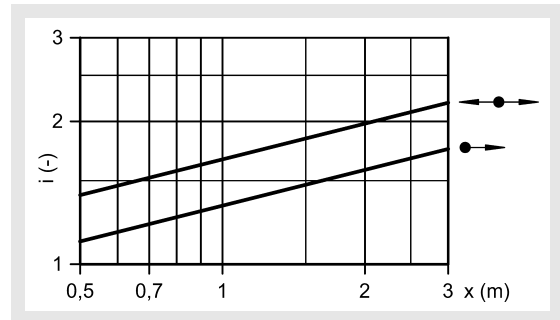
**Induction ratio
PILB-Q-...-0300-300**



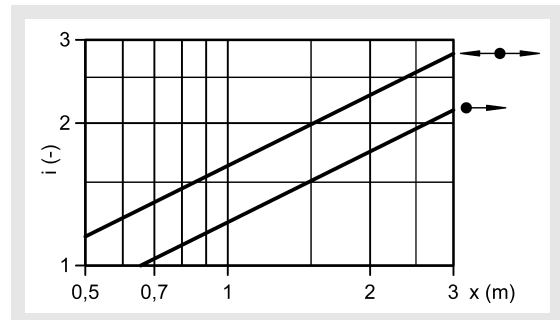
PILB-E-...-1000-600



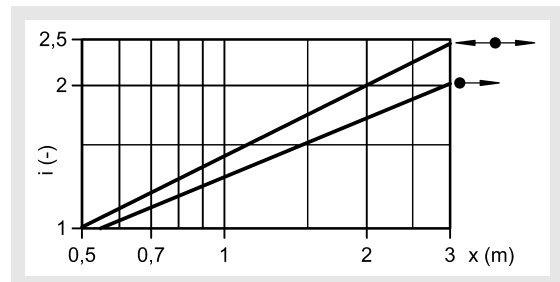
PILB-Q-...-0400-400



PILB-Q-...-0500-500

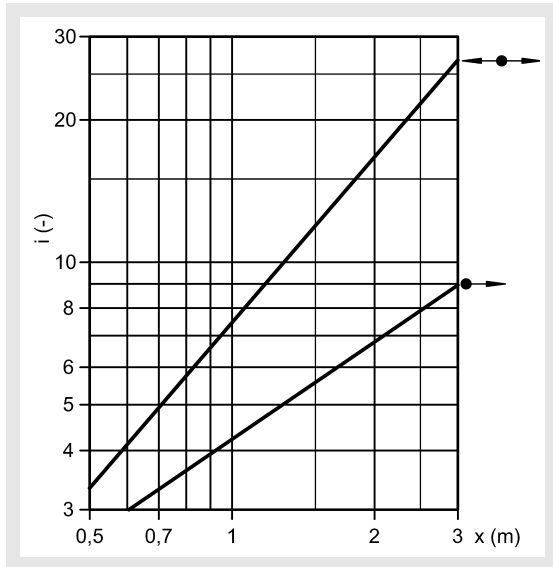


PILB-Q-...-0600-600

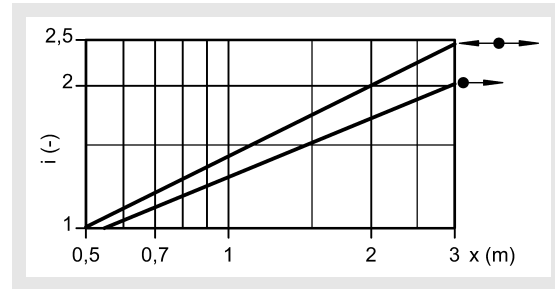


Floor displacement air diffuser PILB

PILB-E-...-1000-150



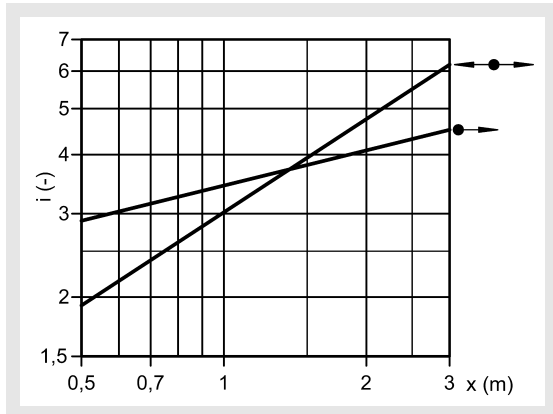
PILB-E-...-1000-600



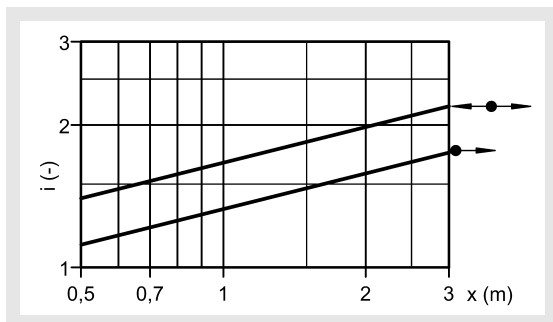
Legend

| | |
|---------------------------------|--|
| V_{ZU} (m ³ /h) | = Supply air volume |
| V_{ZU} [l/s] | = Supply air volume |
| Δp_t (Pa) | = Pressure loss |
| L_{WA} [dB(A)] | = A-weighted sound power level |
| ρ (kg/m ³) | = Density |
| f_m (Hz) | = Octave centre frequency |
| x (m) | = horizontal throw |
| v_{max} (m/s) | = Maximum end velocity of jet |
| TV (-) | = Temperature ratio ($TV = \Delta T_x / \Delta T_0$) |
| ΔT_0 (K) | = Temperature difference between supply air temperature and room temperature ($\Delta T_0 = t_{ZU} - t_R$) |
| ΔT_x (K) | = Temperature difference at point x |
| t_{ZU} (°C) | = Supply air temperature |
| V_x (m ³ /h) [l/s] | = total air jet volume at point x |
| t_R (°C) | = Room temperature |
| i (-) | = Induction ratio ($i = V_x / V_{ZU}$) |
| NW (mm) | = Nominal size |
| | = one-way throw |
| | = two-way throw |

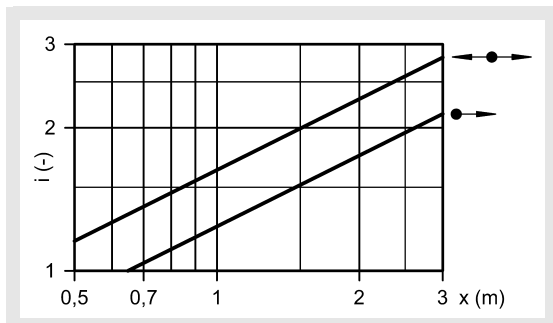
PILB-E-...-1000-300



PILB-E-...-1000-400



PILB-E-...-1000-500



Floor displacement air diffuser PILB

PILB order code

| 01 | 02 | 03 | 04 | 05 | 06 |
|----------------|--------|-----------|-------|--------|-------|
| Type | Design | Air throw | Model | Length | Width |
| Example | | | | | |
| PILB | -Q | -2 | -A | -1000 | -150 |

| 07 | 08 | 09 | 10 | 11 | 12 |
|----------------------|----------|-------|----------|------------------------|--------------------|
| Single / band design | Material | Paint | Mounting | Dirt collection basket | Installation frame |
| | | | | | |
| -N | -V2 | -0000 | -00 | -SFK0 | -ER0 |

All fields must be filled when ordering.

Sample

PILB-Q-2-A-1000-150-N-V2-0000-00-SFK0-ER0

Floor displacement air diffuser PILB, rectangular design | square model | Two-way throw | Faceplate with perforation d=5 mm | Length 1000 mm | Width 150 mm | Single design | Stainless steel (V2A) | Without paint | Without fastening | Without dirt collection basket | Without installation frame

Order details

01 - Type

PILB = Floor displacement air diffuser, type PILB, square model

02 - Design

Q = square model
E = rectangular model

03 - Air throw

1 = one-way throw
2 = two-way throw

04 - Model

A = faceplate with perforation d=5 mm (standard)
B = faceplate with perforation 8x8 mm
C = faceplate with perforation 12x5 mm
D = faceplate with perforation 18x6 mm

05 - Length

0300 = Length 300 mm (only for PILB-Q-...)
(can only be combined with a 300 mm width)
0400 = Length 400 mm (only for PILB-Q-...)
(can only be combined with a 400 mm width)
0500 = Length 500 mm (only for PILB-Q-...)
(can only be combined with a 500 mm width)
0600 = Length 600 mm (only for PILB-Q-...)
(can only be combined with a 600 mm width)
1000 = Length 1000 mm (only for PILB-E-...)
(can be combined with any width)

06 - Width

150 = Width 150 mm (only for PILB-E-...)
300 = Width 300 mm
400 = Width 400 mm
500 = Width 500 mm
600 = Width 600 mm

07 - Single / band design

N = single design

08 - Material

V2 = stainless steel (V2A)

09 - Paint

0000 = Without paint

10 - Mounting

00 = without fastening

11 - Dirt collection basket

SFK0 = without dirt collection basket (standard)
SFK1 = with dirt collection basket (only possible without plenum box)

12 - Installation frame

ER0 = Without installation frame (standard)
ER1 = With installation frame

Floor displacement air diffuser PILB

Order code SK

| 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 |
|----------------|-------|--------------|-------------|--------------|----------|----------|--------|
| Type | Model | Air diffuser | Type of air | Nominal size | Mounting | Material | Damper |
| Example | | | | | | | |
| SK | -Q | -73 | -Z | -300 | -00 | -SV | -DK1 |

| 09 | 10 | 11 | 12 | 13 | 12 | 13 |
|-----------------|-----------------------|-------------|------------|----------------------|-----------------|-----------------|
| Rubber lip seal | Volumetric flow meter | ROB version | Insulation | Height of plenum box | Spigot diameter | Spigot position |
| | | | | | | |
| -GD1 | -VME0 | -ROB0 | -I0 | -KHS | -SDS | -S1 |

All fields must be filled when ordering.

Sample

SK-Q-73-Z-300-00-SV-DK1-GD1-VME0-ROB0-I0-KHS-SDS-S1

Plenum box | Square design | For floor displacement air diffuser type PILB-Q-... | Supply air | NW 300 | without fastening | Made of galvanised sheet steel | With damper | With rubber lip seal | Without volumetric flow meter | Without ROB version | Without insulation | Standard height of plenum box | Standard spigot diameter | Lateral spigot on the plenum box

Order details

01 - Type

SK = plenum box

02 - Model

Q = square model

03 – Air diffuser (must be ordered separately)

73 = for floor displacement air diffuser type PILB-Q-...

04 - Type of air

Z = Supply air

05 – Nominal size

300 = NW 300 (for diffuser LxB = 0300x300)

400 = NW 400 (for diffuser LxB = 0400x400)

500 = NW 500 (for diffuser LxB = 0500x500)

600 = NW 600 (for diffuser LxB = 0600x600)

06 - Mounting

00 = without fastening (standard)

07 - Material

SV = Galvanised sheet steel (standard)

08 - Damper

DK0 = without damper (standard)

DK1 = with damper

09 - Rubber lip seal

GD0 = without rubber lip seal (standard)

GD1 = with rubber lip seal

10 – Volumetric flow meter

VME0 = without volumetric flow meter (standard)

11 - ROB version

ROB0 = Without ROB version (standard)

12 - Insulation

I0 = without insulation (standard)

Ii = with internal insulation

Ia = with external insulation

13 - Height of plenum box

KHS = Height of plenum box standard

xxx = Height of plenum box in mm, freely selectable (minimum height [KHS] = spigot diameter $\varnothing D + 72$ mm, but at least 170 mm, always with 3 digits)

14 - Spigot diameter

SDS = Standard spigot diameter

xxx = Spigot diameter in mm, freely selectable (always with 3 digits)

Floor displacement air diffuser PILB

15 - Spigot position

- S1 = 1 lateral spigot on the box (standard)
- S2 = 2 spigots offset by 90°
- S3 = 2 spigots offset by 180°
- S5 = 2 spigots arranged next to each other

Floor displacement air diffuser PILB

Order code AK

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|----------------|--------------|--------|-------|----------------------|----------|----------|
| Type | Air diffuser | Length | Width | Single / band design | Mounting | Material |
| Example | | | | | | |
| AK | -52 | -01000 | -150 | -N | -00 | -SV |

| 08 | 09 | 10 | 11 | 12 | 13 |
|--------|-----------------|------------|----------------------|-----------------|-----------------|
| Damper | Rubber lip seal | Insulation | Height of plenum box | Spigot diameter | Spigot position |
| | | | | | |
| -DK1 | -GD1 | -I0 | -KHS | -SDS | -S1 |

All fields must be filled when ordering.

Sample

AK-52-01000-150-N-00-SV-DK1-GD1-I0-KHS-SDS-S1

Plenum box | For floor displacement air diffuser type PILB-E... | Length 1000 mm | Width 150 mm | Single design | Without fastening | Galvanised sheet steel | With damper | With rubber lip seal | Without insulation | Standard height of plenum box | Standard spigot diameter | Lateral spigot on the plenum box

Order details

01 - Type

AK = plenum box

02 - Air diffuser (must be ordered separately)

52 = for floor displacement air diffuser type PILB-E-...

03 - Length

1000 = length 1000 mm (can be combined with any width)

04 - Width

150 = Width 150 mm
 300 = Width 300 mm
 400 = Width 400 mm
 500 = Width 500 mm
 600 = Width 600 mm

05 - Single / band design

N = Single design (standard)

06 - Mounting

00 = without fastening

07 - Material

SV = Galvanised sheet steel (standard)

08 - Damper

DK0 = without damper (standard)
 DK1 = with damper

09 - Rubber lip seal

GD0 = without rubber lip seal (standard)
 GD1 = with rubber lip seal

10 - Insulation

I0 = without insulation (standard)
 Ii = with internal insulation
 Ia = with external insulation

11 - Height of plenum box

KHS = Height of plenum box standard
 xxx = Height of plenum box in mm, freely selectable (minimum height [KHS] = spigot diameter \varnothing D + 62 mm, but at least 200 mm, always with 3 digits)

12 - Spigot diameter

SDS = Standard spigot diameter
 xxx = Spigot diameter in mm, freely selectable (always with 3 digits)

13 - Spigot position

S1 = Lateral spigot on the box (standard)

Floor displacement air diffuser PILB

Specification texts

Floor displacement air diffuser in rectangular design, for installation in double floors, consisting of a rectangular faceplate with perforation and back-fitted support frame made of sheet steel painted to RAL 9005 (black).

Product: SCHAKO type **PILB-...**

- Design:
 - square model (-Q)
 - rectangular design (-E)
 - Air throw:
 - one-way throw (-1)
 - two-way throw (-2)
 - Model:
 - faceplate with perforation d=5 mm (-A) (standard)
 - faceplate with perforation 8x8 mm (-B)
 - faceplate with perforation 12x5 mm (-C)
 - faceplate with perforation 18x6 mm (-D)
 - Length:
 - Length 300 mm (-0300) (only for PILB-Q-...) (can only be combined with a 300 mm width)
 - Length 400 mm (-0400) (only for PILB-Q-...) (can only be combined with a 400 mm width)
 - Length 500 mm (-0500) (only for PILB-Q-...) (can only be combined with a 500 mm width)
 - Length 600 mm (-0600) (only for PILB-Q-...) (can only be combined with a 600 mm width)
 - Length 1000 mm (-1000) (only for PILB-E-...) (can be combined with any width)
 - Width:
 - 150 mm (-150) (only for PILB-E-...)
 - 300 mm (-300)
 - 400 mm (-400)
 - 500 mm (-500)
 - 600 mm (-600)
 - Single / band design:
 - Single design (-N)
 - Material:
 - Stainless steel (V2A) (-V2)
 - Paint:
 - Without paint (-0000)
 - Mounting:
 - without fastening (-00) (standard)
- Accessories:**
- Dirt collection basket (-SFK0 / -SFK1)
- without dirt collection basket (-SFK0) (standard).
 - with dirt collection basket (-SFK1), made of galvanised sheet steel (not for use with plenum box).
- Installation frame (-ER0 / -ER1), without flange
- without installation frame (-ER0) (standard).
 - with installation frame (-ER1), made of stainless steel 1.4301 (V2A) in the colour sand silver.
- plenum box (-SK-...-73) (only for PILB-Q-...)
- square model, for supply air (-Z) (not for use with dirt collection basket).
 - Nominal size:
 - NW 300 (-300) (for diffuser LxB = 0300x300)
 - NW 400 (-400) (for diffuser LxB = 0400x400)
 - NW 500 (-500) (for diffuser LxB = 0500x500)
 - NW 600 (-600) (for diffuser LxB = 0600x600)
 - Mounting:
 - without fastening (-00) (standard)
 - Material:
 - made of galvanised sheet steel (-SV) (standard)
 - Damper
 - Without damper (-DK0) (standard)
 - with damper (-DK1), made of galvanised sheet steel, damper fastening made of plastic material, adjustable, in the plenum box housing, for simple air volume regulation.
 - Rubber lip seal:
 - without rubber lip seal (-GD0) (standard)
 - with rubber lip seal (-GD1), made of special rubber, at the connection spigot.
 - Volumetric flow meter:
 - Without volumetric flow meter (-VME0) (standard)
 - ROB version:
 - without ROB version (-ROB0) (standard)
 - Insulation:
 - without insulation (-I0) (standard)
 - with internal insulation (-Ii), thermal insulation inside the plenum box.
 - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
 - Height of plenum box:
 - standard height of plenum box (-KHS)
 - Height of plenum box in mm, freely selectable (-xxx) (minimum height [KHS] = spigot diameter \varnothing D + 72 mm, but at least 170 mm, always with 3 digits)

Floor displacement air diffuser PILB

- Spigot diameter:
 - Standard spigot diameter (-SDS)
 - Spigot diameter in mm, freely selectable (-xxx, always with 3 digits).
- Spigot position:
 - 1 lateral spigot on the plenum box (-S1) (standard)
 - 2 spigots offset by 90° (-S2)
 - 2 spigots offset by 180° (-S3)
 - 2 spigots arranged next to each other (-S5)

plenum box (-AK-...-52) (only for PILB-E-...)

- rectangular model, for supply air (-Z), in single design (-N), installation without fastening (-00) (not for use with dirt collection basket).
 - Length:
 - Length 1000 mm (-1000)
(can be combined with any width)
 - Width:
 - Width: 150 mm (-150) / 300 mm (-300) / 400 mm (-400) / 500 mm (-500) / 600 mm (-600)
 - Material:
 - made of galvanised sheet steel (-SV) (standard)
 - Damper
 - Without damper (-DK0) (standard)
 - with damper (-DK1), made of galvanised sheet steel, damper fastening made of plastic material, adjustable, in the plenum box housing, for simple air volume regulation.
 - Rubber lip seal:
 - without rubber lip seal (-GD0) (standard)
 - with rubber lip seal (-GD1), made of special rubber, at the connection spigot.
 - Insulation:
 - without insulation (-I0) (standard)
 - with internal insulation (-Ii), thermal insulation inside the plenum box.
 - with external insulation (-Ia), thermal insulation at the outside of the plenum box.
 - Height of plenum box:
 - standard height of plenum box (-KHS)
 - Height of plenum box in mm, freely selectable (-xxx) (minimum height [KHS] = spigot diameter $\varnothing D$ +62 mm, but at least 200 mm, always with 3 digits)
 - Spigot diameter:
 - Standard spigot diameter (-SDS)
 - Spigot diameter in mm, freely selectable (-xxx, always with 3 digits).
 - Spigot position:
 - 1 lateral spigot on the plenum box (-S1) (standard)
 - 1 spigot front side (available only upon request)