



# **NORD**diffuser

## Diffusers

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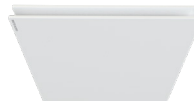
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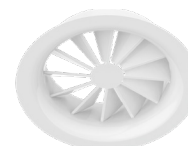
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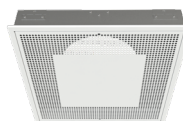
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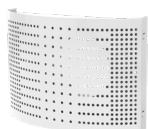
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## DSS Supply air valve

DSS is a supply air valve for offices and living spaces.  
Valves can be installed in the ceiling or wall.  
DSS supply air valve is available in sizes Ø100-160.



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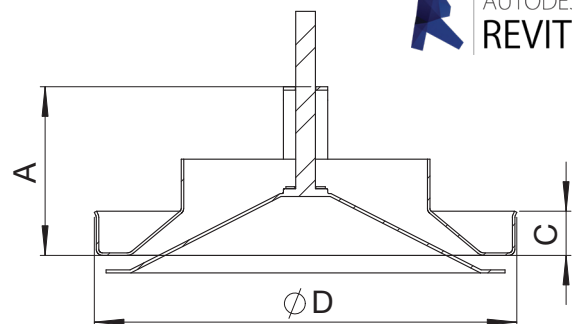
### Structure and dimensions

Manufactured of galvanized steel and coated white (RAL 9003).

The valve has a foam seal and a threaded spindle for easy regulation and locking of the desired airflow.

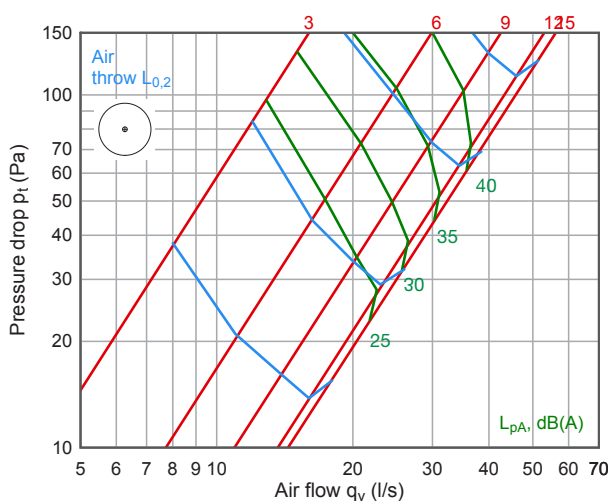
Comes with a sector plate for choosing the desired diffusion pattern.

| Size | ØD  | A  | C  | Weight (kg) |
|------|-----|----|----|-------------|
| 100  | 134 | 70 | 19 | 0,3         |
| 125  | 169 | 80 | 19 | 0,4         |
| 160  | 209 | 80 | 19 | 0,6         |

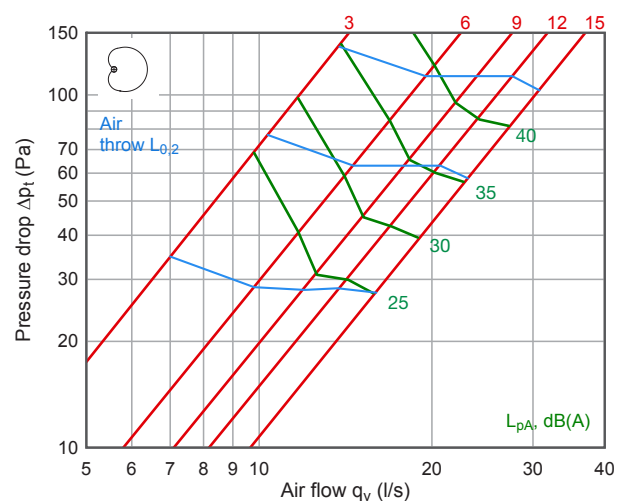


### Technical data

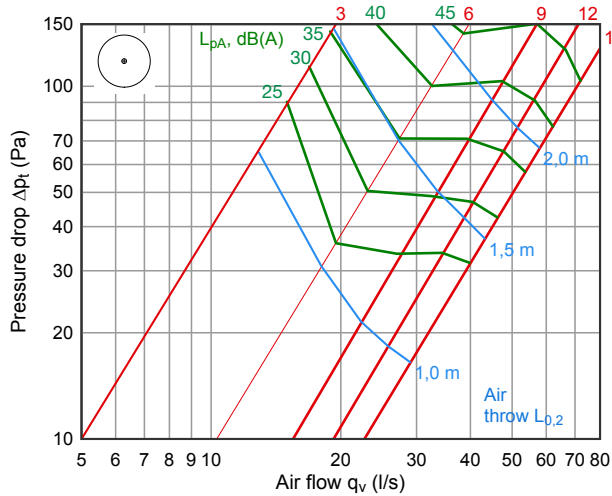
DSS 100



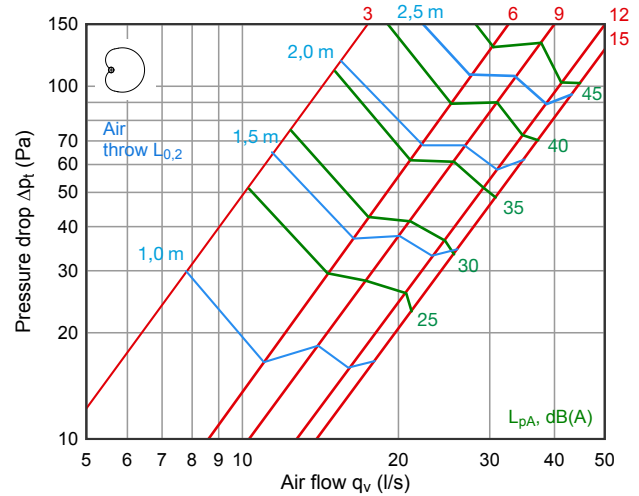
DSS 100 with sector plate



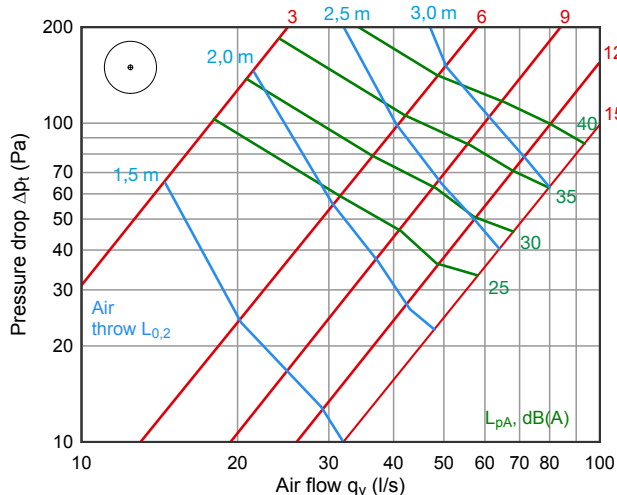
DSS 125



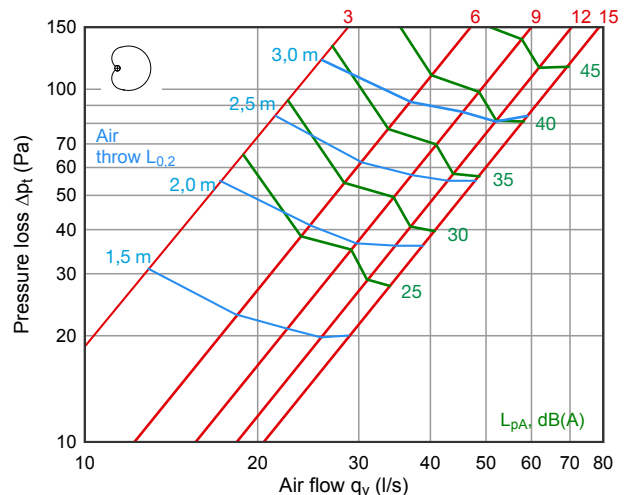
DSS 125 with sector plate



DSS 160



DSS 160 with sector plate



## Acoustic data

DSS 100

| Adjust-<br>ment | Correction of sound level $K_{okt}$ (dB)<br>(Hz) |     |     |     |      |      |      |      |
|-----------------|--------------------------------------------------|-----|-----|-----|------|------|------|------|
|                 | 63                                               | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=3             | -6                                               | -6  | -4  | -5  | -4   | -6   | -15  | -20  |
| s=6             | -6                                               | -1  | 2   | -2  | -6   | -10  | -16  | -23  |
| s=9             | -5                                               | 1   | 5   | -3  | -8   | -11  | -16  | -24  |
| s=12            | -3                                               | 4   | 5   | -3  | -8   | -11  | -16  | -25  |
| s=15            | 0                                                | 10  | 3   | -4  | -8   | -11  | -17  | -25  |

DSS 100 with sector plate

| Adjust-<br>ment | Correction of sound level $K_{okt}$ (dB)<br>(Hz) |     |     |     |      |      |      |      |
|-----------------|--------------------------------------------------|-----|-----|-----|------|------|------|------|
|                 | 63                                               | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=3             | -6                                               | -5  | -2  | -4  | -4   | -8   | -13  | -20  |
| s=6             | -3                                               | -1  | 2   | -2  | -6   | -10  | -14  | -22  |
| s=9             | -4                                               | 0   | 2   | -4  | -7   | -8   | -10  | -16  |
| s=12            | -2                                               | 2   | 3   | -3  | -6   | -10  | -15  | -23  |
| s=15            | -2                                               | 3   | 3   | -2  | -6   | -11  | -16  | -24  |

DSS 125

| Adjust-<br>ment | Correction of sound level $K_{okt}$ (dB)<br>(Hz) |     |     |     |      |      |      |      |
|-----------------|--------------------------------------------------|-----|-----|-----|------|------|------|------|
|                 | 63                                               | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=3             | -5                                               | -2  | -4  | -4  | -3   | -9   | -20  | -24  |
| s=6             | 3                                                | 4   | 4   | -1  | -8   | -19  | -25  | -25  |
| s=9             | 4                                                | 5   | 5   | -2  | -9   | -17  | -22  | -24  |
| s=12            | 3                                                | 5   | 5   | -4  | -8   | -12  | -19  | -26  |
| s=15            | 5                                                | 7   | 3   | -4  | -8   | -8   | -16  | -24  |

DSS 125 with sector plate

| Adjust-<br>ment | Correction of sound level $K_{okt}$ (dB)<br>(Hz) |     |     |     |      |      |      |      |
|-----------------|--------------------------------------------------|-----|-----|-----|------|------|------|------|
|                 | 63                                               | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=3             | 4                                                | 4   | 2   | -3  | -5   | -11  | -16  | -23  |
| s=6             | 6                                                | 6   | 3   | -2  | -7   | -13  | -16  | -26  |
| s=9             | 5                                                | 6   | 4   | -3  | -7   | -13  | -15  | -22  |
| s=12            | 5                                                | 4   | 2   | -4  | -7   | -9   | -10  | -19  |
| s=15            | 6                                                | 5   | 1   | -3  | -6   | -8   | -13  | -22  |



### DSS 160

| Adjust-<br>ment | Correction of sound level $K_{\text{okt}}$ (dB)<br>(Hz) |     |     |     |      |      |      |      |
|-----------------|---------------------------------------------------------|-----|-----|-----|------|------|------|------|
|                 | 63                                                      | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=3             | -8                                                      | -6  | -10 | -9  | -4   | -6   | -11  | -19  |
| s=6             | -6                                                      | -3  | -3  | -3  | -4   | -9   | -12  | -20  |
| s=9             | -1                                                      | 1   | 2   | -1  | -5   | -12  | -17  | -25  |
| s=12            | 1                                                       | 3   | 3   | -2  | -7   | -11  | -15  | -25  |
| s=15            | 1                                                       | 3   | 2   | -3  | -5   | -9   | -15  | -25  |

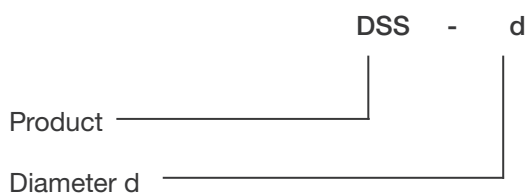
### DSS 160 with sector plate

| Adjust-<br>ment | Correction of sound level $K_{\text{okt}}$ (dB)<br>(Hz) |     |     |     |      |      |      |      |
|-----------------|---------------------------------------------------------|-----|-----|-----|------|------|------|------|
|                 | 63                                                      | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=3             | 1                                                       | -1  | -2  | -4  | -3   | -9   | -12  | -20  |
| s=6             | 6                                                       | 1   | 1   | -2  | -5   | -10  | -15  | -21  |
| s=9             | 4                                                       | 0   | 1   | -2  | -5   | -11  | -17  | -25  |
| s=12            | 4                                                       | 2   | 1   | -3  | -5   | -9   | -13  | -21  |
| s=15            | 4                                                       | 1   | 0   | -3  | -5   | -9   | -13  | -22  |

### Sound attenuation, $\Delta L$ (dB)

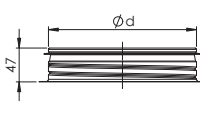
| Product                         | Adjustment | Sound attenuation in dB at octave bands, middle frequency (Hz) |     |     |     |      |      |      |      |
|---------------------------------|------------|----------------------------------------------------------------|-----|-----|-----|------|------|------|------|
|                                 |            | 63                                                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| DSS 100                         | s=3        | 24                                                             | 17  | 14  | 13  | 13   | 16   | 9    | 8    |
|                                 | s=9        | 23                                                             | 16  | 12  | 9   | 9    | 12   | 6    | 6    |
|                                 | s=15       | 21                                                             | 16  | 12  | 8   | 7    | 10   | 5    | 6    |
| DSS 100<br>with sector<br>plate | s=3        | 24                                                             | 18  | 14  | 13  | 12   | 11   | 8    | 9    |
|                                 | s=9        | 24                                                             | 17  | 12  | 10  | 9    | 9    | 5    | 7    |
|                                 | s=15       | 23                                                             | 16  | 12  | 9   | 7    | 7    | 5    | 7    |
| DSS 125                         | s=3        | 17                                                             | 17  | 13  | 13  | 15   | 16   | 9    | 9    |
|                                 | s=9        | 20                                                             | 15  | 10  | 8   | 10   | 11   | 5    | 6    |
|                                 | s=15       | 21                                                             | 15  | 9   | 7   | 8    | 9    | 3    | 6    |
| DSS 125<br>with sector<br>plate | s=3        | 19                                                             | 18  | 14  | 13  | 15   | 15   | 11   | 11   |
|                                 | s=9        | 19                                                             | 16  | 11  | 9   | 9    | 9    | 5    | 7    |
|                                 | s=15       | 21                                                             | 16  | 10  | 8   | 8    | 8    | 4    | 7    |
| DSS 160                         | s=3        | 17                                                             | 17  | 13  | 14  | 17   | 14   | 9    | 9    |
|                                 | s=9        | 17                                                             | 13  | 10  | 10  | 12   | 9    | 5    | 6    |
|                                 | s=15       | 18                                                             | 12  | 9   | 8   | 10   | 7    | 4    | 6    |
| DSS 160<br>with sector<br>plate | s=3        | 19                                                             | 17  | 13  | 14  | 16   | 13   | 10   | 10   |
|                                 | s=9        | 18                                                             | 14  | 11  | 10  | 12   | 8    | 7    | 7    |
|                                 | s=15       | 19                                                             | 13  | 9   | 9   | 10   | 6    | 5    | 7    |

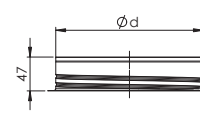
### Product codes



### Example: DSS 200

### Accessories

| <div>   </div> |     |     |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|--------|
| RLT Socket                                                                                                                                                                           |     |     |        |
| Product                                                                                                                                                                              | Ød  | ØD  | Weight |
| RLT 100                                                                                                                                                                              | 98  | 125 | 0,12   |
| RLT 125                                                                                                                                                                              | 124 | 150 | 0,15   |
| RLT 160                                                                                                                                                                              | 159 | 185 | 0,18   |

| <div>   </div> |     |     |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|--------|
| RLL Socket                                                                                                                                                                              |     |     |        |
| Product                                                                                                                                                                                 | Ød  | ØD  | Weight |
| RLL 100                                                                                                                                                                                 | 99  | 125 | 0,11   |
| RLL 125                                                                                                                                                                                 | 124 | 150 | 0,14   |
| RLL 160                                                                                                                                                                                 | 159 | 185 | 0,16   |

## Installation

Saddle RLT or RLL is attached to duct or part with rivets. The valve is threaded into the frame until fixing springs lie stably on the threads.

## Measurement and regulation of airflow

Measurement of airflow through pressure differential measured with a separate measuring device. Regulation by adjusting control a.

| DSS 100 |     |     |     |     |     |
|---------|-----|-----|-----|-----|-----|
| a, mm   | 3   | 6   | 9   | 12  | 15  |
| k-value | 1,3 | 2,5 | 3,8 | 5,0 | 5,3 |

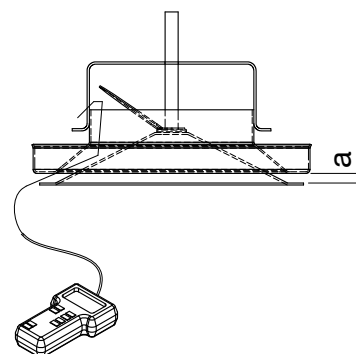
| DSS 125 |     |     |     |     |     |
|---------|-----|-----|-----|-----|-----|
| a, mm   | 3   | 6   | 9   | 12  | 15  |
| k-value | 1,6 | 3,3 | 4,9 | 6,3 | 8,1 |

| DSS 160 |     |     |     |     |      |
|---------|-----|-----|-----|-----|------|
| a, mm   | 3   | 6   | 9   | 12  | 15   |
| k-value | 1,8 | 4,1 | 6,2 | 8,2 | 10,6 |

| DSS 100 (with sector plate) |     |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|-----|
| a, mm                       | 3   | 6   | 9   | 12  | 15  |
| k-value                     | 1,2 | 1,9 | 2,3 | 2,7 | 3,2 |

| DSS 125 (with sector plate) |     |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|-----|
| a, mm                       | 3   | 6   | 9   | 12  | 15  |
| k-value                     | 1,5 | 2,7 | 3,3 | 4,2 | 4,6 |

| DSS 160 (with sector plate) |     |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|-----|
| a, mm                       | 3   | 6   | 9   | 12  | 15  |
| k-value                     | 2,3 | 3,9 | 4,9 | 5,8 | 6,6 |



$$q_v = k \sqrt{\Delta p_m}$$

## Maintenance

Remove the inner cone by turning counter-clockwise. Clean surfaces with damp cloth. Replace inner cone in its original position.

## DSE Exhaust valve

Exhaust valve for wall and ceiling installation.  
Available in sizes Ø 100-200 mm.



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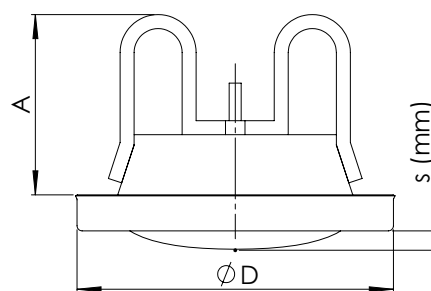
**AUTODESK  
REVIT**

### Structure and dimensions

Manufactured of galvanized steel and coated white (RAL 9003). The valve has a foam seal and a threaded spindle for easy regulation and locking of the desired airflow.

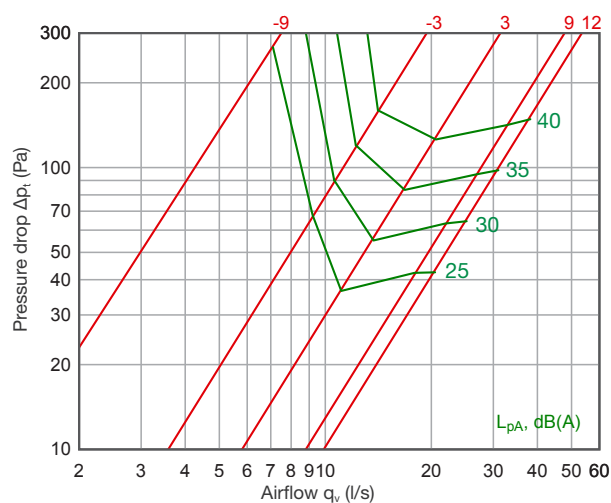
Comes with a sector plate for choosing the desired diffusion pattern.

| Size | ØD  | A   | Weight (kg) |
|------|-----|-----|-------------|
| 100  | 130 | 68  | 0,3         |
| 125  | 158 | 84  | 0,4         |
| 160  | 188 | 87  | 0,5         |
| 200  | 237 | 105 | 0,6         |

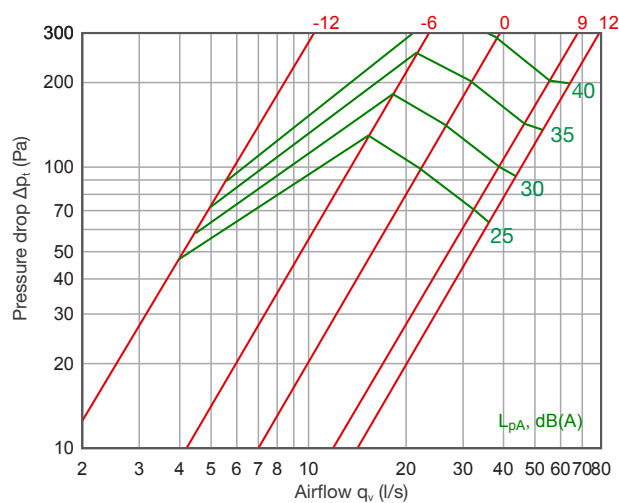


### Technical data

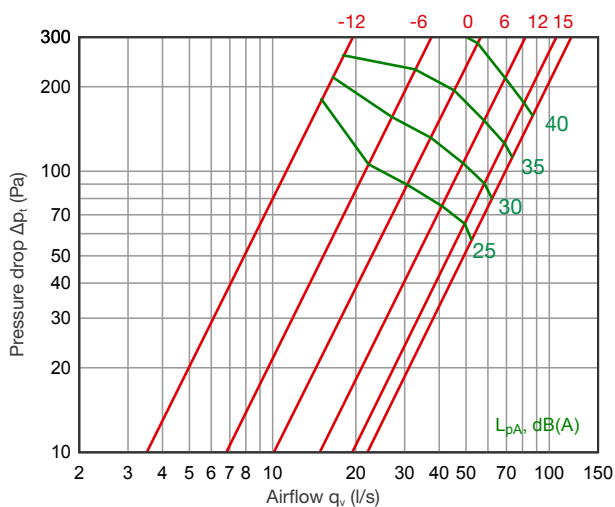
**DSE 100**



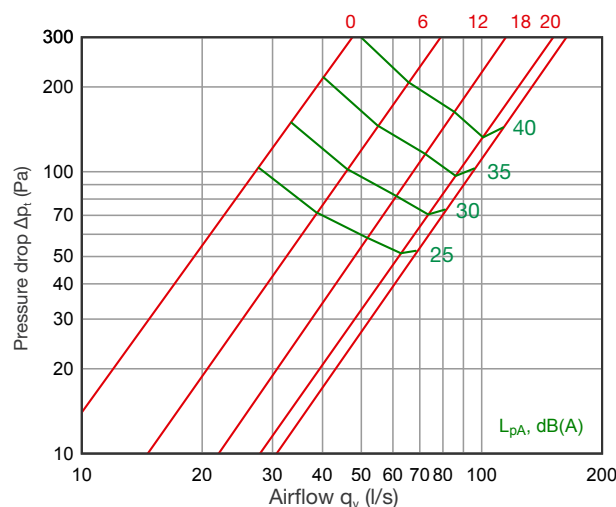
**DSE 125**



**DSE 160**



**DSE 200**



## Acoustic data

**DSE 100**

| Adjustment | Correction of sound level in dB at octave bands, middle frequency (Hz) |     |     |     |      |      |      |      |
|------------|------------------------------------------------------------------------|-----|-----|-----|------|------|------|------|
|            | 63                                                                     | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=-9       | 2                                                                      | -5  | -4  | -8  | -8   | -4   | -9   | -10  |
| s=-3       | -2                                                                     | -3  | -2  | -5  | -6   | -5   | -11  | -13  |
| s=+3       | -6                                                                     | -2  | 0   | -3  | -6   | -7   | -14  | -15  |
| s=+9       | -7                                                                     | -4  | 0   | -2  | -6   | -9   | -15  | -16  |
| s=+12      | -8                                                                     | -5  | 1   | -1  | -6   | -11  | -17  | -17  |

**DSE 125**

| Adjustment | Correction of sound level in dB at octave bands, middle frequency (Hz) |     |     |     |      |      |      |      |
|------------|------------------------------------------------------------------------|-----|-----|-----|------|------|------|------|
|            | 63                                                                     | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=-6       | 1                                                                      | 0   | -3  | -6  | -9   | -4   | -15  | -17  |
| s=0        | 0                                                                      | 0   | -4  | -6  | -9   | -4   | -15  | -17  |
| s=+9       | 0                                                                      | 1   | -1  | -3  | -9   | -5   | -14  | -18  |
| s=+12      | 1                                                                      | 2   | -1  | -3  | -10  | -5   | -15  | -18  |

**DSE 160**

| Adjustment | Correction of sound level in dB at octave bands, middle frequency (Hz) |     |     |     |      |      |      |      |
|------------|------------------------------------------------------------------------|-----|-----|-----|------|------|------|------|
|            | 63                                                                     | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=-12      | 2                                                                      | -6  | -7  | -9  | -6   | -4   | -12  | -21  |
| s=-6       | 5                                                                      | -2  | -5  | -8  | -3   | -8   | -15  | -17  |
| s=0        | 6                                                                      | -1  | -5  | -7  | -3   | -8   | -14  | -17  |
| s=+6       | 3                                                                      | -3  | -4  | -5  | -3   | -8   | -14  | -17  |
| s=+9       | 3                                                                      | -1  | -1  | -3  | -4   | -9   | -15  | -18  |
| s=+12      | 2                                                                      | 0   | 1   | -3  | -5   | -9   | -16  | -19  |

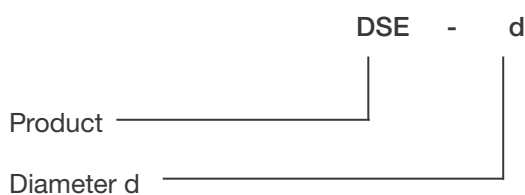
**DSE 200**

| Adjustment | Correction of sound level K <sub>okt</sub> in dB at octave bands, middle frequency (Hz) |     |     |     |      |      |      |      |
|------------|-----------------------------------------------------------------------------------------|-----|-----|-----|------|------|------|------|
|            | 63                                                                                      | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| s=0        | 3                                                                                       | 0   | -4  | -5  | -3   | -10  | -15  | -18  |
| s=+6       | 1                                                                                       | -3  | -7  | -8  | -2   | -9   | -13  | -19  |
| s=+12      | 3                                                                                       | -3  | -6  | -8  | -2   | -9   | -13  | -19  |
| s=+18      | 3                                                                                       | -4  | -5  | -7  | -2   | -10  | -15  | -20  |
| s=+20      | 2                                                                                       | -4  | -5  | -7  | -2   | -9   | -14  | -19  |

## Sound attenuation, $\Delta L$ (dB)

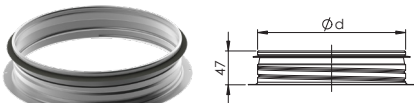
| Product | Adjustment | Sound attenuation in dB at octave bands, middle frequency (Hz) |     |     |     |      |      |      |      |
|---------|------------|----------------------------------------------------------------|-----|-----|-----|------|------|------|------|
|         |            | 63                                                             | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| DSE 100 | s=-9       | 27                                                             | 21  | 19  | 18  | 20   | 17   | 10   | 9    |
|         | s=+3       | 24                                                             | 16  | 13  | 12  | 12   | 15   | 5    | 7    |
|         | s=+12      | 24                                                             | 16  | 12  | 10  | 8    | 14   | 4    | 6    |
| DSE 125 | s=-6       | 18                                                             | 18  | 14  | 13  | 15   | 14   | 10   | 9    |
|         | s=0        | 18                                                             | 17  | 12  | 11  | 12   | 13   | 8    | 8    |
|         | s=+12      | 20                                                             | 16  | 10  | 8   | 9    | 9    | 5    | 6    |
| DSE 160 | s=-12      | 19                                                             | 19  | 14  | 14  | 15   | 13   | 10   | 11   |
|         | s=+6       | 18                                                             | 14  | 10  | 9   | 9    | 10   | 6    | 6    |
|         | s=+15      | 18                                                             | 13  | 9   | 7   | 8    | 9    | 5    | 6    |
| DSE 250 | s=0        | 16                                                             | 17  | 12  | 12  | 13   | 10   | 8    | 9    |
|         | s=+12      | 15                                                             | 14  | 9   | 9   | 10   | 8    | 6    | 7    |
|         | s=+20      | 15                                                             | 12  | 8   | 8   | 9    | 8    | 5    | 7    |

## Product codes



Example: DSE 200

## Accessories

|               |                                                                                   |     |     |
|---------------|-----------------------------------------------------------------------------------|-----|-----|
| RLT<br>Socket |  |     |     |
|               | Product                                                                           | Ød  | ØD  |
|               | RLT 100                                                                           | 98  | 125 |
|               | RLT 125                                                                           | 124 | 150 |
|               | RLT 160                                                                           | 159 | 185 |

|               |                                                                                    |     |     |
|---------------|------------------------------------------------------------------------------------|-----|-----|
| RLL<br>Socket |  |     |     |
|               | Product                                                                            | Ød  | ØD  |
|               | RLL 100                                                                            | 99  | 125 |
|               | RLL 125                                                                            | 124 | 150 |
|               | RLL 160                                                                            | 159 | 185 |

## Installation

Saddle RLT or RLL is attached to duct or part with rivets. The valve is threaded into the frame until fixing springs lie stably on the threads.

## Measurement and regulation of airflow

Measurement of airflow through pressure differential measured with a separate measuring device. Regulation by adjusting control a.

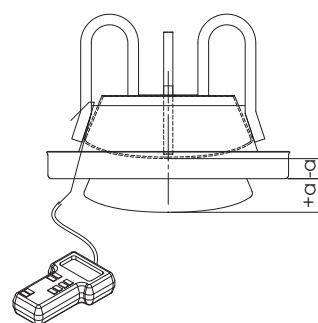
Valid until 06.2024

| DSE 100 |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|
| a, mm   | -9   | -6   | -3   | 0    | 3    | 6    | 9    | 12   |
| k-value | 0,79 | 1,08 | 1,36 | 1,65 | 1,94 | 2,25 | 2,55 | 2,81 |

| DSE 125 |     |      |     |      |   |     |     |     |     |
|---------|-----|------|-----|------|---|-----|-----|-----|-----|
| a, mm   | -12 | -9   | -6  | -3   | 0 | 3   | 6   | 9   | 12  |
| k-value | 0,6 | 0,95 | 1,3 | 1,65 | 2 | 2,4 | 2,8 | 3,2 | 3,6 |

| DSE 160 |     |      |    |      |     |     |     |      |     |     |
|---------|-----|------|----|------|-----|-----|-----|------|-----|-----|
| a, mm   | -12 | -9   | -6 | -3   | 0   | 3   | 6   | 9    | 12  | 15  |
| k-value | 1,1 | 1,55 | 2  | 2,45 | 2,9 | 3,5 | 4,1 | 4,65 | 5,2 | 5,7 |

| DSE 200 |      |      |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| a, mm   | -6   | -3   | 0    | 3    | 6    | 9    | 12   | 15   | 18   | 20   |
| k-value | 0,48 | 1,07 | 1,66 | 2,41 | 3,16 | 3,94 | 4,72 | 5,48 | 6,24 | 6,79 |



$$q_v = k_v \sqrt{\Delta p_m}$$

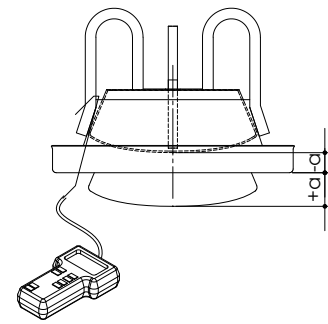
Valid from 06.2024

| DSE 100 |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|
| a, mm   | -9   | -6   | -3   | 0    | 3    | 6    | 9    | 12   |
| k-value | 0,55 | 0,86 | 1,18 | 1,47 | 1,75 | 2,08 | 2,42 | 2,68 |

| DSE 125 |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|
| a, mm   | -9   | -6   | -3   | 0    | 3    | 6    | 9    | 12   |
| k-value | 1,10 | 1,41 | 1,81 | 2,13 | 2,58 | 2,96 | 3,36 | 3,74 |

| DSE 160 |      |      |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| a, mm   | -12  | -9   | -6   | -3   | 0    | 3    | 6    | 9    | 12   | 15   |
| k-value | 1,12 | 1,56 | 2,02 | 2,57 | 3,05 | 3,58 | 4,03 | 4,59 | 5,07 | 5,69 |

| DSE 200 |      |      |      |      |      |      |      |      |      |      |
|---------|------|------|------|------|------|------|------|------|------|------|
| a, mm   | -6   | -3   | 0    | 3    | 6    | 9    | 12   | 15   | 18   | 20   |
| k-value | 0,93 | 1,67 | 2,40 | 3,15 | 3,90 | 4,64 | 5,37 | 6,13 | 6,96 | 7,29 |



$$q_v = k \sqrt{\Delta p_m}$$

**NB!** Before measuring the valve, check the k-values on the DSE valve at the site.

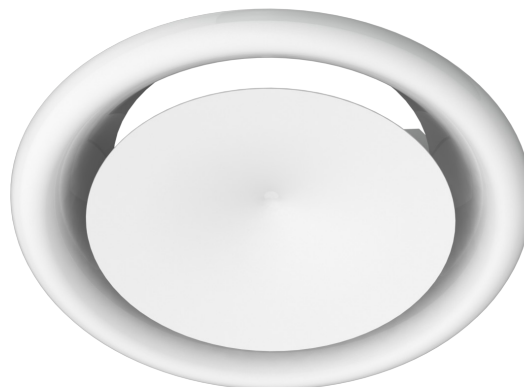
## Maintenance

Remove the inner cone by turning counter-clockwise. Clean surfaces with damp cloth. Replace inner cone in its original position.



## DVP Supply air valve

For systems with low airflows.

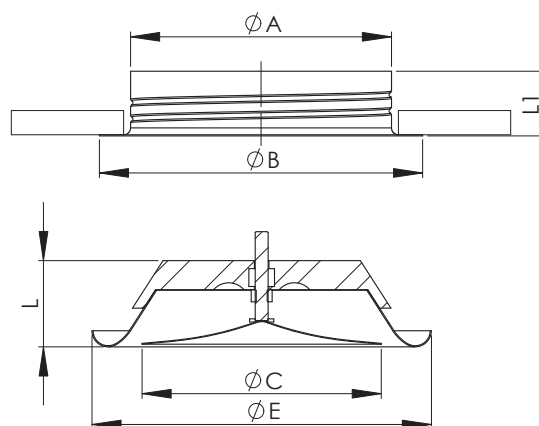


### Structure and dimensions

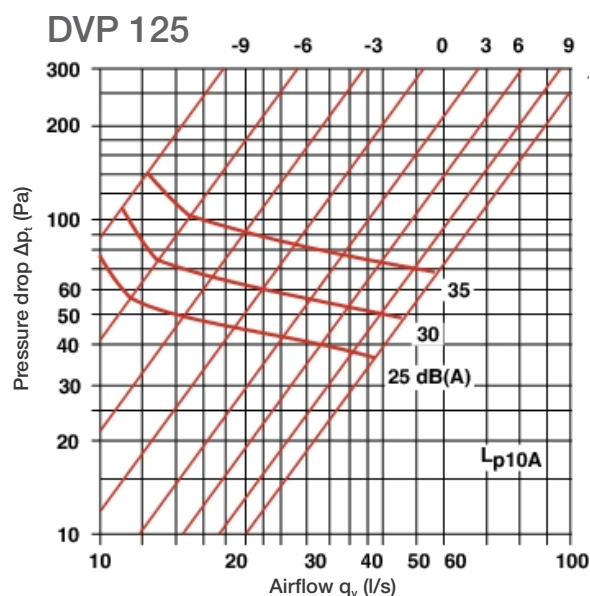
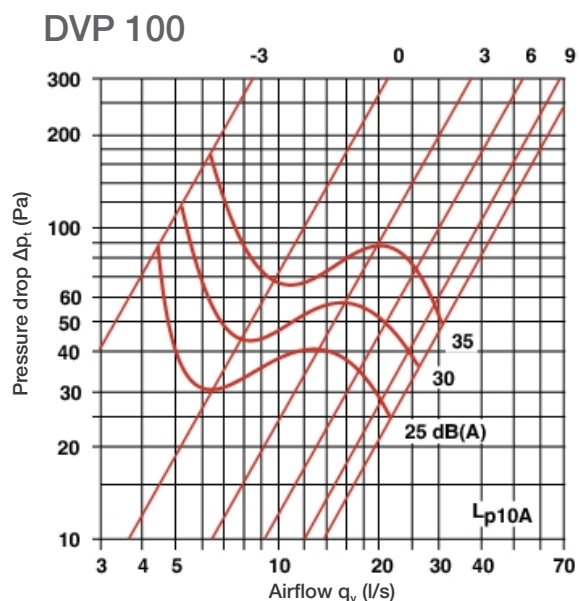
Manufactured of galvanized steel and coated white (RAL 9003).

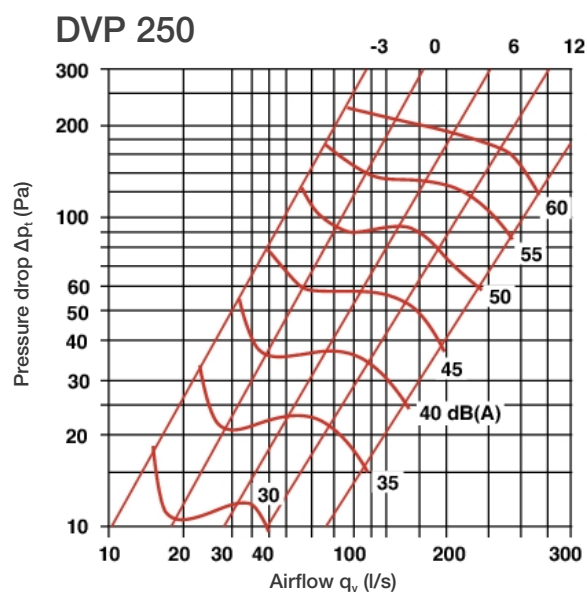
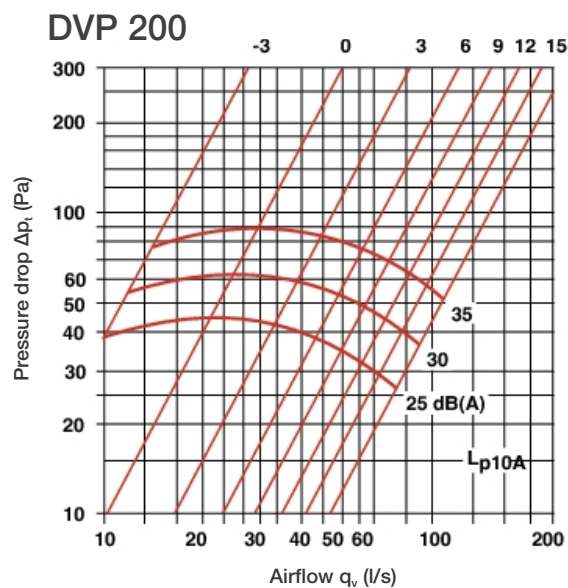
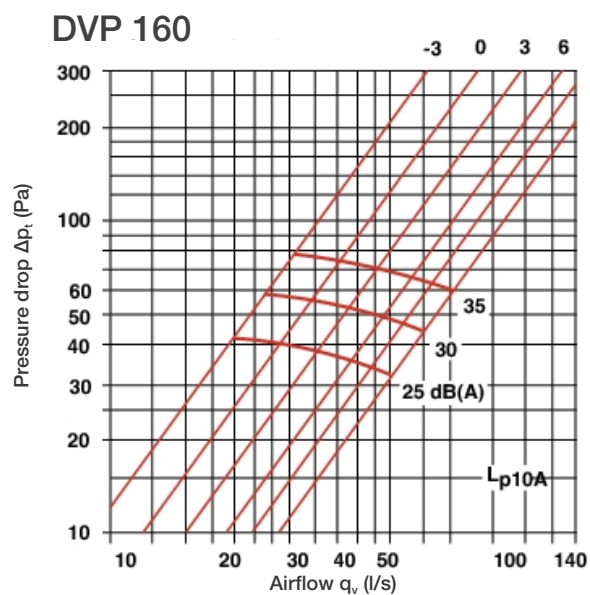
The vent body includes an elastic foam seal.

| Size | ØA  | ØB  | ØC  | ØE  | L  | L1 | Weight (kg) |
|------|-----|-----|-----|-----|----|----|-------------|
| 100  | 98  | 125 | 92  | 137 | 40 | 45 | 0,12        |
| 125  | 123 | 150 | 115 | 164 | 45 | 45 | 0,3         |
| 160  | 159 | 185 | 148 | 212 | 55 | 45 | 0,4         |
| 200  | 198 | 225 | 188 | 248 | 60 | 45 | 0,5         |
| 250  | 248 | 290 | 240 | 300 | 70 | 45 | 1,2         |



### Technical data





## Product codes

Product DVP - d

Diameter d

Example: DVP 200

## Installation

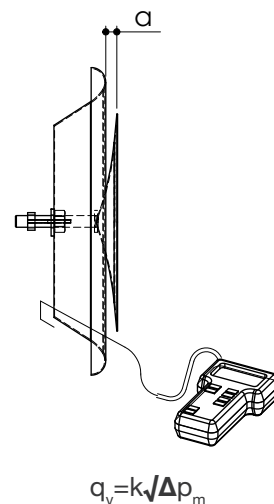
Installation to duct using a mounting frame (included).

## Measurement and regulation of airflow

Measurement of airflow through pressure differential measured with a separate measuring device.

Regulation by opening or closing by turning the plate.

| a, mm   | K-value |      |       |       |       |       |       |       |
|---------|---------|------|-------|-------|-------|-------|-------|-------|
|         | 0       | 3    | 6     | 9     | 12    | 15    | 18    | 21    |
| DVP 100 | 1,45    | 2,50 | 3,10  | 3,95  | 4,10  |       |       |       |
| DVP 125 | 2,50    | 3,65 | 4,40  | 5,45  | 6,40  | 7,45  |       |       |
| DVP 160 | 4,40    | 5,30 | 7,30  | 8,70  | 9,95  | 11,85 |       |       |
| DVP 200 | 4,05    | 6,05 | 8,25  | 10,25 | 12,00 | 15,30 | 17,45 |       |
| DVP 250 | 6,15    | 8,90 | 10,90 | 12,95 | 15,25 | 18,05 | 20,75 | 23,85 |



## Maintenance

Remove the inner cone by turning counter-clockwise. Clean surfaces with damp cloth. Replace inner cone in its original position.

## DVS Exhaust valve

DVS exhaust valve is suitable for ventilation systems with small air volumes.

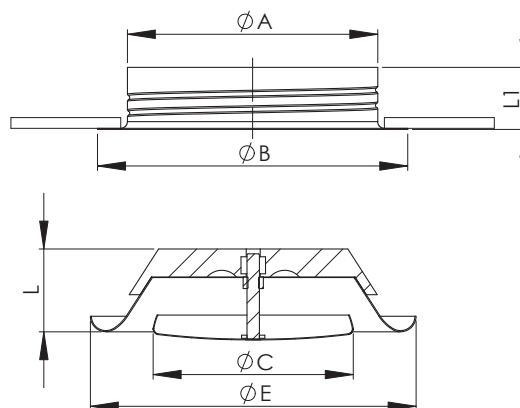


### Structure and dimensions

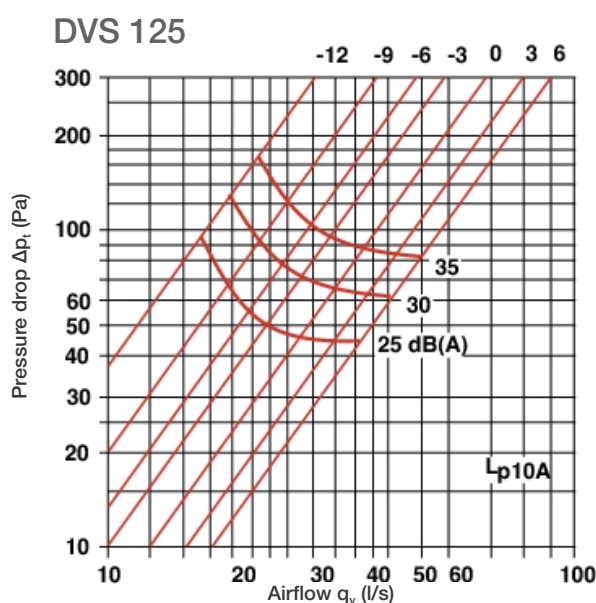
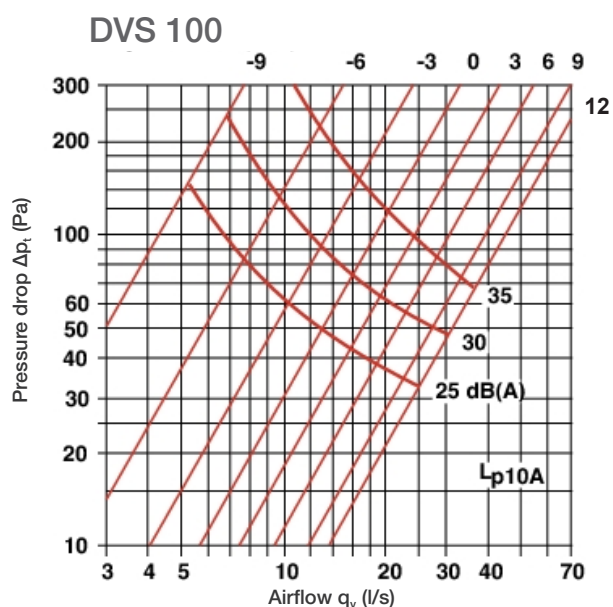
Manufactured of galvanized steel and coated white (RAL 9003).

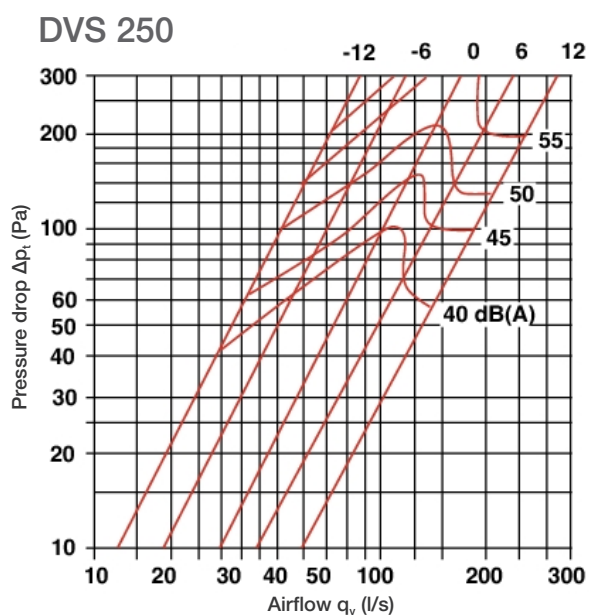
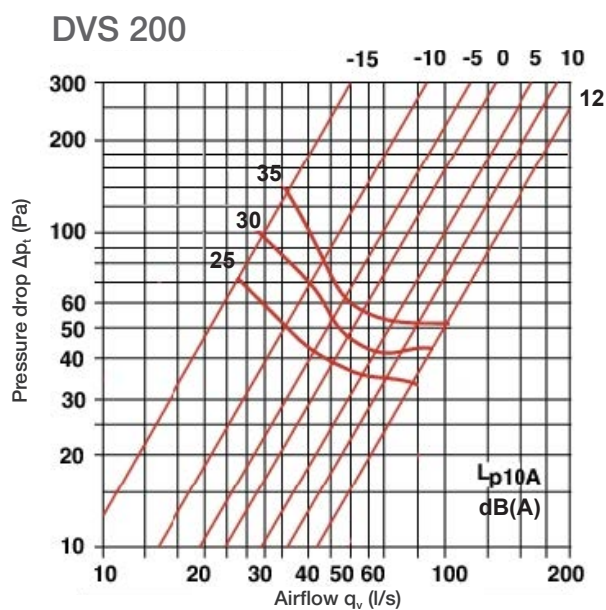
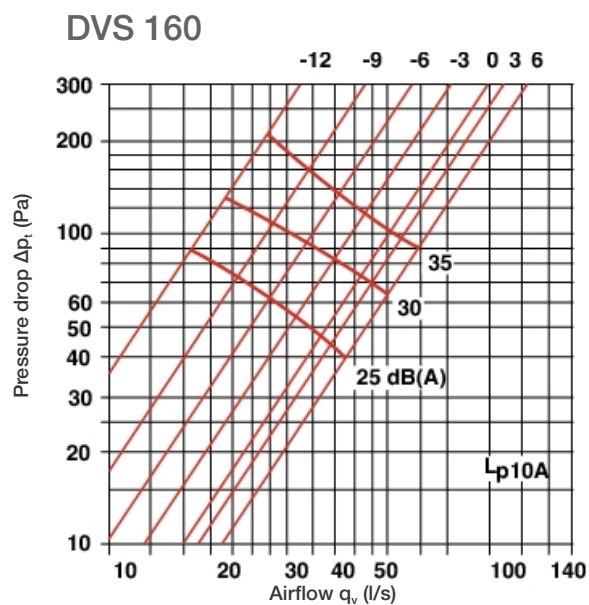
The valve body includes an elastic foam seal.

| Size | ØA  | ØB  | ØC  | ØE  | L  | L1 | Weight (kg) |
|------|-----|-----|-----|-----|----|----|-------------|
| 100  | 98  | 125 | 92  | 137 | 40 | 45 | 0,12        |
| 125  | 123 | 150 | 115 | 164 | 45 | 45 | 0,3         |
| 160  | 159 | 185 | 148 | 212 | 55 | 45 | 0,4         |
| 200  | 198 | 225 | 188 | 248 | 60 | 45 | 0,5         |
| 250  | 248 | 290 | 240 | 300 | 70 | 45 | 1,2         |

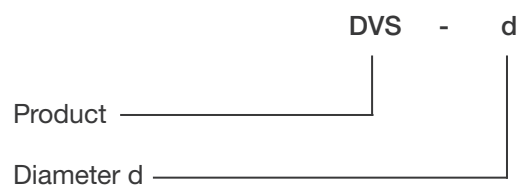


### Technical data





## Product codes



Example: DVS 200

## Installation

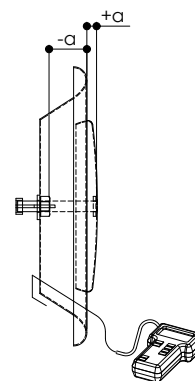
Installation to duct using a mounting frame (included).

## Measurement and regulation of airflow

Measurement of airflow through pressure differential measured with a separate measuring device.

Regulation by opening or closing by turning the plate.

| a, mm   | K-value |      |      |      |       |       |       |       |       |
|---------|---------|------|------|------|-------|-------|-------|-------|-------|
|         | -12     | -9   | -6   | -3   | 0     | 3     | 6     | 9     | 12    |
| DVS 100 |         | 0,45 | 0,80 | 1,20 | 1,50  | 1,80  | 2,25  | 2,65  | 2,95  |
| DVS 125 | 0,80    | 1,25 | 1,65 | 2,10 | 2,60  | 3,00  | 3,45  | 4,00  | 4,50  |
| DVS 160 | 2,10    | 2,35 | 3,00 | 3,70 | 4,20  | 4,95  | 5,45  | 6,25  | 6,90  |
| DVS 200 | 3,15    | 3,90 | 4,75 | 5,15 | 6,25  | 7,40  | 8,25  | 8,95  | 10,00 |
| DVS 250 | 5,85    | 6,95 | 8,05 | 9,45 | 10,30 | 10,85 | 12,35 | 13,75 | 15,50 |



$$q_v = k \sqrt{\Delta p_m}$$

## Maintenance

Remove the inner cone by turning counter-clockwise. Clean surfaces with damp cloth. Replace inner cone in its original position.

## SFU Supply/exhaust air valve

SFU supply/exhaust valve for ceiling and wall installation.  
The air valve is suitable for homes as well as for offices.

- Adjustable pressure loss
- The valve attenuates duct noise
- Installation directly into a duct/fitting
- Available in sizes Ø 100-200 mm



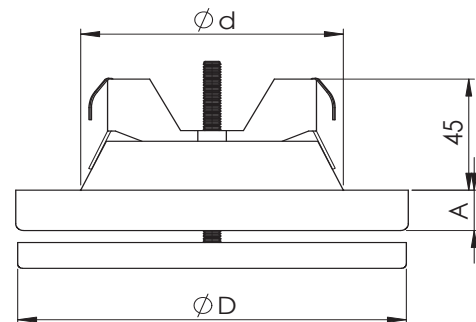
### Structure and dimensions

SFU valves are manufactured of galvanized steel and coated with white paint (RAL 9003).

The valve body includes an elastic foam seal.

The disc is fixed to the body with threaded rod.

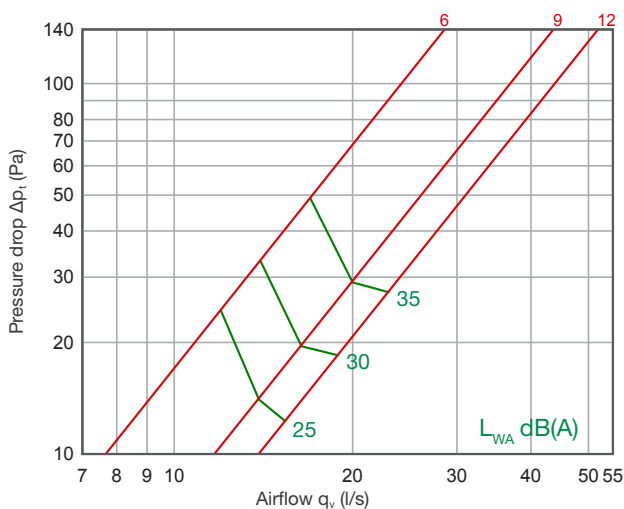
| Size | ØD  | A  | Weight (kg) |
|------|-----|----|-------------|
| 100  | 135 | 15 | 1,75        |
| 125  | 160 | 15 | 2,85        |
| 160  | 191 | 15 | 3,05        |
| 200  | 238 | 18 | 4,4         |



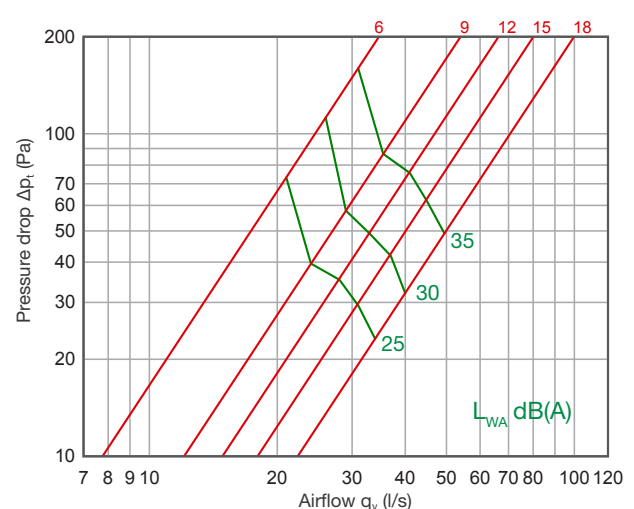
### Technical data

#### Supply air

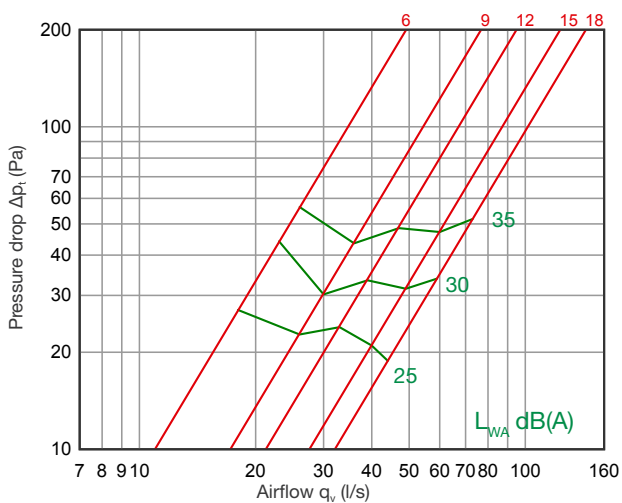
SFU 100



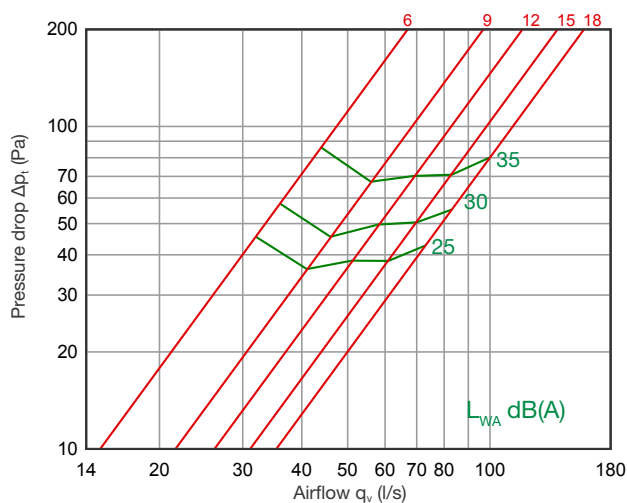
SFU 125



**SFU 160**

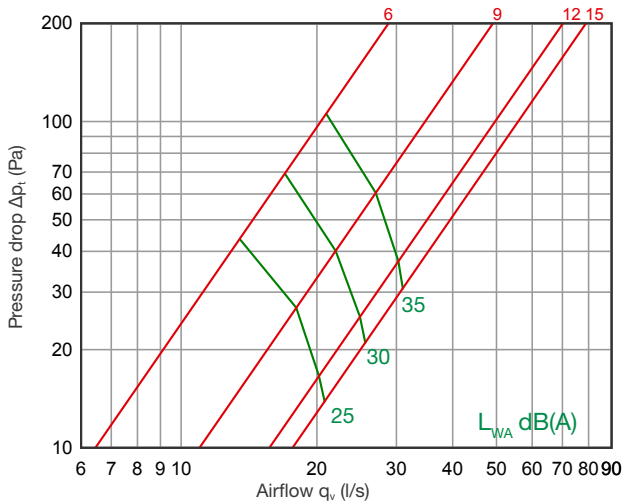


**SFU 200**

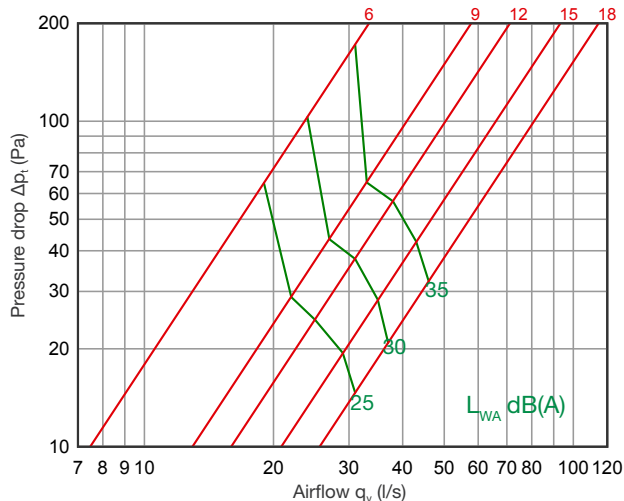


## Exhaust air

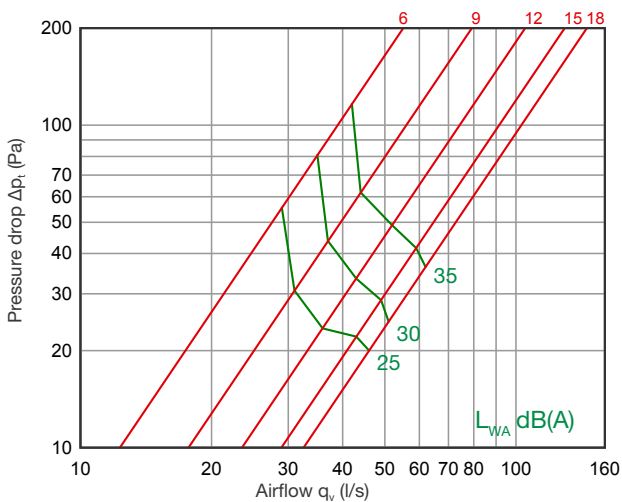
**SFU 100**



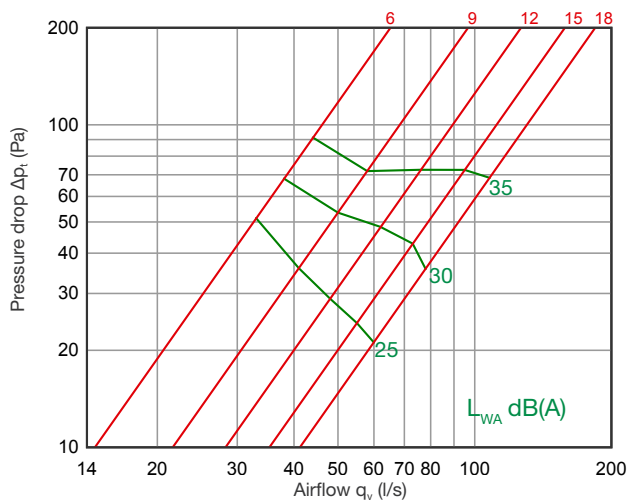
**SFU 125**



**SFU 160**



**SFU 200**





## Product codes

SFU - d

Product \_\_\_\_\_

Diameter d \_\_\_\_\_

Example: SFU 200

## Installation

SFU air valve can be installed directly into a duct/fitting. Push the valve into the duct. The valve shall be fixed with springs directly into a duct and it does not require any additional fastening.

## Measurement and regulation of airflow

Measurement of airflow through pressure differential measured with a separate measuring device.

Regulation by opening or closing by turning the plate. Measure the opening (a) position (in mm).

| SFU 100, supply air |      |      |      |  |  |
|---------------------|------|------|------|--|--|
| a, mm               | 6    | 9    | 12   |  |  |
| k-factor            | 2,40 | 3,70 | 4,25 |  |  |

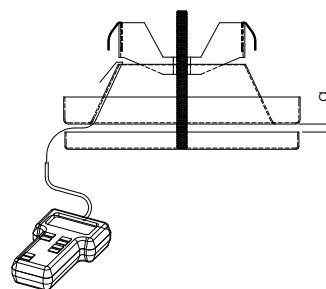
| SFU 125, supply air |      |      |      |      |      |
|---------------------|------|------|------|------|------|
| a, mm               | 6    | 9    | 12   | 15   | 18   |
| k-factor            | 2,45 | 3,80 | 4,70 | 5,60 | 6,85 |

| SFU 160, supply air |      |      |      |      |      |
|---------------------|------|------|------|------|------|
| a, mm               | 6    | 9    | 12   | 15   | 18   |
| k-factor            | 3,50 | 5,55 | 6,70 | 8,55 | 9,80 |

| SFU 200, supply air |      |      |      |      |       |
|---------------------|------|------|------|------|-------|
| a, mm               | 6    | 9    | 12   | 15   | 18    |
| k-factor            | 4,75 | 7,05 | 8,50 | 9,75 | 11,05 |



$$q_v = k \sqrt{\Delta p_m}$$

| SFU 100, exhaust air |      |      |      |      |      |
|----------------------|------|------|------|------|------|
| a, mm                | 6    | 9    | 12   | 15   | 18   |
| k-factor             | 1,90 | 2,95 | 4,00 | 4,35 | 4,40 |

| SFU 125, exhaust air |      |      |      |      |      |
|----------------------|------|------|------|------|------|
| a, mm                | 6    | 9    | 12   | 15   | 18   |
| k-factor             | 2,15 | 3,60 | 4,20 | 5,30 | 6,35 |

| SFU 160, exhaust air |      |      |      |      |      |
|----------------------|------|------|------|------|------|
| a, mm                | 6    | 9    | 12   | 15   | 18   |
| k-factor             | 3,55 | 5,00 | 6,40 | 7,60 | 8,55 |

| SFU 200, exhaust air |      |      |      |      |       |
|----------------------|------|------|------|------|-------|
| a, mm                | 6    | 9    | 12   | 15   | 18    |
| k-factor             | 4,30 | 6,40 | 7,85 | 9,75 | 11,20 |

## Maintenance

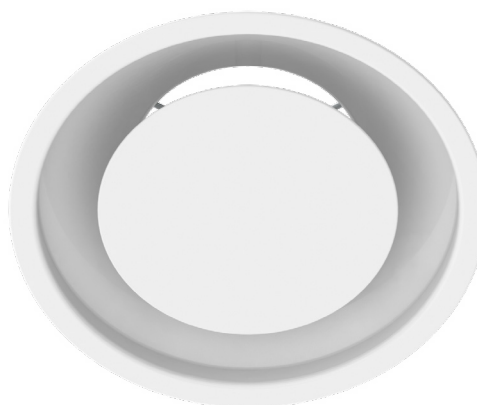
Remove the inner cone by turning counter-clockwise. Clean the components surfaces with damp cloth. Replace inner cone in its original position.

## DKC Ceiling diffuser

Round ceiling diffuser.

### Features:

- horizontal or vertical air jet
- suitable for over- or under-heated supply air
- installation in ceiling or free hanging
- duct sizes Ø 160-400 mm

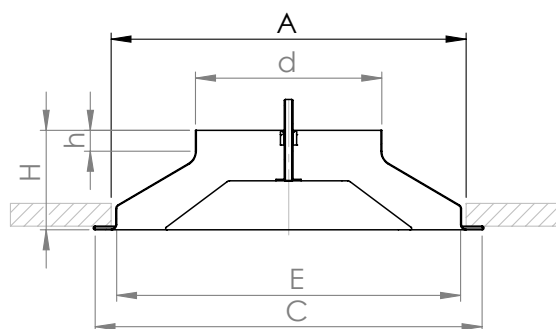


### Material and finish

Manufactured of aluminium steel and coated white (RAL 9003).

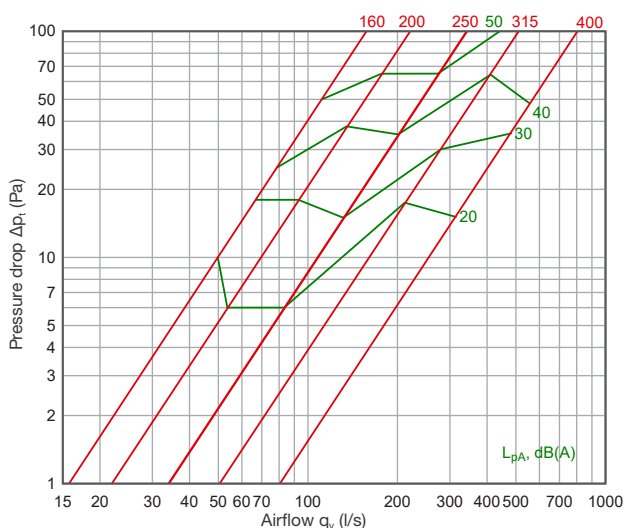
### Measurements

| Nominal size | d   | E   | C   | h  | H   | A   |
|--------------|-----|-----|-----|----|-----|-----|
| 160          | 157 | 280 | 335 | 45 | 105 | 288 |
| 200          | 198 | 360 | 423 | 48 | 118 | 370 |
| 250          | 248 | 445 | 517 | 48 | 130 | 461 |
| 315          | 313 | 560 | 640 | 48 | 146 | 576 |
| 400          | 398 | 680 | 776 | 65 | 185 | 700 |

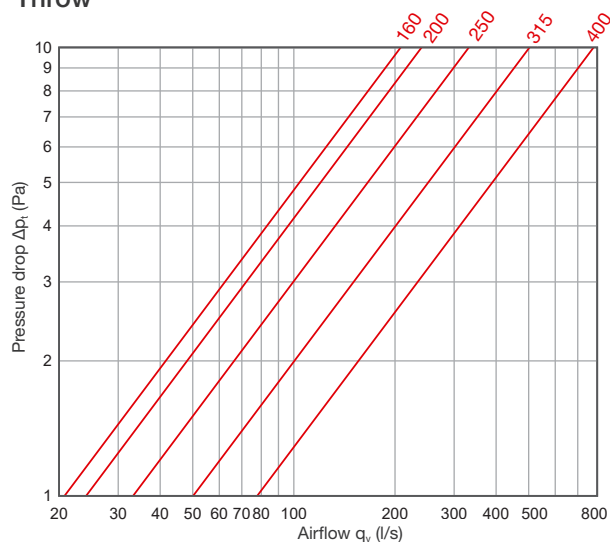


### Technical data

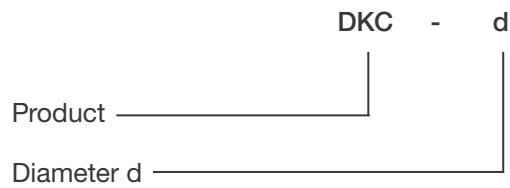
#### Acoustic data



#### Throw



## Product codes



Example: DKC 200

## Installation

Remove the inner cone. Attach the outer cone to duct or plenum box with rivets. Replace inner cone and adjust for position which gives the desired airflow and diffusion pattern.

## Maintenance

Remove the inner cone by turning counter-clockwise. Clean surfaces with damp cloth. Replace inner cone in its original position.

**N.B.** Measure and note inner cone's original position.

## DKA Ceiling diffuser

Ceiling diffuser with adjustable air jet pattern. Horizontal or vertical supply air pattern chosen by turning the cone.

### Features:

- Horizontal or vertical air jet
- Installation in ceiling or free hanging
- Duct sizes Ø 160-630 mm
- Max.  $\Delta t = 10^\circ\text{C}$

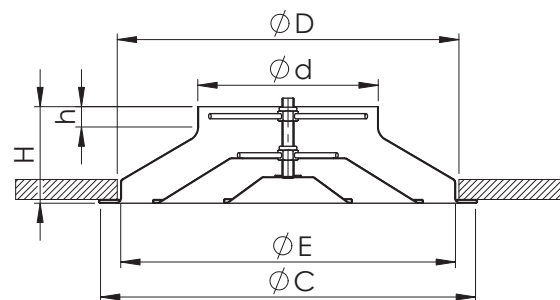


### Material and finish

Manufactured of aluminium sheet and coated white (RAL 9003).

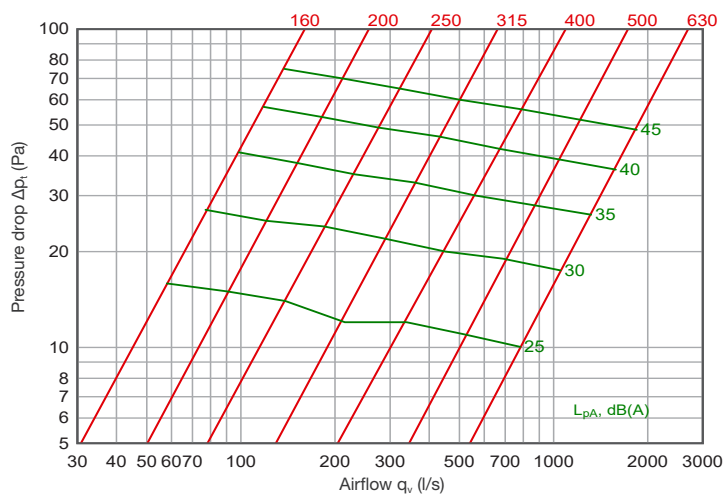
### Measurements

| Size | Ød  | ØE  | ØC   | h  | H   | ØD  |
|------|-----|-----|------|----|-----|-----|
| 160  | 157 | 280 | 335  | 45 | 105 | 288 |
| 200  | 198 | 360 | 423  | 48 | 118 | 370 |
| 250  | 248 | 445 | 517  | 48 | 130 | 461 |
| 315  | 313 | 560 | 640  | 48 | 146 | 576 |
| 400  | 398 | 680 | 776  | 65 | 185 | 700 |
| 500  | 498 | 805 | 917  | 65 | 185 | 825 |
| 630  | 628 | 943 | 1045 | 65 | 185 | 963 |



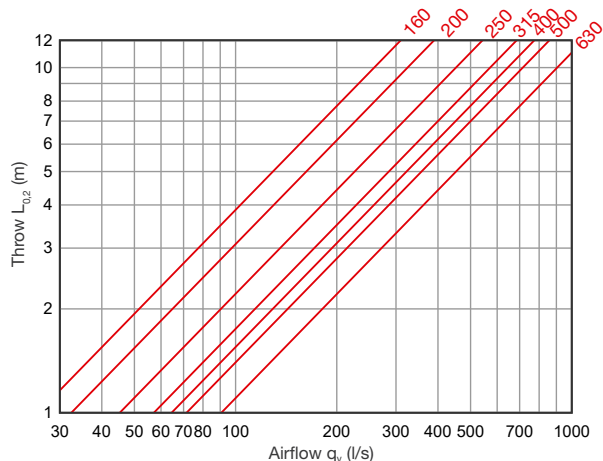
### Technical data

Technical data are given for adjustment 0, when the inner and outer cones are on same level.

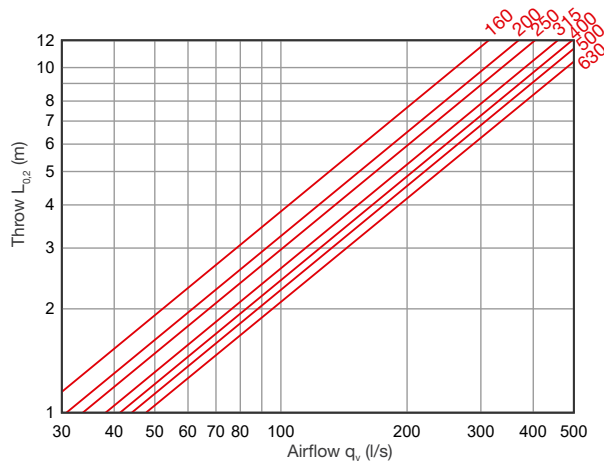


## Throw

### Horizontal jet



### Vertical jet



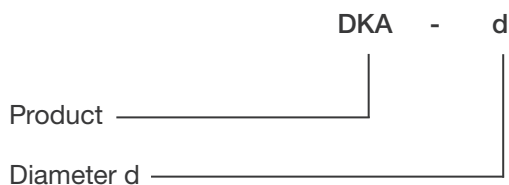
## Acoustic data

| Size   | Sound level correction factor $K_{okt}$ (dB) |     |     |      |      |      |
|--------|----------------------------------------------|-----|-----|------|------|------|
|        | 125                                          | 250 | 500 | 1000 | 2000 | 4000 |
| 160    | 6                                            | 4   | 2   | -1   | -6   | -14  |
| 200    | 6                                            | 4   | 2   | -2   | -4   | -13  |
| 250    | 6                                            | 6   | 1   | -3   | -4   | -14  |
| 315    | 7                                            | 5   | 1   | -1   | -4   | -14  |
| 400    | 8                                            | 5   | 3   | -3   | -5   | -14  |
| 500    | 9                                            | 5   | 3   | -4   | -7   | -14  |
| Tol. ± | 3                                            | 2   | 2   | 2    | 2    | 2    |

| Size   | Sound attenuation $\Delta L$ (dB) at octave bands, middle frequency (Hz) |     |     |      |      |      |
|--------|--------------------------------------------------------------------------|-----|-----|------|------|------|
|        | 125                                                                      | 250 | 500 | 1000 | 2000 | 4000 |
| 160    | 12                                                                       | 8   | 3   | 1    | 0    | 0    |
| 200    | 11                                                                       | 8   | 3   | 0    | 0    | 0    |
| 250    | 10                                                                       | 5   | 2   | 0    | 0    | 0    |
| 315    | 8                                                                        | 5   | 1   | 0    | 0    | 0    |
| 400    | 7                                                                        | 4   | 1   | 0    | 0    | 0    |
| 500    | 6                                                                        | 2   | 0   | 0    | 0    | 0    |
| Tol. ± | 3                                                                        | 2   | 2   | 2    | 2    | 2    |

$$L_w = L_{A10} + K_{okt}$$

## Product codes



Example: DKA 200

## Maintenance

Remove the cones by turning counter-clockwise. Clean surfaces with damp cloth. Replace cones in its original positions.

**NB!** Measure and note inner cone's original position.

## Installation

Remove the cones. Attach the outer cone to duct or plenum box with rivets. Replace inner cones and adjust for position which gives the desired airflow and diffusion pattern.

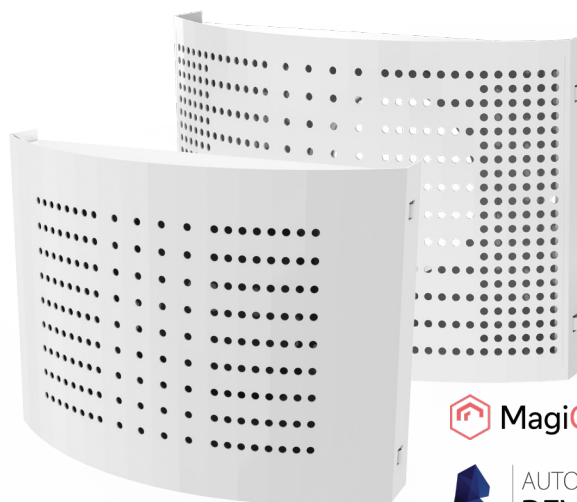
## DSK-P Diffuser for supply air

Wall-mounted diffuser for supply air. Product is designed for use in residential houses and other premises where airflows are low and air distribution is from the wall.

DSK-P 100 and DSK-P 125 diffusers fulfill Finnish building code E7:2004 and Ministry of Environment type approval regulations (2008) for smoke throttling element, when installed on the wall or on the end of a horizontal duct.

### Features:

- Low noise level
- Draftless air supply
- Easy installation
- Removable front plate

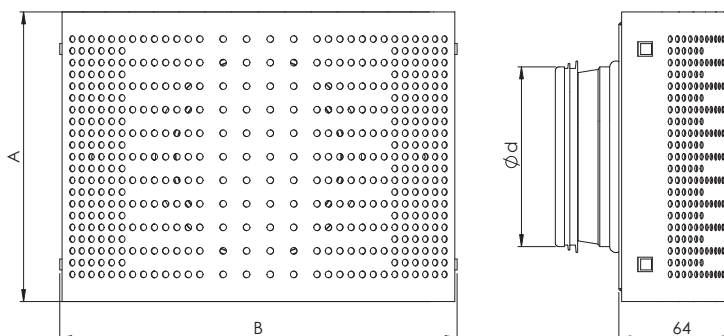


Suitable for houses, offices and other rooms with low air quantities with supply air on the wall.

### Structure and dimensions

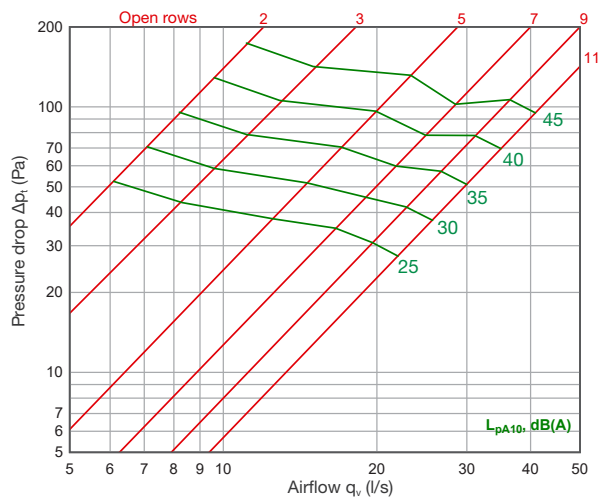
DSK-diffuser be composed of two parts: the main body and the front panel. Both details are manufactured of galvanized steel and coated white (RAL 9003). Duct connection is equipped with circular rubber gasket.

| Product<br>Ød | B<br>(mm) | A<br>(mm) | Weight<br>(kg) |
|---------------|-----------|-----------|----------------|
| DSK-P 100     | 217       | 160       | 0,7            |
| DSK-P2 100    | 217       | 160       | 0,7            |
| DSK-P 125     | 217       | 160       | 0,7            |
| DSK 160       | 350       | 235       | 1,4            |
| DSK 200       | 400       | 275       | 1,7            |

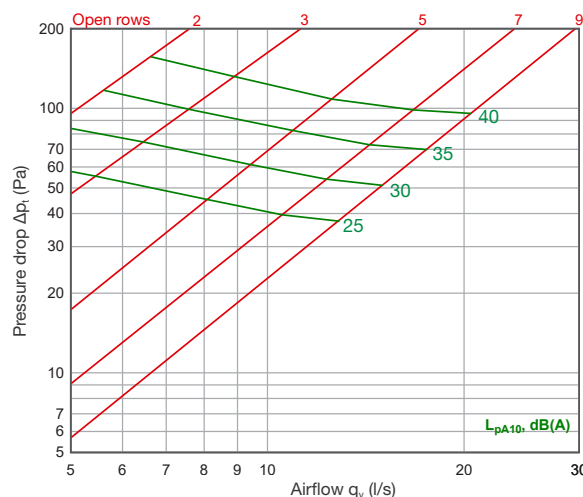


### Technical data

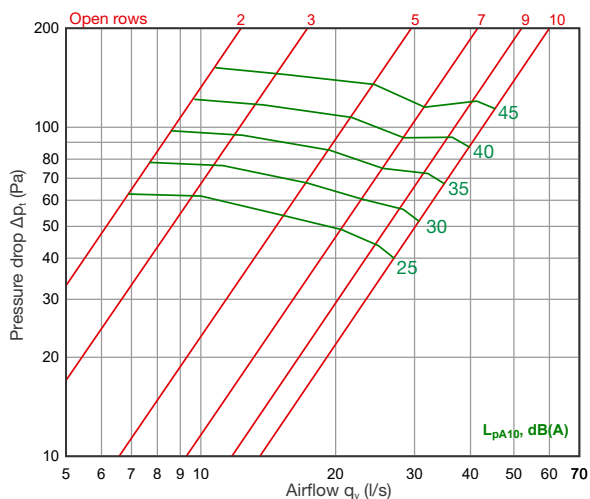
DSK-P 100



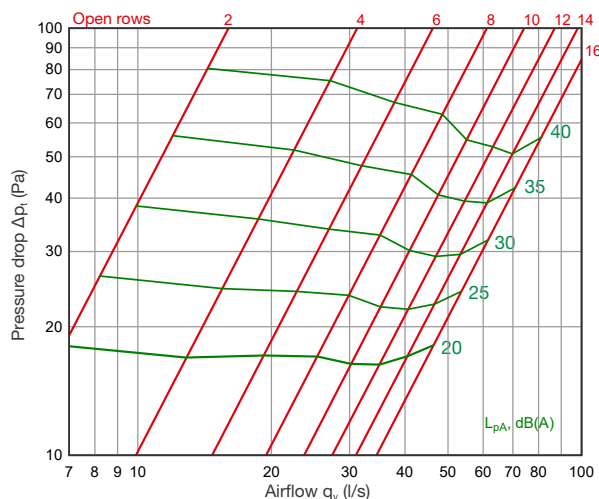
DSK-P2 100



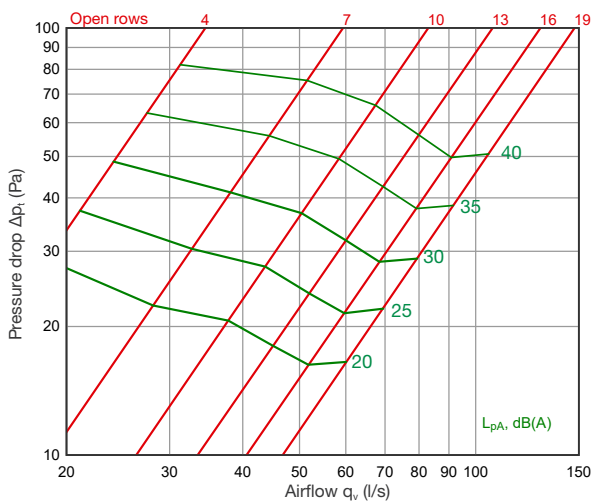
**DSK-P 125**



**DSK 160**

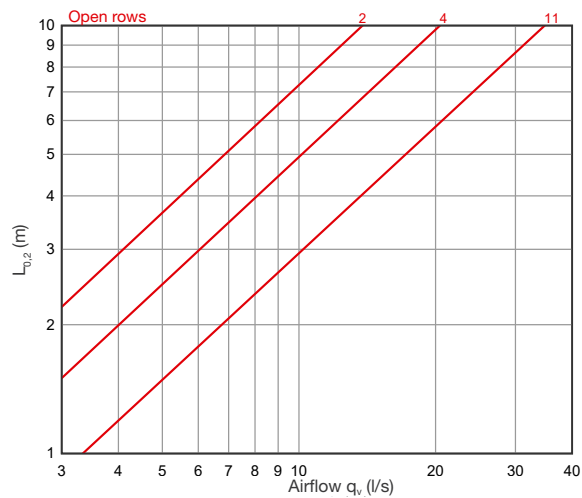


**DSK 200**

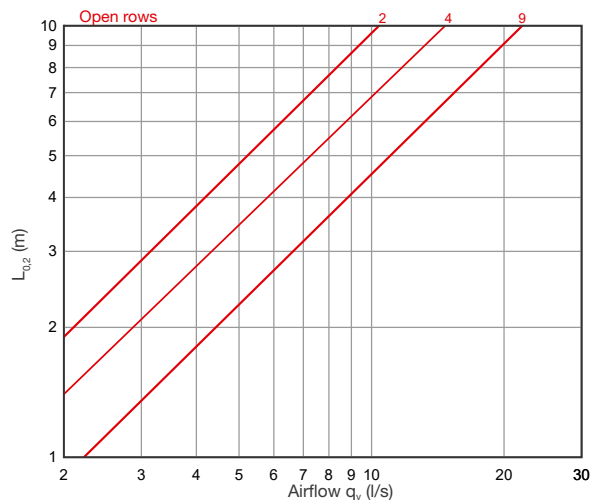


## Throw

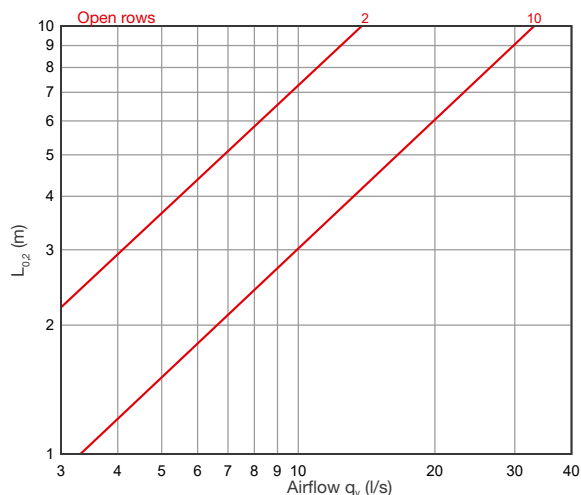
**DSK-P 100**



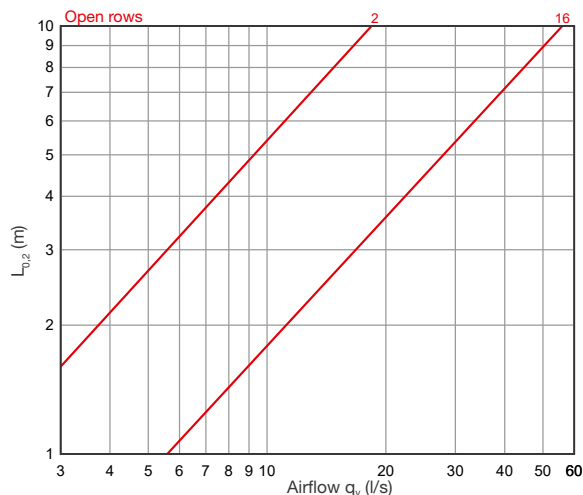
**DSK-P2 100**



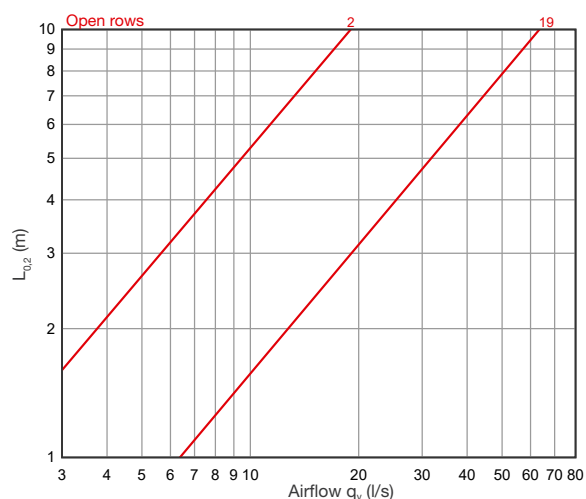
**DSK-P 125**



**DSK 160**



**DSK 200**



## Acoustic data

DSK-P 100, mean octave sound power level:  $L_{w_{okt}} = L_{pA} + K$

| Adjust-<br>ment | Correction for octave band $K_{okt}$ (dB) |     |     |     |    |    |     |     |
|-----------------|-------------------------------------------|-----|-----|-----|----|----|-----|-----|
|                 | Hz                                        |     |     |     |    |    |     |     |
|                 | 63                                        | 125 | 250 | 500 | 1k | 2k | 4k  | 8k  |
| 11              | 1                                         | -2  | -2  | 0   | 0  | -3 | -15 | -19 |
| 9               | -2                                        | 0   | -1  | 1   | 0  | -4 | -14 | -18 |
| 7               | -2                                        | -2  | -1  | 1   | 0  | -3 | -14 | -18 |
| 5               | -1                                        | 0   | 0   | 0   | 0  | -2 | -11 | -18 |
| 3               | -3                                        | -2  | 0   | 0   | -1 | -1 | -9  | -17 |
| 2               | -1                                        | -3  | -5  | -5  | -1 | -1 | -5  | -14 |

| Adjust-<br>ment | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|-----------------|------------------------------------|-----|-----|-----|----|----|----|----|
|                 | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                 | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 11              | 22                                 | 17  | 10  | 5   | 1  | 2  | 2  | 4  |
| 7               | 22                                 | 17  | 10  | 4   | 2  | 4  | 4  | 6  |
| 3               | 22                                 | 17  | 9   | 4   | 7  | 8  | 7  | 9  |

DSK-P2 100,  $L_{w_{okt}} = L_{pA} + K$

| Adjust-<br>ment | Correction for octave band $K_{okt}$ (dB) |     |     |     |    |    |     |     |
|-----------------|-------------------------------------------|-----|-----|-----|----|----|-----|-----|
|                 | Hz                                        |     |     |     |    |    |     |     |
|                 | 63                                        | 125 | 250 | 500 | 1k | 2k | 4k  | 8k  |
| 9               | -3                                        | -2  | -3  | 0   | 0  | -4 | -14 | -17 |
| 7               | -2                                        | -1  | -1  | 0   | 0  | -4 | -14 | -18 |
| 5               | 0                                         | 1   | 0   | 1   | 1  | -3 | -12 | -17 |
| 3               | -1                                        | 0   | -2  | 0   | 0  | -1 | -10 | -17 |
| 2               | -2                                        | -4  | -4  | -6  | -2 | 0  | -6  | -15 |

| Adjust-<br>ment | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|-----------------|------------------------------------|-----|-----|-----|----|----|----|----|
|                 | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                 | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 7               | 22                                 | 17  | 10  | 4   | 2  | 4  | 4  | 6  |
| 3               | 22                                 | 17  | 9   | 4   | 7  | 8  | 7  | 9  |



DSK-P 125, mean octave sound power level:  $L_{w_{\text{okt}}} = L_{pA} + K$

| Adjust-<br>ment | Correction for octave band $K_{\text{okt}}$ (dB) |     |     |     |    |    |     |     |
|-----------------|--------------------------------------------------|-----|-----|-----|----|----|-----|-----|
|                 | Hz                                               |     |     |     |    |    |     |     |
|                 | 63                                               | 125 | 250 | 500 | 1k | 2k | 4k  | 8k  |
| 10              | 2                                                | -1  | -2  | 0   | -1 | -2 | -12 | -18 |
| 9               | 3                                                | -2  | -2  | -1  | -1 | -1 | -11 | -18 |
| 7               | 2                                                | -1  | -3  | -2  | -2 | 0  | -10 | -18 |
| 5               | 2                                                | -1  | -2  | -2  | -2 | 0  | -9  | -17 |
| 3               | -2                                               | -3  | -7  | -5  | -3 | 0  | -7  | -16 |
| 2               | -2                                               | -5  | -8  | -5  | -3 | 0  | -7  | -16 |

| Adjust-<br>ment | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|-----------------|------------------------------------|-----|-----|-----|----|----|----|----|
|                 | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                 | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 10              | 19                                 | 14  | 8   | 4   | 0  | 1  | 2  | 4  |
| 7               | 19                                 | 14  | 8   | 4   | 1  | 3  | 5  | 6  |
| 3               | 20                                 | 15  | 9   | 5   | 6  | 7  | 8  | 10 |

DSK 160, mean octave sound power level:  $L_{w_{\text{okt}}} = L_{pA} + K$

| Adjust-<br>ment | Correction for octave band $K_{\text{okt}}$ (dB) |     |     |     |    |    |     |     |
|-----------------|--------------------------------------------------|-----|-----|-----|----|----|-----|-----|
|                 | Hz                                               |     |     |     |    |    |     |     |
|                 | 63                                               | 125 | 250 | 500 | 1k | 2k | 4k  | 8k  |
| 16              | -11                                              | -8  | -8  | -6  | -3 | -7 | -17 | -27 |
| 14              | -13                                              | -8  | -8  | -6  | -3 | -7 | -17 | -26 |
| 12              | -13                                              | -8  | -7  | -6  | -2 | -7 | -17 | -26 |
| 10              | -13                                              | -8  | -8  | -5  | -3 | -8 | -16 | -24 |
| 8               | -12                                              | -6  | -8  | -6  | -3 | -7 | -16 | -23 |
| 6               | -16                                              | -9  | -9  | -6  | -3 | -7 | -15 | -23 |
| 4               | -16                                              | -11 | -10 | -8  | -3 | -6 | -14 | -22 |
| 2               | -18                                              | -16 | -15 | -9  | -2 | -7 | -12 | -21 |

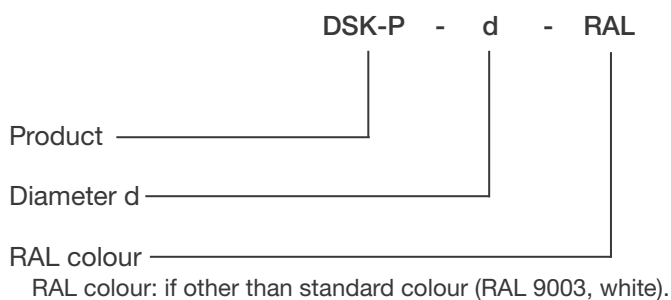
| Adjust-<br>ment | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|-----------------|------------------------------------|-----|-----|-----|----|----|----|----|
|                 | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                 | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 16              | 18                                 | 12  | 6   | 3   | 1  | 1  | 2  | 3  |
| 8               | 18                                 | 12  | 6   | 3   | 5  | 4  | 4  | 6  |
| 2               | 19                                 | 14  | 8   | 7   | 9  | 7  | 9  | 11 |

DSK 200, mean octave sound power level:  $L_{w_{\text{okt}}} = L_{pA} + K$

| Adjust-<br>ment | Correction for octave band $K_{\text{okt}}$ (dB) |     |     |     |    |    |     |     |
|-----------------|--------------------------------------------------|-----|-----|-----|----|----|-----|-----|
|                 | Hz                                               |     |     |     |    |    |     |     |
|                 | 63                                               | 125 | 250 | 500 | 1k | 2k | 4k  | 8k  |
| 19              | -9                                               | -6  | -7  | -5  | -3 | -8 | -18 | -28 |
| 16              | -10                                              | -6  | -8  | -5  | -2 | -8 | -18 | -27 |
| 13              | -9                                               | -6  | -7  | -5  | -3 | -7 | -17 | -26 |
| 10              | -10                                              | -5  | -7  | -6  | -3 | -6 | -15 | -25 |
| 7               | -11                                              | -5  | -7  | -6  | -4 | -6 | -14 | -22 |
| 4               | -12                                              | -9  | -10 | -8  | -5 | -5 | -11 | -21 |

| Adjust-<br>ment | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|-----------------|------------------------------------|-----|-----|-----|----|----|----|----|
|                 | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                 | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 19              | 15                                 | 9   | 6   | 2   | 0  | 1  | 1  | 3  |
| 10              | 15                                 | 9   | 6   | 3   | 3  | 3  | 3  | 5  |
| 4               | 15                                 | 9   | 7   | 6   | 5  | 5  | 7  | 9  |

## Product codes



Example: DSK-P 125

## Other materials:

H - acid-proof steel (standards EVS-EN 10088-2:2014, EN 1.4436 or AISI 316)

## Installation

Installed directly to duct and fixed to wall with screws or with rivets to duct. Front plate simply pressed in tight against the body.

## Measurement and regulation of airflow

Measurement of airflow as pressure differential measured through a hole in the front plate.

Regulation by closing or opening nozzles.

### K-factor

A - position, opened rows

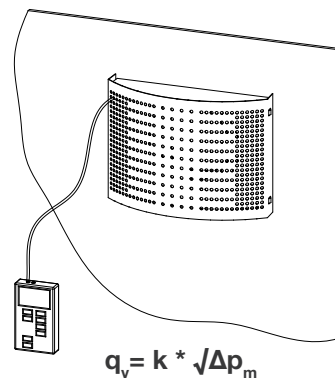
| A         | 11   | 9    | 7    | 5    | 3    | 2    |
|-----------|------|------|------|------|------|------|
| DSK-P 100 | 5,34 | 4,32 | 3,12 | 2,15 | 1,30 | 0,87 |

| A          | 9    | 7    | 5    | 3    | 2    |
|------------|------|------|------|------|------|
| DSK-P2 100 | 2,16 | 1,56 | 1,08 | 0,65 | 0,49 |

| A         | 10   | 9    | 7    | 5    | 3    | 2    |
|-----------|------|------|------|------|------|------|
| DSK-P 125 | 4,68 | 3,95 | 3,08 | 2,16 | 1,30 | 0,89 |

| A       | 16    | 14    | 12   | 10   | 8    | 6    | 4    | 2    |
|---------|-------|-------|------|------|------|------|------|------|
| DSK 160 | 13,58 | 11,59 | 9,85 | 8,13 | 6,54 | 4,76 | 3,17 | 1,59 |

| A       | 19    | 16    | 13    | 10   | 7    | 4    |
|---------|-------|-------|-------|------|------|------|
| DSK 200 | 17,47 | 14,95 | 11,72 | 8,92 | 6,09 | 3,47 |



## DEN Diffuser for supply air

Supply air diffuser with round plenum box for visible installation.

### Features:

- visible installation
- duct sizes Ø 100-315 mm
- easy to clean
- low noise level
- with measuring and regulating device

Air jets through the side and perforated front plate.  
Easily removable front plate makes cleaning easy.

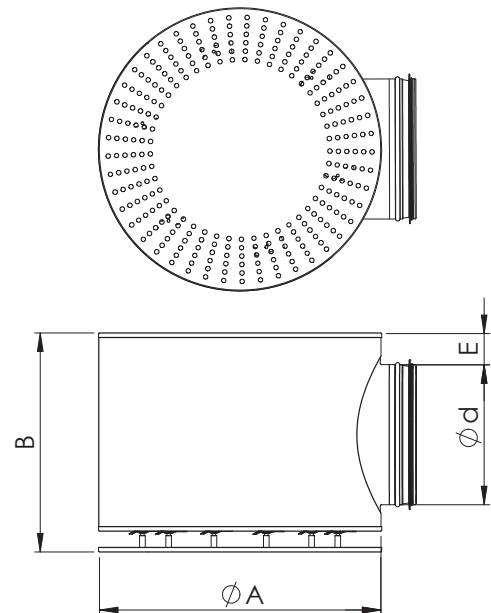


### Material and sizes

Manufactured of galvanized steel and coated with white (RAL 9003) polyester powder coating.

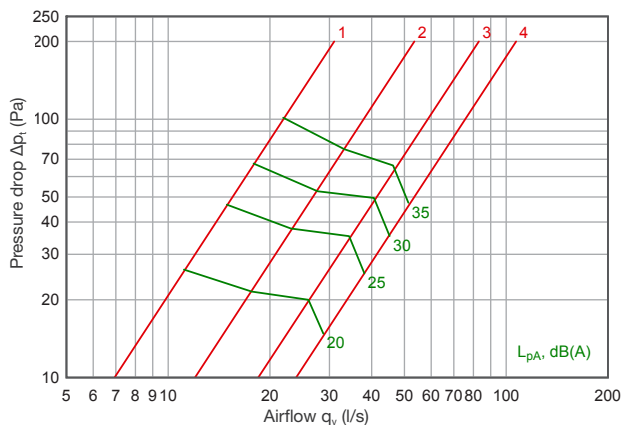
Round duct connection with rubber gasket.

| Nominal size | Ød    | ØA  | B   | E  | Weight (kg) |
|--------------|-------|-----|-----|----|-------------|
| 100          | 99,3  | 350 | 240 | 36 | 2,5         |
| 125          | 124,3 | 350 | 240 | 38 | 3,0         |
| 160          | 159,3 | 400 | 275 | 41 | 4,5         |
| 200          | 199,3 | 450 | 305 | 31 | 7,2         |
| 250          | 249,3 | 500 | 395 | 56 | 11,0        |
| 315          | 314,3 | 600 | 487 | 56 | 12,0        |

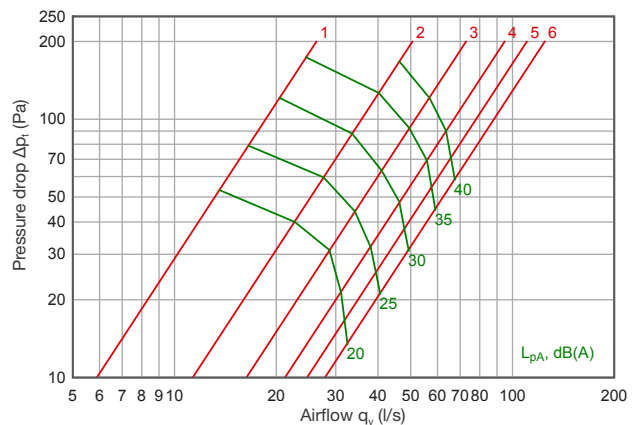


### Technical data

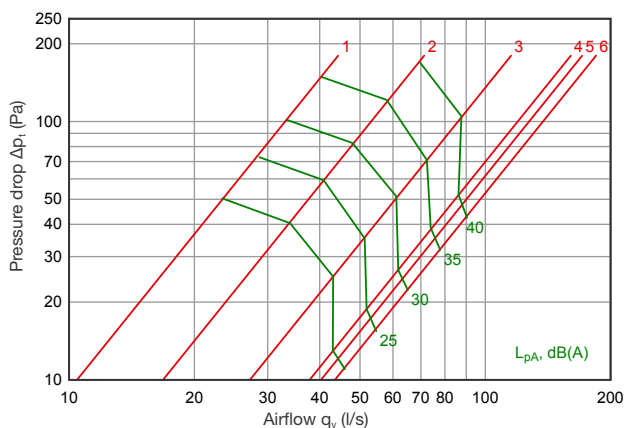
#### DEN 100



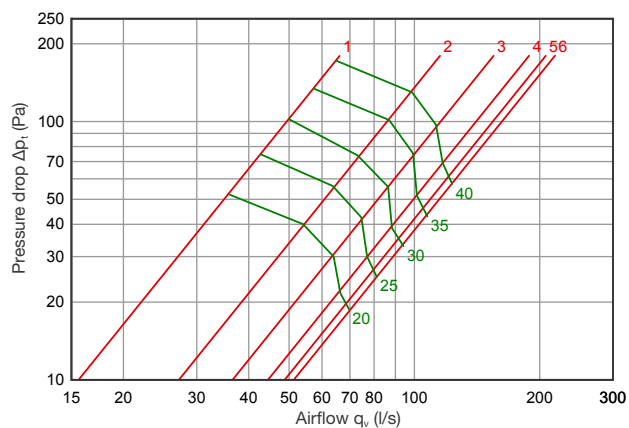
#### DEN 125



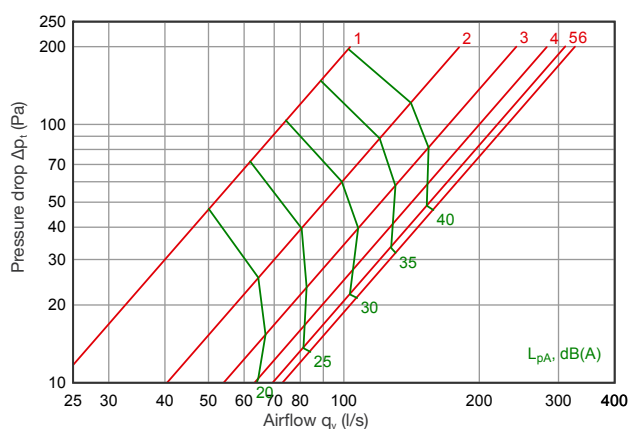
**DEN 160**



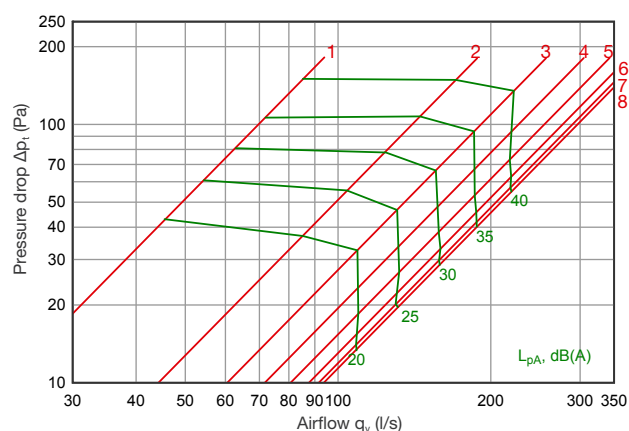
**DEN 200**



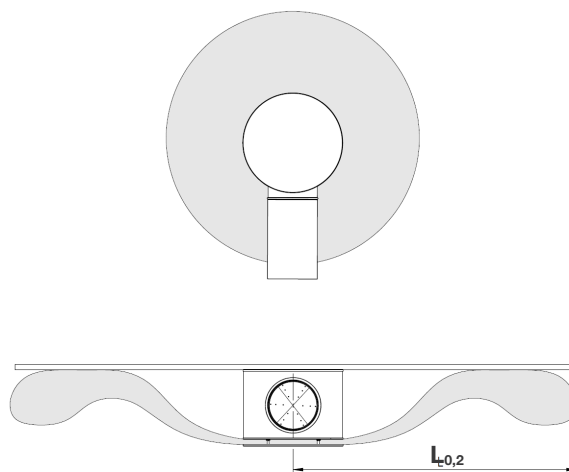
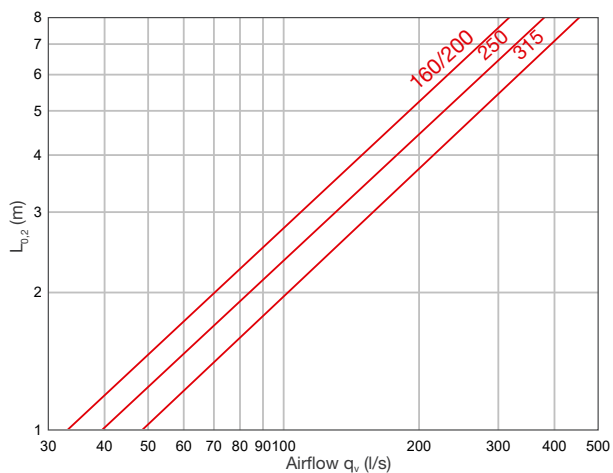
**DEN 250**



**DEN 315**



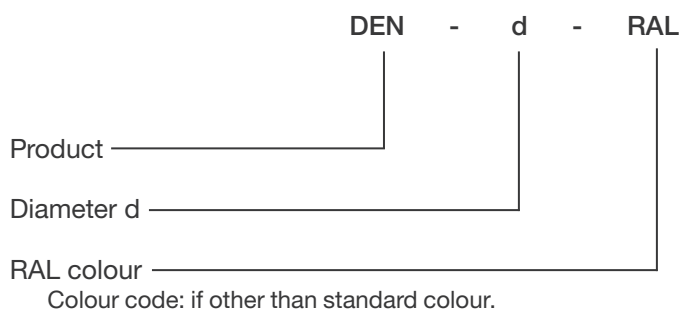
### Throw



### K-factor

| Nominal size | Position |      |      |      |      |      |      |      |
|--------------|----------|------|------|------|------|------|------|------|
|              | 1        | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
| DEN 100      | 2,2      | 3,7  | 5,4  | 6,7  |      |      |      |      |
| DEN 125      | 1,85     | 3,65 | 5,35 | 7,25 | 8,60 | 9,80 |      |      |
| DEN 160      | 3,3      | 5,6  | 9,1  | 13   | 14,7 | 17   |      |      |
| DEN 200      | 5,2      | 10   | 15,1 | 21,3 | 26,1 | 29,3 |      |      |
| DEN 250      | 8,7      | 16,6 | 24,2 | 33,7 | 40,6 | 43,5 |      |      |
| DEN 315      | 7,8      | 18   | 27,9 | 36,1 | 47,5 | 56,5 | 86,4 | 91,3 |

## Product codes



Example:      DEN 200  
                   DEN 200 RAL9006

## DEK Ceiling diffuser

DEK is a rectangular ceiling diffuser for duct connections Ø 100-400 mm.

Air is directed into the room through the side slots and perforated front panel.

Diffuser front plate is easily removable, making the cleaning process more comfortable and less time consuming.

The diffuser is generally used with the SKDM plenum box.



### Features:

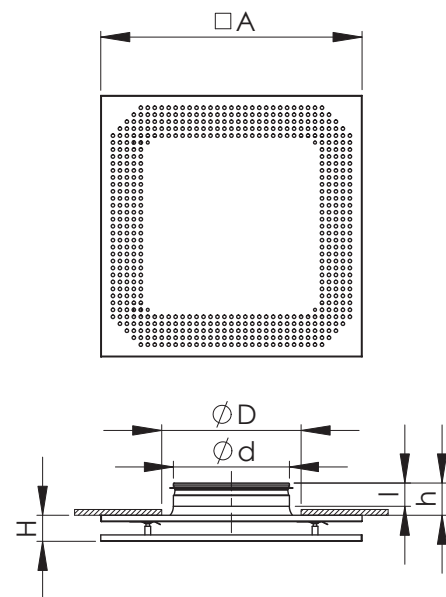
- low noise level
- removable front plate makes cleaning easy



### Structure and dimensions

Manufactured of galvanized steel and coated white (RAL 9003).  
Round duct connection with rubber gasket.

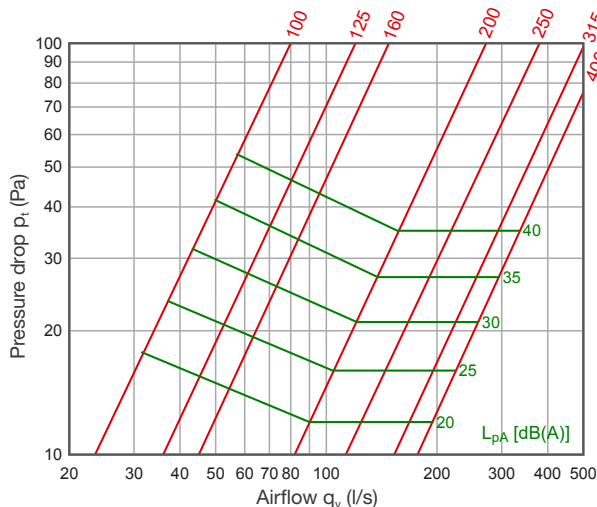
| Nominal size | Ød  | A   | H  | ØD  | h  | l  |
|--------------|-----|-----|----|-----|----|----|
| 100-300      | 100 | 300 | 47 | 130 | 45 | 40 |
| 125-350      | 125 | 350 | 47 | 170 | 50 | 40 |
| 160-350      | 160 | 350 | 47 | 210 | 55 | 40 |
| 200-450      | 200 | 450 | 47 | 250 | 55 | 40 |
| 200-600      | 200 | 595 | 47 | 250 | 55 | 40 |
| 250-450      | 250 | 450 | 47 | 300 | 55 | 40 |
| 250-600      | 250 | 595 | 47 | 300 | 55 | 40 |
| 315-600      | 315 | 595 | 47 | 365 | 55 | 40 |
| 400-600      | 400 | 595 | 47 | 450 | 90 | 75 |



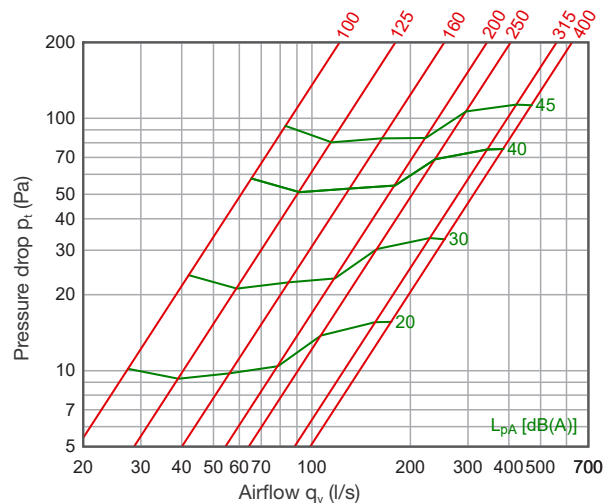
### Technical data

#### Airflow - pressure drop - sound level

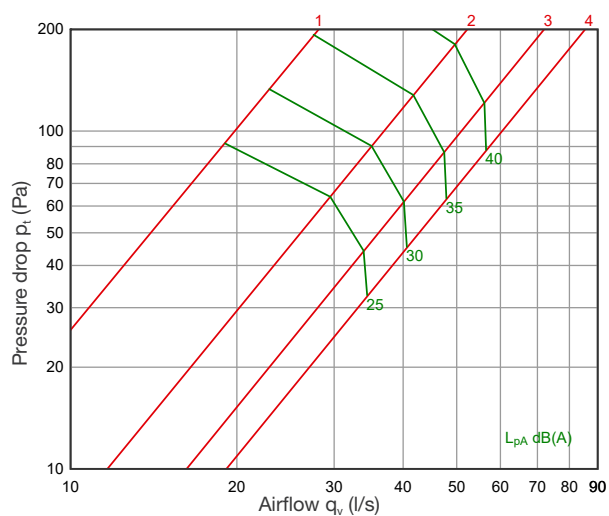
##### Supply air



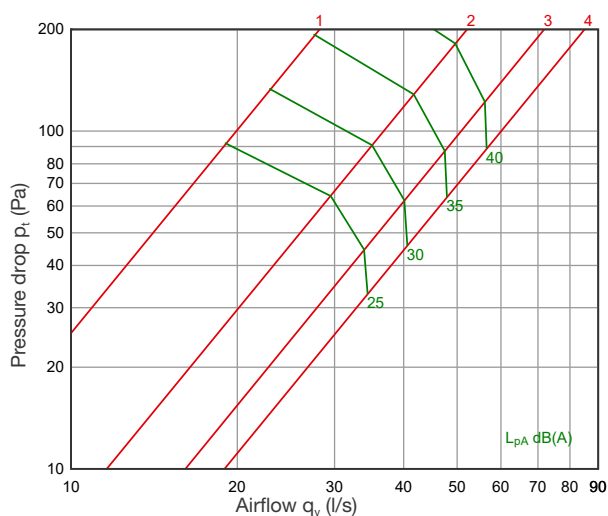
##### Exhaust air



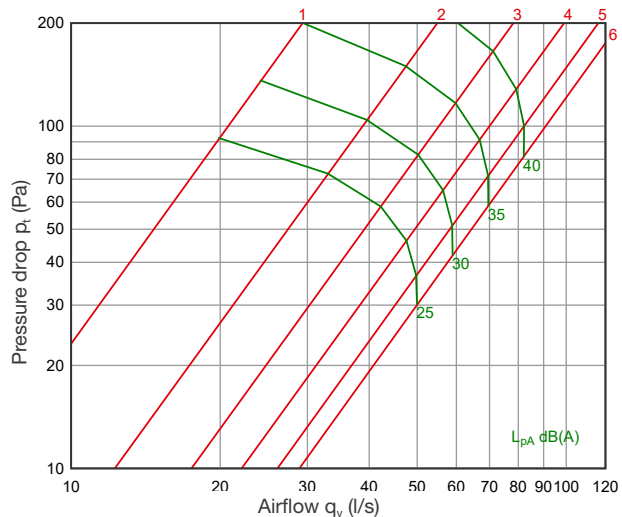
**DEK 100 + SKDM 100/100**



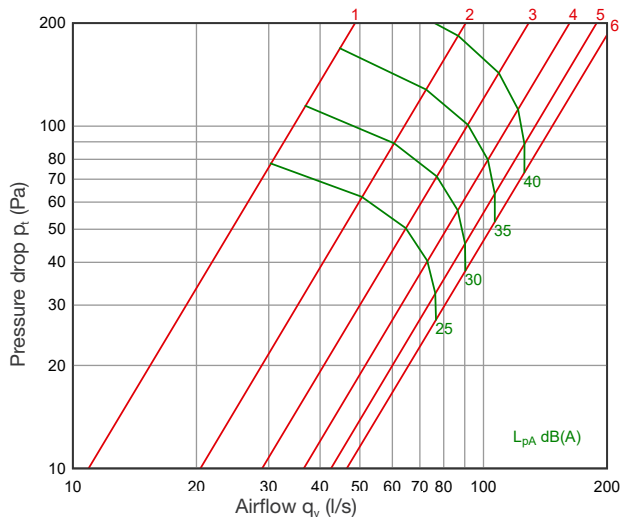
**DEK 125 + SKDM 100/125**



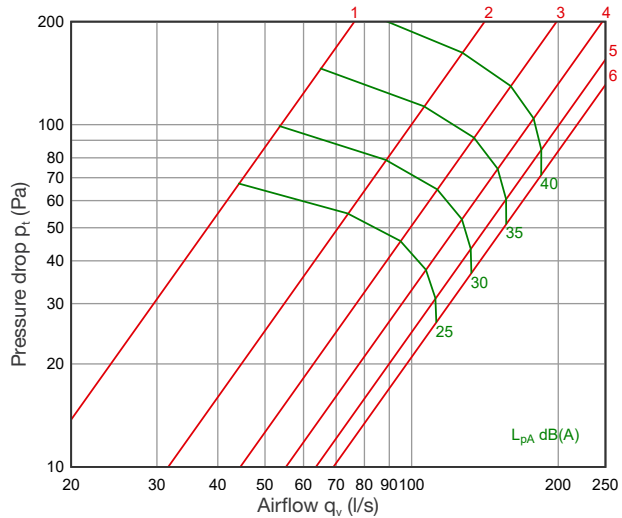
**DEK 160 + SKDM 125/160**



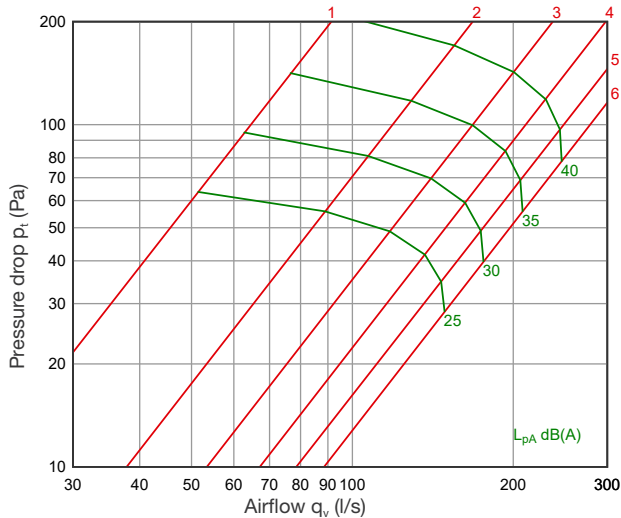
**DEK 200 + SKDM 160/200**



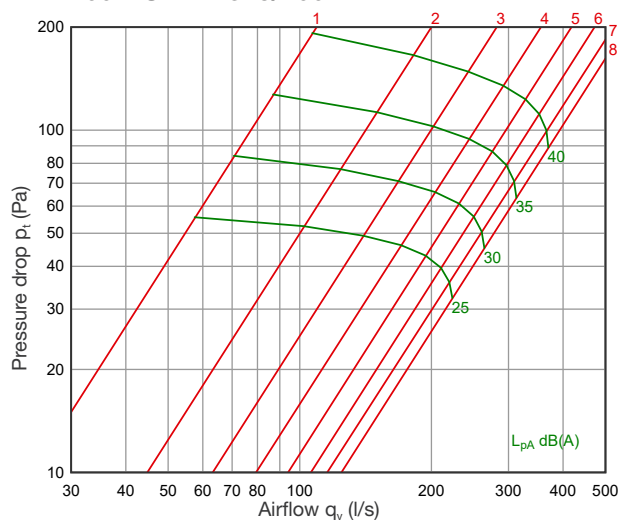
**DEK 250 + SKDM 200/250**



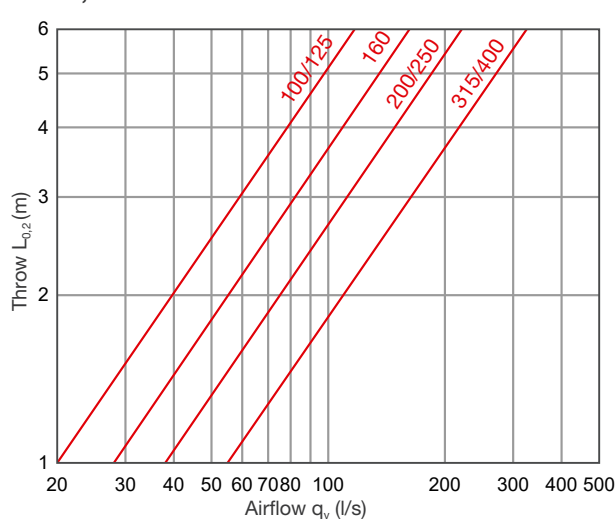
**DEK 315 + SKDM 250/315**



**DEK 400 + SKDM 315/400**



**DEK, throw**



## Acoustic data

| DEK Size | Sound level correction factor $K_{okt}$ (dB) |     |     |     |    |     |     |     |
|----------|----------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|          | Hz                                           |     |     |     |    |     |     |     |
|          | 63                                           | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| 100      | 6                                            | 3   | 2   | 2   | -1 | -3  | -10 | -19 |
| 125      | 14                                           | 11  | 7   | 1   | -1 | -1  | -14 | -19 |
| 160      | 14                                           | 11  | 5   | 1   | 0  | -9  | -14 | -19 |
| 200      | 11                                           | 8   | 4   | 2   | 0  | -9  | -14 | -19 |
| 250      | 11                                           | 8   | 2   | 3   | -1 | -9  | -14 | -19 |
| 315      | 14                                           | 11  | 3   | 2   | -2 | -6  | -14 | -19 |
| 400      | 15                                           | 12  | 4   | 2   | -2 | -11 | -14 | -19 |

| DEK Size | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 100      | 18                                 | 15  | 10  | 4   | 5  | 5  | 2  | 4  |
| 125      | 17                                 | 14  | 9   | 4   | 4  | 2  | 3  | 4  |
| 160      | 16                                 | 13  | 8   | 4   | 3  | 2  | 4  | 5  |
| 200      | 13                                 | 10  | 7   | 5   | 3  | 2  | 3  | 5  |
| 250      | 12                                 | 9   | 5   | 5   | 3  | 3  | 4  | 6  |
| 315      | 11                                 | 8   | 6   | 5   | 2  | 3  | 4  | 5  |
| 400      | 11                                 | 8   | 7   | 5   | 2  | 2  | 4  | 7  |

$$L_w = L_{pA10} + K_{okt}$$

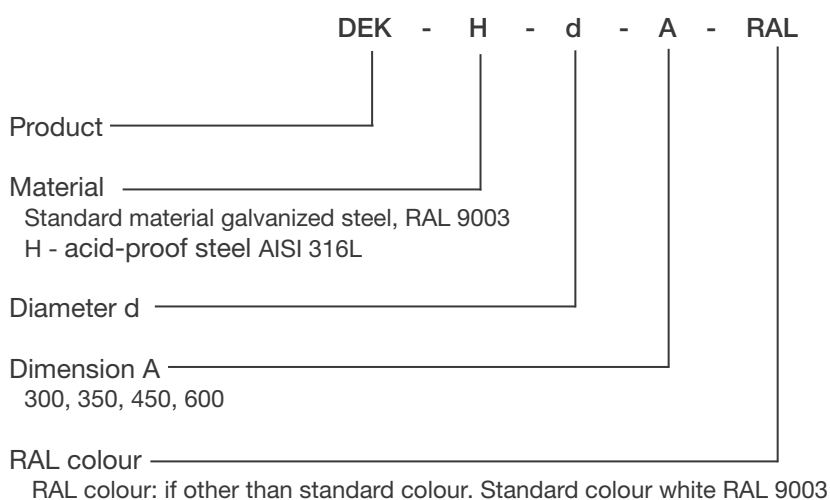
| DEK+SKDM                  | Position | K-factor | Sound level correction factor $K_{okt}$ (dB) |     |     |     |    |     |     |     |
|---------------------------|----------|----------|----------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|                           |          |          | 63                                           | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DEK 100<br>+ SKDM 100/100 | s = 1    | 2,0      | 1                                            | 4   | -2  | -6  | -6 | -8  | -12 | -17 |
|                           | s = 2    | 3,8      | 4                                            | 7   | 0   | -4  | -6 | -11 | -17 | -22 |
|                           | s = 3    | 5,4      | 5                                            | 9   | 2   | -3  | -6 | -13 | -19 | -25 |
|                           | s = 4    | 6,6      | 7                                            | 11  | 3   | -3  | -6 | -14 | -21 | -27 |
| DEK 125<br>+ SKDM 100/125 | s = 1    | 2,0      | 1                                            | 4   | -2  | -6  | -6 | -8  | -12 | -17 |
|                           | s = 2    | 3,8      | 4                                            | 7   | 0   | -4  | -6 | -11 | -17 | -22 |
|                           | s = 3    | 5,4      | 5                                            | 9   | 2   | -3  | -6 | -13 | -19 | -25 |
|                           | s = 4    | 6,6      | 7                                            | 11  | 3   | -3  | -6 | -14 | -21 | -27 |
| DEK 160<br>+ SKDM 125/160 | s = 1    | 2,1      | -2                                           | 1   | -4  | -6  | -6 | -5  | -8  | -13 |
|                           | s = 2    | 4,0      | 1                                            | 5   | -1  | -5  | -6 | -8  | -13 | -19 |
|                           | s = 3    | 5,8      | 3                                            | 7   | 0   | -4  | -6 | -10 | -16 | -22 |
|                           | s = 4    | 7,4      | 4                                            | 8   | 1   | -3  | -6 | -12 | -18 | -24 |
|                           | s = 5    | 8,8      | 5                                            | 9   | 2   | -3  | -6 | -13 | -19 | -26 |
|                           | s = 6    | 10,0     | 5                                            | 10  | 3   | -3  | -6 | -13 | -21 | -27 |
| DEK 200<br>+ SKDM 160/200 | s = 1    | 3,5      | -2                                           | 1   | -4  | -6  | -6 | -5  | -8  | -14 |
|                           | s = 2    | 6,7      | 0                                            | 4   | -1  | -5  | -6 | -8  | -13 | -19 |
|                           | s = 3    | 9,6      | 2                                            | 6   | 0   | -4  | -6 | -10 | -15 | -22 |
|                           | s = 4    | 12,2     | 3                                            | 7   | 1   | -3  | -7 | -11 | -17 | -24 |
|                           | s = 5    | 14,6     | 4                                            | 8   | 2   | -3  | -7 | -12 | -19 | -26 |
|                           | s = 6    | 16,7     | 4                                            | 9   | 3   | -2  | -7 | -13 | -20 | -27 |



| DEK+SKDM                  | Position | K-factor | Sound level correction factor $K_{\text{okt}}$ (dB) |     |     |     |    |     |     |     |
|---------------------------|----------|----------|-----------------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|                           |          |          | 63                                                  | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DEK 250<br>+ SKDM 200/250 | s = 1    | 5,5      | -1                                                  | 2   | -3  | -6  | -6 | -6  | -8  | -13 |
|                           | s = 2    | 10,5     | 2                                                   | 5   | -1  | -5  | -6 | -9  | -13 | -19 |
|                           | s = 3    | 15,1     | 4                                                   | 7   | 1   | -4  | -6 | -11 | -16 | -22 |
|                           | s = 4    | 19,2     | 5                                                   | 9   | 2   | -3  | -6 | -12 | -18 | -24 |
|                           | s = 5    | 22,9     | 5                                                   | 10  | 3   | -3  | -6 | -13 | -19 | -26 |
|                           | s = 6    | 26,1     | 6                                                   | 11  | 3   | -2  | -6 | -14 | -21 | -27 |
| DEK 315<br>+ SKDM 250/315 | s = 1    | 6,4      | 0                                                   | 2   | -4  | -7  | -5 | -5  | -7  | -11 |
|                           | s = 2    | 12,5     | 3                                                   | 5   | -1  | -5  | -6 | -9  | -11 | -16 |
|                           | s = 3    | 18,1     | 4                                                   | 7   | 0   | -4  | -6 | -10 | -14 | -19 |
|                           | s = 4    | 23,4     | 5                                                   | 8   | 1   | -4  | -6 | -12 | -16 | -22 |
|                           | s = 5    | 28,3     | 6                                                   | 9   | 2   | -3  | -6 | -13 | -18 | -23 |
|                           | s = 6    | 32,8     | 7                                                   | 10  | 3   | -3  | -6 | -14 | -19 | -25 |
| DEK 400<br>+ SKDM 315/400 | s = 1    | 7,5      | -1                                                  | 0   | -5  | -7  | -5 | -4  | -4  | -8  |
|                           | s = 2    | 14,7     | 1                                                   | 4   | -2  | -6  | -6 | -7  | -9  | -14 |
|                           | s = 3    | 21,5     | 3                                                   | 5   | -1  | -5  | -6 | -9  | -12 | -17 |
|                           | s = 4    | 28,0     | 4                                                   | 7   | 0   | -4  | -6 | -10 | -14 | -19 |
|                           | s = 5    | 34,2     | 5                                                   | 8   | 1   | -4  | -6 | -11 | -15 | -21 |
|                           | s = 6    | 40,1     | 6                                                   | 9   | 2   | -4  | -6 | -12 | -17 | -22 |
|                           | s = 7    | 45,6     | 6                                                   | 10  | 2   | -3  | -6 | -13 | -18 | -23 |
|                           | s = 8    | 50,9     | 7                                                   | 10  | 3   | -3  | -6 | -13 | -19 | -24 |

| DEK+SKDM               | Position | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|------------------------|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|                        |          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                        |          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DEK 100 + SKDM 100/100 | s = 1    | 21                                 | 18  | 16  | 17  | 25 | 20 | 20 | 21 |
|                        | s = 4    | 21                                 | 18  | 16  | 18  | 18 | 17 | 16 | 12 |
| DEK 125 + SKDM 100/125 | s = 1    | 21                                 | 18  | 16  | 17  | 25 | 20 | 20 | 21 |
|                        | s = 4    | 21                                 | 18  | 16  | 18  | 18 | 17 | 16 | 12 |
| DEK 160 + SKDM 125/160 | s = 1    | 20                                 | 16  | 16  | 17  | 21 | 17 | 20 | 21 |
|                        | s = 6    | 19                                 | 15  | 15  | 17  | 16 | 15 | 15 | 13 |
| DEK 200 + SKDM 160/200 | s = 1    | 18                                 | 13  | 15  | 18  | 19 | 13 | 19 | 22 |
|                        | s = 6    | 17                                 | 13  | 14  | 17  | 14 | 13 | 15 | 14 |
| DEK 250 + SKDM 200/250 | s = 1    | 14                                 | 12  | 14  | 18  | 18 | 17 | 20 | 20 |
|                        | s = 6    | 14                                 | 11  | 13  | 16  | 14 | 14 | 16 | 16 |
| DEK 315 + SKDM 250/315 | s = 1    | 11                                 | 11  | 13  | 18  | 18 | 19 | 20 | 19 |
|                        | s = 6    | 10                                 | 10  | 13  | 16  | 14 | 15 | 17 | 18 |
| DEK 400 + SKDM 315/400 | s = 1    | 8                                  | 9   | 13  | 18  | 18 | 19 | 20 | 19 |
|                        | s = 8    | 8                                  | 9   | 12  | 16  | 14 | 15 | 17 | 18 |

## Product codes



**Example: DEK 200**

## DEP Ceiling diffuser

DEP is a rectangular ceiling diffuser for supply and exhaust air. The diffuser is with smooth surface and duct connections are for Ø 125-400 mm.

Air is directed into the room through the side slots.

Features:

- Low noise level
- Removable front plate makes cleaning easy
- Elegant design
- Precise and fast airflow adjustment
- Available in various RAL-colors

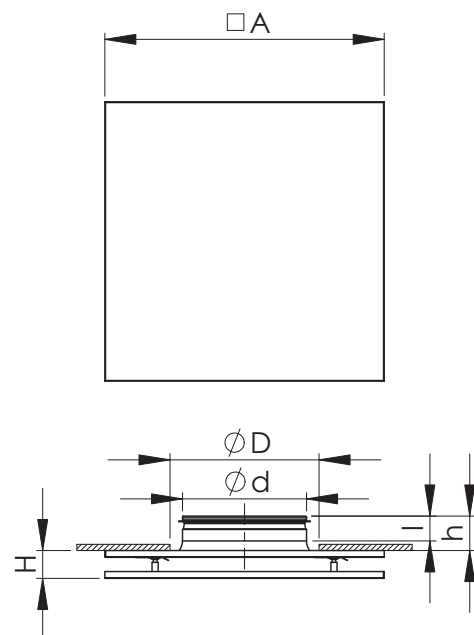
The diffuser is generally used with the SKDM plenum box.



### Structure and dimensions

Manufactured of galvanized steel and coated white (RAL 9003).  
Round duct connection with rubber gasket.

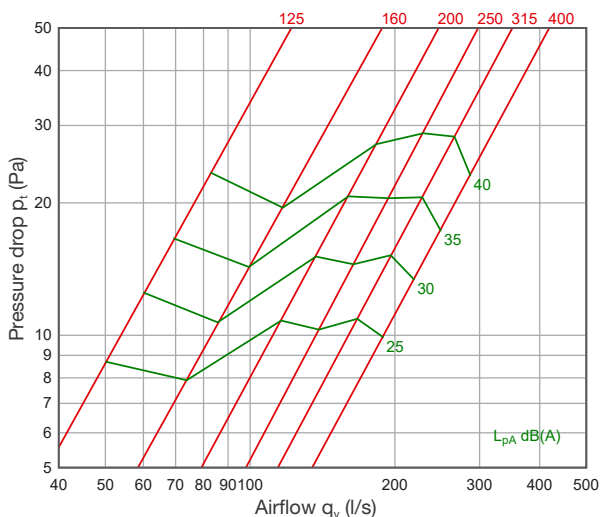
| Nominal size | Ød  | A   | H  | ØD  | h  | l  |
|--------------|-----|-----|----|-----|----|----|
| 125-350      | 125 | 350 | 47 | 170 | 50 | 40 |
| 160-350      | 160 | 350 | 47 | 210 | 55 | 40 |
| 200-450      | 200 | 450 | 47 | 250 | 55 | 40 |
| 200-600      | 200 | 595 | 47 | 250 | 55 | 40 |
| 250-450      | 250 | 450 | 47 | 300 | 55 | 40 |
| 250-600      | 250 | 595 | 47 | 300 | 55 | 40 |
| 315-600      | 315 | 595 | 47 | 365 | 55 | 40 |
| 400-600      | 400 | 595 | 47 | 450 | 90 | 75 |



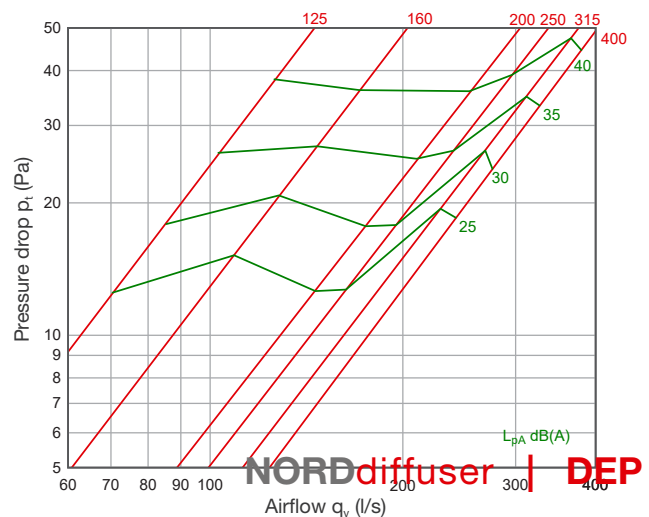
### Technical data

Airflow - pressure drop - sound level

Supply air

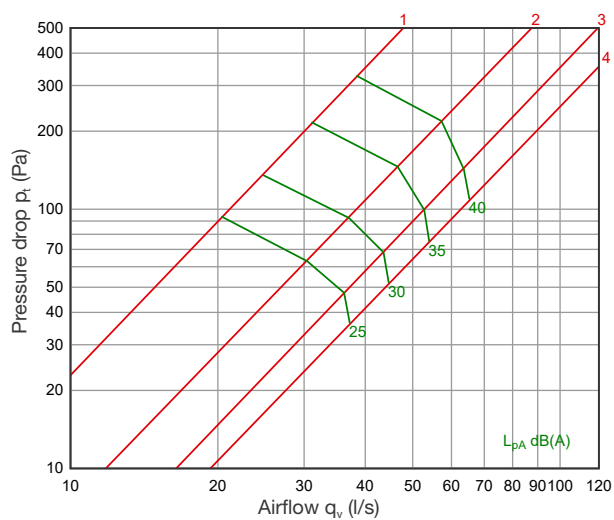


Exhaust air

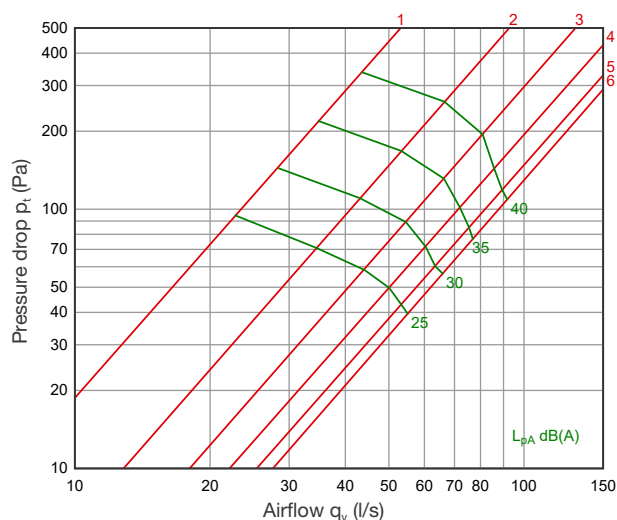


Supply air

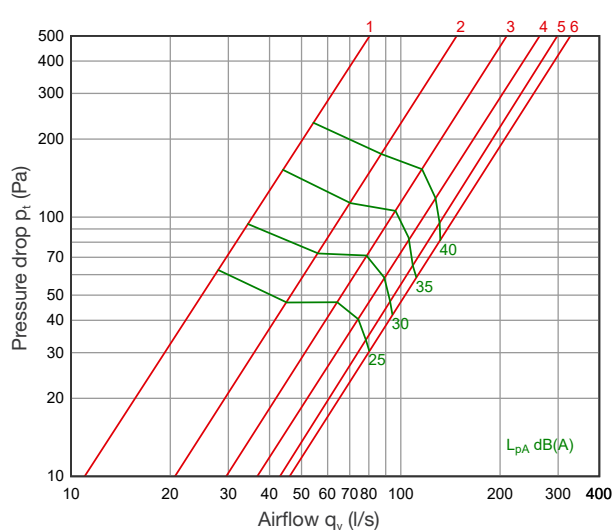
**DEP 125 + SKDM 100/125**



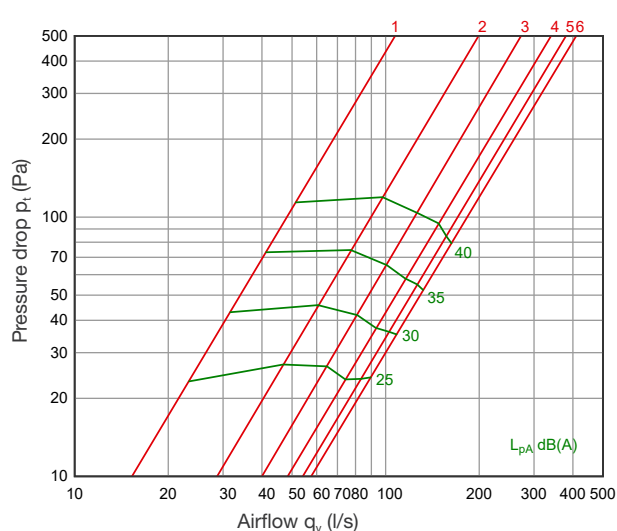
**DEP 160 + SKDM 125/160**



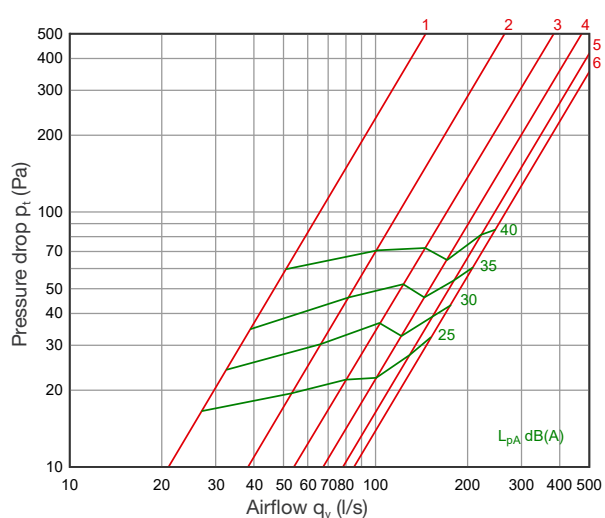
**DEP 200 + SKDM 160/200**



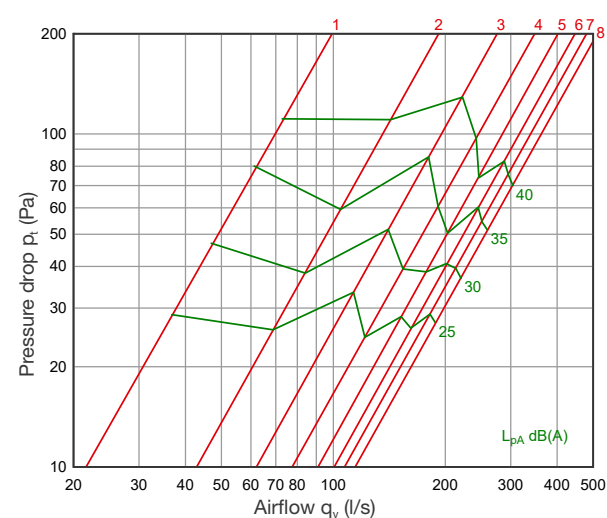
**DEP 250 + SKDM 200/250**



**DEP 315 + SKDM 250/315**

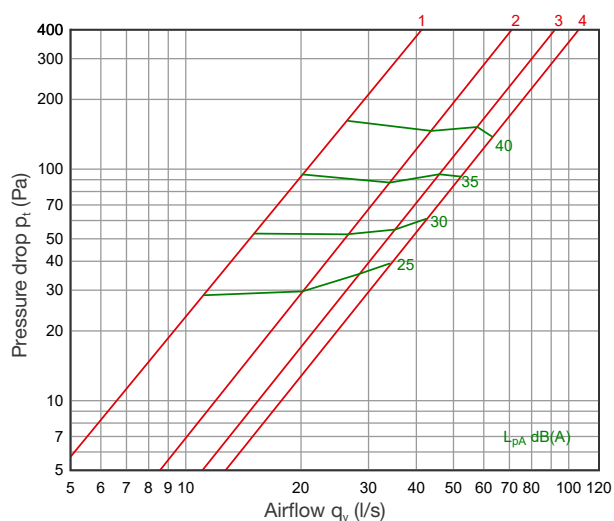


**DEP 400 + SKDM 315/400**

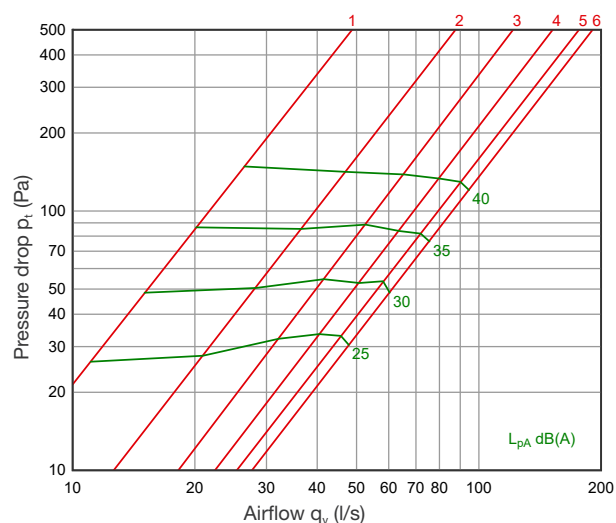


## Exhaust air

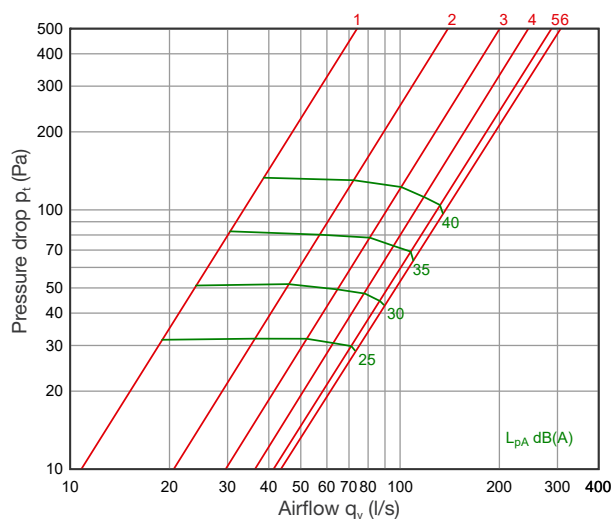
**DEP 125 + SKDM 100/125**



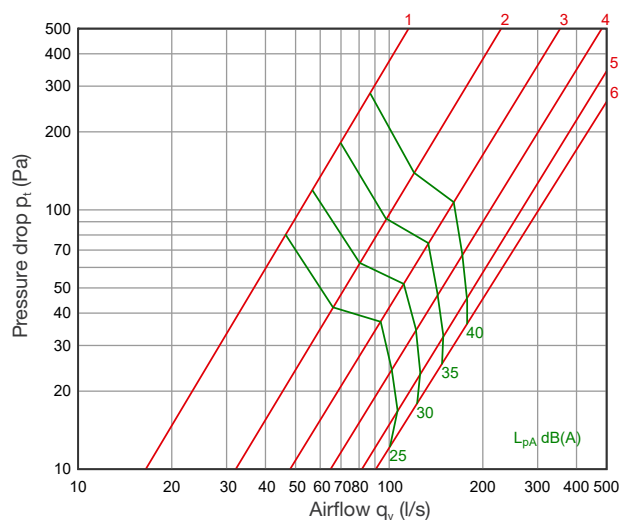
**DEP 160 + SKDM 125/160**



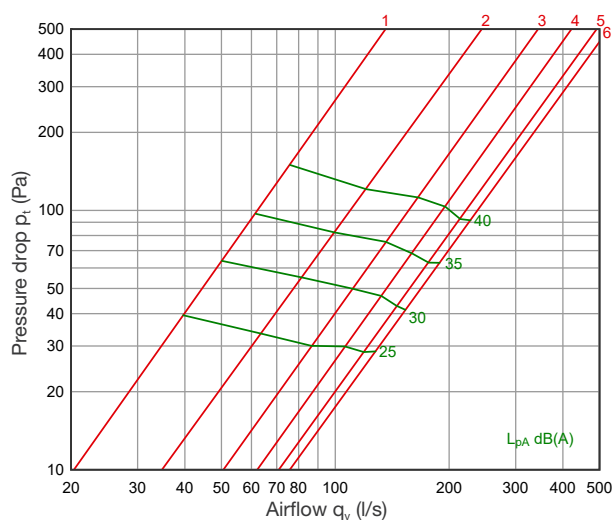
**DEP 200 + SKDM 160/200**



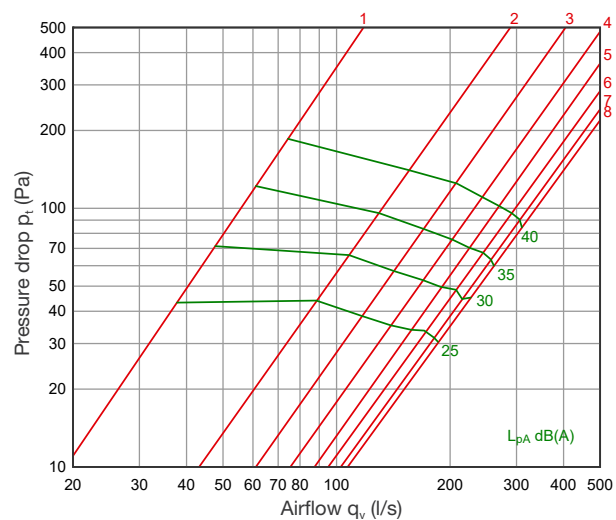
**DEP 250 + SKDM 200/250**



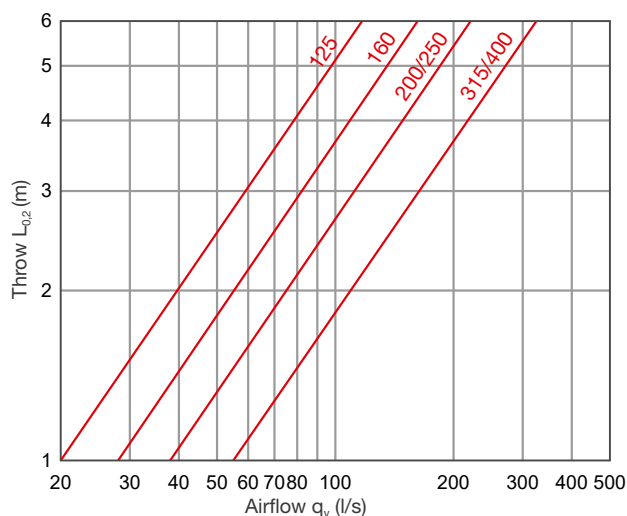
**DEP 315 + SKDM 250/315**



**DEP 400 + SKDM 315/400**



DEP, throw



## Acoustic data

### Supply air $L_{pA10} + K_{okt}$

| DEP<br>Nominal<br>size | Sound level correction factor $K_{okt}$ (dB) |      |     |      |      |       |       |       |
|------------------------|----------------------------------------------|------|-----|------|------|-------|-------|-------|
|                        | Hz                                           |      |     |      |      |       |       |       |
|                        | 63                                           | 125  | 250 | 500  | 1k   | 2k    | 4k    | 8k    |
| 125                    | 5,3                                          | 5,4  | 5,4 | 1,1  | -0,7 | -7,9  | -16,3 | -23,0 |
| 160                    | 6,2                                          | 7,8  | 8,2 | 1,1  | -2,7 | -9,9  | -19,7 | -23,9 |
| 200                    | 6,0                                          | 4,9  | 4,3 | 2,8  | -1,6 | -10,9 | -19,9 | -23,7 |
| 250                    | 7,7                                          | 7,3  | 4,6 | 2,1  | -1,3 | -10,7 | -19,9 | -23,6 |
| 315                    | 8,1                                          | 12,6 | 6,3 | 0,9  | -2,1 | -11,2 | -20,0 | -23,6 |
| 400                    | 8,7                                          | 13,8 | 8,7 | -1,2 | -5,8 | -14,1 | -21,9 | -23,7 |

| DEP<br>Nominal<br>size | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|------------------------|------------------------------------|-----|-----|-----|----|----|----|----|
|                        | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                        | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| 125                    | 22                                 | 17  | 12  | 5   | 3  | 1  | 4  | 4  |
| 160                    | 21                                 | 15  | 10  | 5   | 4  | 1  | 4  | 5  |
| 200                    | 18                                 | 14  | 9   | 5   | 2  | 2  | 5  | 5  |
| 250                    | 18                                 | 12  | 9   | 5   | 2  | 2  | 6  | 6  |
| 315                    | 14                                 | 11  | 9   | 7   | 2  | 4  | 6  | 7  |
| 400                    | 12                                 | 9   | 8   | 8   | 3  | 5  | 8  | 8  |

| DEP+SKDM                  | Position | K-factor | Sound level correction factor $K_{okt}$ (dB) |      |      |      |       |       |       |       |
|---------------------------|----------|----------|----------------------------------------------|------|------|------|-------|-------|-------|-------|
|                           |          |          | 63                                           | 125  | 250  | 500  | 1k    | 2k    | 4k    | 8k    |
| DEP 125<br>+ SKDM 100/125 | s = 1    | 2,15     | 1,6                                          | 1,9  | -2,5 | -5,0 | -8,3  | -5,7  | -9,2  | -12,2 |
|                           | s = 2    | 3,92     | 6,8                                          | 6,7  | 1,4  | -2,8 | -8,3  | -8,8  | -14,2 | -13,4 |
|                           | s = 3    | 5,43     | 9,4                                          | 7,6  | 0,9  | -2,7 | -7,4  | -12,3 | -14,1 | -13,5 |
|                           | s = 4    | 6,46     | 10,3                                         | 8,9  | 0,4  | -2,5 | -7,7  | -13,4 | -16,0 | -15,9 |
| DEP 160<br>+ SKDM 125/160 | s = 1    | 2,38     | -1,7                                         | -2,7 | -3,4 | -5,0 | -7,0  | -9,0  | -6,4  | -11,5 |
|                           | s = 2    | 4,18     | 4,4                                          | 2,4  | 1,0  | -2,6 | -6,5  | -11,0 | -9,5  | -11,9 |
|                           | s = 3    | 5,86     | 8,1                                          | 4,6  | 1,8  | -2,0 | -6,4  | -12,2 | -12,9 | -13,5 |
|                           | s = 4    | 7,26     | 10,2                                         | 6,4  | 2,0  | -2,1 | -6,8  | -13,2 | -14,5 | -14,4 |
|                           | s = 5    | 8,43     | 11,3                                         | 6,5  | 2,1  | -2,3 | -6,9  | -13,8 | -15,5 | -16,0 |
|                           | s = 6    | 9,22     | 12,5                                         | 6,6  | 2,3  | -2,3 | -6,9  | -14,2 | -15,9 | -16,8 |
| DEP 200<br>+ SKDM 160/200 | s = 1    | 3,6      | -4,2                                         | -1,3 | -5,9 | -4,5 | -6,4  | -6,4  | -9,4  | -12,9 |
|                           | s = 2    | 6,68     | -1,5                                         | 2,7  | -1,2 | -2,8 | -7,7  | -6,0  | -13,2 | -13,6 |
|                           | s = 3    | 9,45     | 4,3                                          | 6,2  | 0,1  | -1,3 | -7,1  | -9,3  | -14,0 | -13,6 |
|                           | s = 4    | 11,7     | 6,7                                          | 6,6  | 0,1  | -0,8 | -7,1  | -11,4 | -14,8 | -15,5 |
|                           | s = 5    | 13,8     | 5,9                                          | 7,3  | -0,4 | -1,0 | -7,3  | -10,8 | -16,2 | -16,3 |
|                           | s = 6    | 15,5     | 7,5                                          | 7,4  | 0,1  | -0,6 | -7,6  | -12,3 | -17,2 | -17,6 |
| DEP 250<br>+ SKDM 200/250 | s = 1    | 4,85     | 3,4                                          | 4,1  | 2,7  | -5,0 | -8,2  | -9,1  | -10,5 | -14,7 |
|                           | s = 2    | 9,51     | 6,5                                          | 6,8  | 4,4  | -2,7 | -10,2 | -13,1 | -15,9 | -15,0 |
|                           | s = 3    | 14,4     | 6,3                                          | 6,2  | 3,9  | -1,6 | -9,5  | -14,7 | -16,7 | -16,2 |
|                           | s = 4    | 19,3     | 5,8                                          | 6,4  | 3,4  | -1,5 | -9,1  | -16,2 | -16,3 | -16,3 |
|                           | s = 5    | 23,8     | 5,3                                          | 5,8  | 2,7  | -0,8 | -7,9  | -16,4 | -16,6 | -16,3 |
|                           | s = 6    | 27,6     | 5,7                                          | 5,9  | 2,5  | -0,6 | -7,3  | -15,7 | -17,1 | -16,3 |
| DEP 315<br>+ SKDM 250/315 | s = 1    | 6,69     | -9,4                                         | -8,6 | -9,6 | -2,9 | -6,5  | -11,6 | -17,6 | -17,5 |
|                           | s = 2    | 12,4     | -5,9                                         | -4,2 | -7,1 | -5,4 | -4,5  | -10,0 | -16,6 | -17,8 |
|                           | s = 3    | 17,9     | -3,0                                         | -3,1 | -7,4 | -5,9 | -6,4  | -9,2  | -16,3 | -17,3 |
|                           | s = 4    | 22,7     | -0,3                                         | -1,2 | -6,2 | -4,9 | -3,3  | -9,4  | -18,4 | -17,9 |
|                           | s = 5    | 26,4     | 4,5                                          | 4,9  | -3,4 | -5,0 | -3,3  | -10,7 | -17,0 | -17,2 |
|                           | s = 6    | 29,0     | 7,1                                          | 7,8  | -1,2 | -3,1 | -5,0  | -12,7 | -14,2 | -18,3 |

| DEP+SKDM                  | Position | K-factor | Sound level correction factor $K_{\text{okt}}$ (dB) |      |       |       |      |       |       |       |
|---------------------------|----------|----------|-----------------------------------------------------|------|-------|-------|------|-------|-------|-------|
|                           |          |          | 63                                                  | 125  | 250   | 500   | 1k   | 2k    | 4k    | 8k    |
| DEP 400<br>+ SKDM 315/400 | s = 1    | 6,98     | -5,8                                                | -9,6 | -17,1 | -15,4 | -5,7 | -9,8  | -12,3 | -17,7 |
|                           | s = 2    | 14,0     | -2,3                                                | -2,9 | -10,2 | -11,1 | -3,9 | -10,5 | -14,8 | -16,4 |
|                           | s = 3    | 20,6     | 3,0                                                 | 2,2  | -6,0  | -8,7  | -4,8 | -9,8  | -12,6 | -15,5 |
|                           | s = 4    | 26,9     | 2,7                                                 | 2,5  | -6,1  | -5,6  | -4,0 | -10,3 | -16,7 | -16,9 |
|                           | s = 5    | 31,9     | 5,1                                                 | 4,7  | -2,5  | -4,2  | -3,0 | -11,8 | -18,9 | -18,4 |
|                           | s = 6    | 36,5     | 8,2                                                 | 6,7  | -0,7  | -3,2  | -3,6 | -12,7 | -17,7 | -18,3 |
|                           | s = 7    | 40,1     | 9,8                                                 | 8,5  | 0,3   | -1,9  | -5,4 | -12,7 | -18,9 | -19,0 |
|                           | s = 8    | 43,2     | 8,7                                                 | 9,1  | 0,4   | -1,5  | -6,0 | -13,3 | -19,1 | -19,0 |

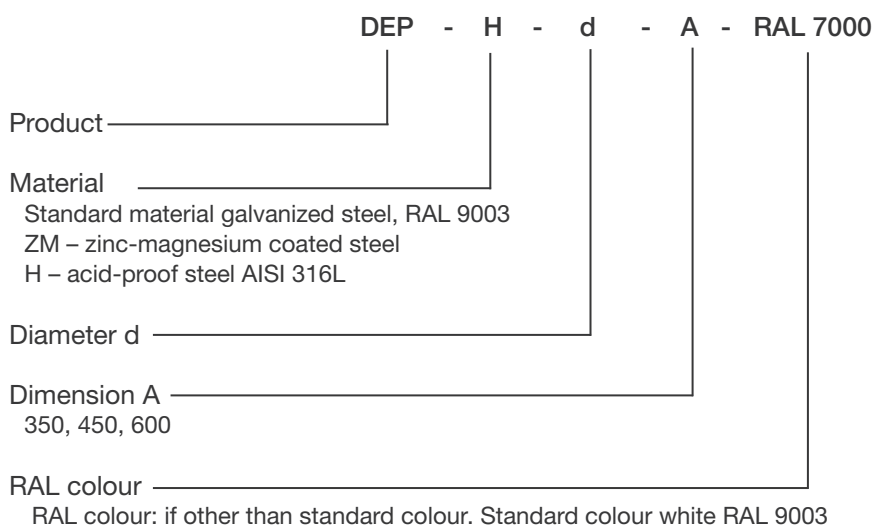
Exhaust air  $L_w = L_{pA10} + K_{\text{okt}}$

| DEP<br>Nominal<br>size | Sound level correction factor $K_{\text{okt}}$ (dB) |      |      |      |      |      |       |       |
|------------------------|-----------------------------------------------------|------|------|------|------|------|-------|-------|
|                        | Hz                                                  |      |      |      |      |      |       |       |
|                        | 63                                                  | 125  | 250  | 500  | 1k   | 2k   | 4k    | 8k    |
| 125                    | 2,6                                                 | 5,8  | 5,5  | 1,3  | -2,0 | -7,9 | -13,8 | -19,5 |
| 160                    | 4,9                                                 | 4,5  | 4,3  | -1,2 | 0,1  | -3,8 | -11,3 | -18,9 |
| 200                    | 6,3                                                 | 3,8  | 3,4  | 1,9  | -1,2 | -6,3 | -12,3 | -18,1 |
| 250                    | 8,2                                                 | 6,6  | 2,3  | 0,6  | -0,9 | -7,2 | -13,4 | -19,2 |
| 315                    | 8,2                                                 | 10,9 | 1,0  | -2,9 | -0,3 | -3,8 | -11,5 | -18,9 |
| 400                    | 4,8                                                 | 5,4  | -3,0 | -5,1 | -0,3 | -2,4 | -10,0 | -18,3 |

| DEP+SKDM                  | Position | K-factor | Sound level correction factor $K_{\text{okt}}$ (dB) |      |      |      |       |       |       |       |
|---------------------------|----------|----------|-----------------------------------------------------|------|------|------|-------|-------|-------|-------|
|                           |          |          | 63                                                  | 125  | 250  | 500  | 1k    | 2k    | 4k    | 8k    |
| DEP 125<br>+ SKDM 100/125 | s = 1    | 2,12     | 0,5                                                 | 2,0  | -1,5 | -0,3 | -10,3 | -13,3 | -12,4 | -13,8 |
|                           | s = 2    | 4,07     | 2,0                                                 | 4,5  | 0,0  | -0,4 | -11,0 | -13,7 | -13,0 | -14,2 |
|                           | s = 3    | 6,08     | 3,2                                                 | 5,4  | 2,2  | -0,7 | -10,2 | -14,9 | -14,2 | -14,5 |
|                           | s = 4    | 8,16     | 4,5                                                 | 6,8  | 2,8  | -1,2 | -9,8  | -14,9 | -16,2 | -15,0 |
| DEP 160<br>+ SKDM 125/160 | s = 1    | 2,22     | -1,6                                                | 0,6  | -0,2 | 0,1  | -9,9  | -13,2 | -12,3 | -14,3 |
|                           | s = 2    | 4,19     | 0,9                                                 | 2,4  | 0,9  | 0,0  | -9,6  | -13,8 | -12,8 | -14,1 |
|                           | s = 3    | 6,33     | 0,4                                                 | 2,9  | 2,3  | -0,3 | -8,8  | -13,7 | -13,7 | -14,5 |
|                           | s = 4    | 8,65     | 2,2                                                 | 3,0  | 2,7  | -0,7 | -8,1  | -13,6 | -14,0 | -14,8 |
|                           | s = 5    | 11,2     | 3,1                                                 | 3,8  | 2,9  | -1,0 | -7,7  | -14,0 | -14,6 | -15,1 |
|                           | s = 6    | 13,2     | 4,0                                                 | 4,1  | 3,0  | -1,2 | -7,1  | -14,2 | -15,3 | -15,2 |
| DEP 200<br>+ SKDM 160/200 | s = 1    | 3,37     | -1,6                                                | 2,5  | 0,7  | -0,8 | -7,2  | -11,4 | -13,7 | -15,4 |
|                           | s = 2    | 6,73     | -1,4                                                | 3,3  | 1,5  | -0,3 | -7,5  | -12,8 | -14,6 | -15,2 |
|                           | s = 3    | 10,4     | -1,0                                                | 4,0  | 1,9  | -0,6 | -7,2  | -13,3 | -14,7 | -15,4 |
|                           | s = 4    | 14,1     | 0,7                                                 | 4,5  | 2,0  | -0,6 | -6,6  | -13,9 | -16,4 | -16,0 |
|                           | s = 5    | 17,9     | 2,4                                                 | 4,5  | 2,2  | -0,8 | -6,1  | -13,7 | -17,1 | -16,6 |
|                           | s = 6    | 21,0     | 2,8                                                 | 5,2  | 1,9  | -0,7 | -6,2  | -13,6 | -17,3 | -17,0 |
| DEP 250<br>+ SKDM 200/250 | s = 1    | 5,16     | 1,9                                                 | 3,5  | -0,2 | -3,8 | -8,2  | -8,6  | -8,1  | -9,3  |
|                           | s = 2    | 9,83     | 3,3                                                 | 7,5  | 4,9  | -3,8 | -10,3 | -12,6 | -11,5 | -13,2 |
|                           | s = 3    | 14,2     | 4,8                                                 | 5,7  | 1,6  | -1,7 | -7,1  | -11,7 | -13,9 | -14,3 |
|                           | s = 4    | 17,9     | 4,5                                                 | 4,4  | -0,5 | -1,8 | -5,4  | -11,6 | -13,3 | -14,3 |
|                           | s = 5    | 20,8     | 4,9                                                 | 4,7  | -0,7 | -1,2 | -5,9  | -11,7 | -15,3 | -15,9 |
|                           | s = 6    | 22,3     | 5,2                                                 | 4,8  | -0,8 | -2,1 | -5,6  | -13,5 | -13,7 | -17,1 |
| DEP 315<br>+ SKDM 250/315 | s = 1    | 6,73     | 10,4                                                | 9,9  | 1,8  | -4,5 | -8,9  | -13,4 | -11,5 | -13,4 |
|                           | s = 2    | 12,3     | 12,0                                                | 10,8 | 1,5  | -3,6 | -8,9  | -15,6 | -14,7 | -15,4 |
|                           | s = 3    | 18,5     | 9,4                                                 | 9,2  | 1,8  | -2,7 | -8,3  | -15,3 | -15,9 | -15,9 |
|                           | s = 4    | 24,4     | 8,2                                                 | 8,1  | 1,3  | -2,0 | -7,4  | -14,9 | -16,9 | -17,0 |
|                           | s = 5    | 30,3     | 6,5                                                 | 7,0  | 1,1  | -1,4 | -6,5  | -14,9 | -17,3 | -17,6 |
|                           | s = 6    | 32,4     | 6,9                                                 | 6,5  | 0,7  | -1,2 | -6,3  | -14,7 | -17,6 | -17,8 |
| DEP 400<br>+ SKDM 315/400 | s = 1    | 5,76     | 4,9                                                 | 4,0  | -1,4 | -1,2 | -5,5  | -13,4 | -13,2 | -12,7 |
|                           | s = 2    | 14,8     | 10,6                                                | 8,6  | 0,2  | -2,1 | -6,1  | -14,3 | -13,0 | -14,3 |
|                           | s = 3    | 21,5     | 10,2                                                | 8,6  | 0,4  | -1,9 | -7,0  | -12,6 | -13,2 | -16,2 |
|                           | s = 4    | 28,3     | 10,6                                                | 7,0  | 0,5  | -0,9 | -6,6  | -14,6 | -16,2 | -16,8 |
|                           | s = 5    | 34,8     | 10,9                                                | 6,6  | 0,3  | -0,7 | -6,6  | -14,6 | -17,5 | -18,0 |
|                           | s = 6    | 40,6     | 10,0                                                | 6,8  | 0,1  | -0,9 | -6,4  | -13,9 | -18,1 | -18,4 |
|                           | s = 7    | 45,2     | 10,4                                                | 5,8  | -0,1 | -0,9 | -6,3  | -13,0 | -18,1 | -18,6 |
|                           | s = 8    | 48,1     | 10,2                                                | 5,8  | -0,4 | -1,2 | -6,3  | -12,1 | -17,9 | -18,3 |

| DEP+SKDM               | Position | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|------------------------|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|                        |          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                        |          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DEP 125 + SKDM 100/125 | s = 1    | 26                                 | 17  | 16  | 17  | 27 | 21 | 21 | 18 |
|                        | s = 4    | 26                                 | 17  | 16  | 17  | 23 | 20 | 19 | 17 |
| DEP 160 + SKDM 125/160 | s = 1    | 22                                 | 17  | 17  | 16  | 22 | 19 | 21 | 22 |
|                        | s = 6    | 22                                 | 16  | 16  | 17  | 18 | 19 | 18 | 18 |
| DEP 200 + SKDM 160/200 | s = 1    | 23                                 | 14  | 17  | 14  | 24 | 16 | 23 | 23 |
|                        | s = 6    | 23                                 | 14  | 16  | 15  | 17 | 16 | 19 | 20 |
| DEP 250 + SKDM 200/250 | s = 1    | 21                                 | 13  | 16  | 17  | 20 | 17 | 23 | 19 |
|                        | s = 6    | 20                                 | 14  | 15  | 17  | 19 | 16 | 21 | 18 |
| DEP 315 + SKDM 250/315 | s = 1    | 19                                 | 11  | 15  | 20  | 17 | 20 | 24 | 23 |
|                        | s = 6    | 18                                 | 11  | 15  | 18  | 17 | 15 | 19 | 21 |
| DEP 400 + SKDM 315/400 | s = 1    | 16                                 | 10  | 16  | 17  | 18 | 24 | 22 | 24 |
|                        | s = 8    | 16                                 | 9   | 16  | 15  | 17 | 17 | 19 | 21 |

## Product codes



**Example:**    DEP 200-600  
                   DEP 200-600-RAL7000  
                   DEP-H 200-600

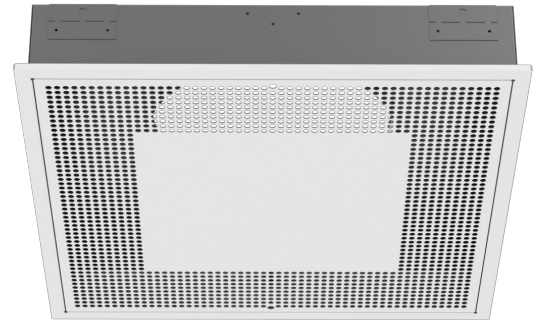
## DKU Ceiling diffuser

Rectangular ceiling diffuser with perforated front plate.  
Can also be used as an exhaust unit.

### Features:

- horizontal air jet
- ceiling installation
- easy-to-open front plate
- duct sizes Ø 100-315 mm

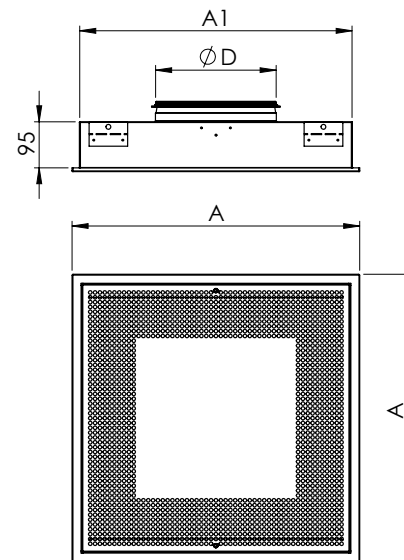
Can be installed in SKDM plenum box.



### Structure and dimensions

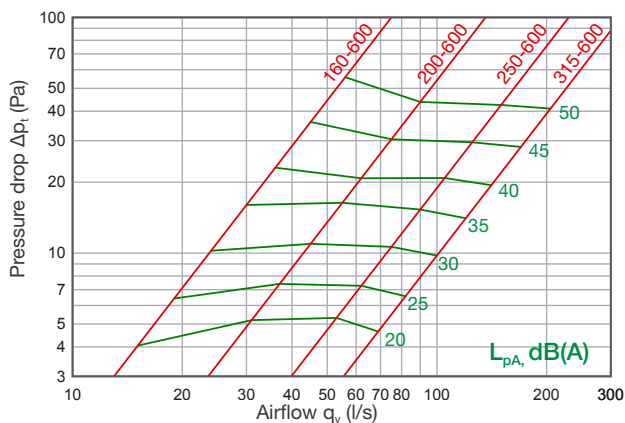
Manufactured of galvanized steel and coated white (RAL 9003). Round duct connection with rubber gasket.  
Front plate is easily removed for cleaning.

| Nominal size | Ød  | A   | A1  | Weight (kg) |
|--------------|-----|-----|-----|-------------|
| 100-300      | 100 | 300 | 270 | 2,7         |
| 125-300      | 125 | 300 | 270 | 2,8         |
| 125-600      | 125 | 595 | 565 | 6,8         |
| 160-450      | 160 | 450 | 420 | 4,7         |
| 160-600      | 160 | 595 | 565 | 6,9         |
| 200-450      | 200 | 450 | 420 | 4,7         |
| 200-600      | 200 | 595 | 565 | 6,9         |
| 250-600      | 250 | 595 | 565 | 6,8         |
| 315-600      | 315 | 595 | 565 | 6,7         |

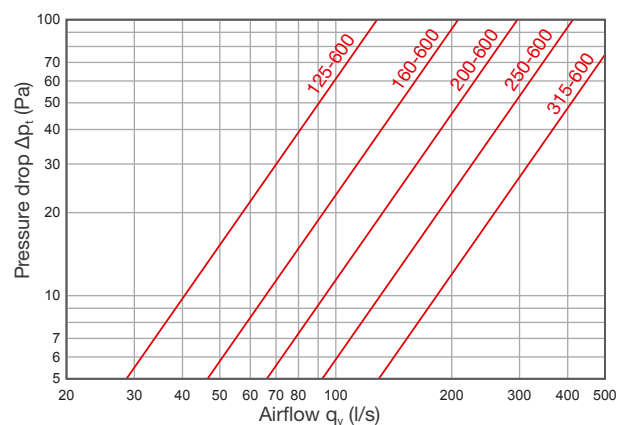


### Technical data

#### Supply air



#### Exhaust air





## Product codes

**DKU - H - d - A - RAL 7000**

Product \_\_\_\_\_

Material \_\_\_\_\_  
 Standard material galvanized steel, RAL 9003  
 ZM – zinc-magnesium coated steel  
 H – acid-proof steel AISI 316L

Diameter d \_\_\_\_\_

Dimension A \_\_\_\_\_

RAL colour \_\_\_\_\_  
 RAL colour: if other than standard colour. Standard colour white RAL 9003

**Example: DKU 200-450**

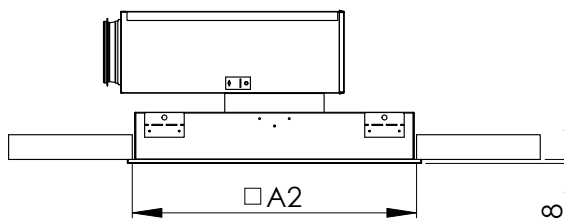
### Accessories:

SKDM-plenum box

## Installation

Installed directly to duct with screws or rivets or to SKDM plenum box.

| Nominal size | A2  |
|--------------|-----|
| 100-300      | 280 |
| 125-300      | 280 |
| 125-600      | 575 |
| 160-450      | 430 |
| 160-600      | 575 |
| 200-450      | 430 |
| 200-600      | 575 |
| 250-600      | 575 |
| 315-600      | 575 |



Recommended minimum distance before diffuser is 3 x duct diameter (3\*d).

## Maintenance

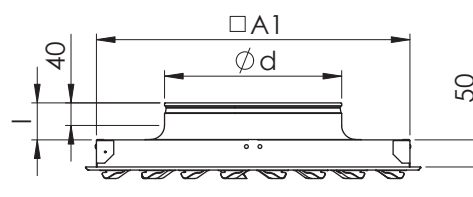
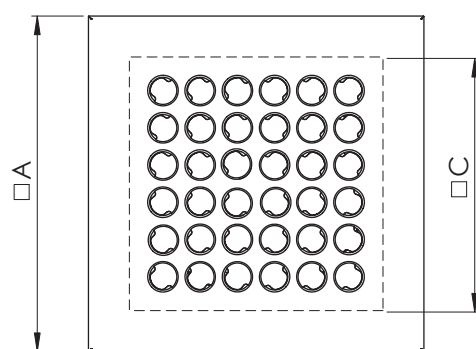
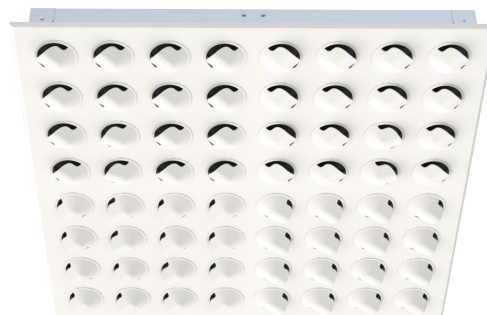
Remove front plate. Clean visible parts with a damp cloth.

## DKZ Nozzle diffuser

DKZ is a rectangular nozzle diffuser, which is designed to provide effective supply air distribution, while also avoiding draft in the occupied zone. Diffusers front plate is easily removable, making the cleaning process more comfortable and less time consuming.

DKZ is suitable for using in rooms with or without suspended ceiling.

- Nozzles can be rotated by 360°
- Suitable for rooms with false ceiling
- Suitable for CAV and VAV systems
- High mixing ratio
- Can be used for heating, cooling and isothermal supply air
- Multiple air distribution patterns:
  - horizontal
  - vertical
- Easy access front panel
- Easy to clean
- Can be installed straight to the duct or used together with a SKDM plenum box
- Duct sizes Ø125-400 mm

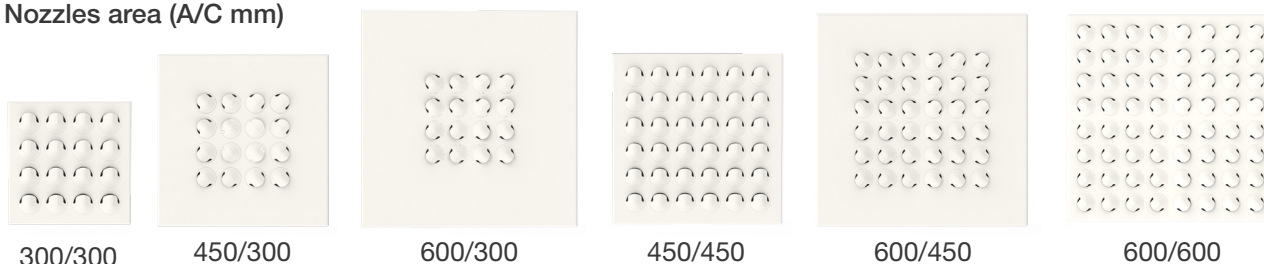


### Material and surface treatment

Nozzle diffuser DKZ is manufactured from galvanized steel and the nozzles are from ABS. The front plate and nozzles have a white (RAL 9003), grey (RAL 9006) or black (RAL 9005) finish by standard, but are also available in any other RAL colours.

| Nominal size<br>d-A (mm) | A   | A1  | I  | C   | Nozzles<br>(pc) | Weight<br>(kg) |
|--------------------------|-----|-----|----|-----|-----------------|----------------|
| 125-300                  | 300 | 260 | 60 | 300 | 16              | 1,5            |
| 125-450                  | 450 | 410 | 60 | 300 | 16              | 2,9            |
| 125-600                  | 595 | 560 | 60 | 300 | 16              | 4,8            |
| 160-300                  | 300 | 260 | 65 | 300 | 16              | 1,5            |
| 160-450                  | 450 | 410 | 65 | 300 | 16              | 2,9            |
| 160-600                  | 595 | 560 | 65 | 300 | 16              | 4,8            |
| 200-450                  | 450 | 410 | 65 | 450 | 36              | 2,8            |
| 200-600                  | 595 | 560 | 65 | 450 | 36              | 4,8            |
| 250-600                  | 595 | 560 | 65 | 600 | 64              | 4,7            |
| 315-600                  | 595 | 560 | 65 | 600 | 64              | 4,6            |
| 400-600                  | 595 | 560 | 65 | 600 | 81              | 4,8            |

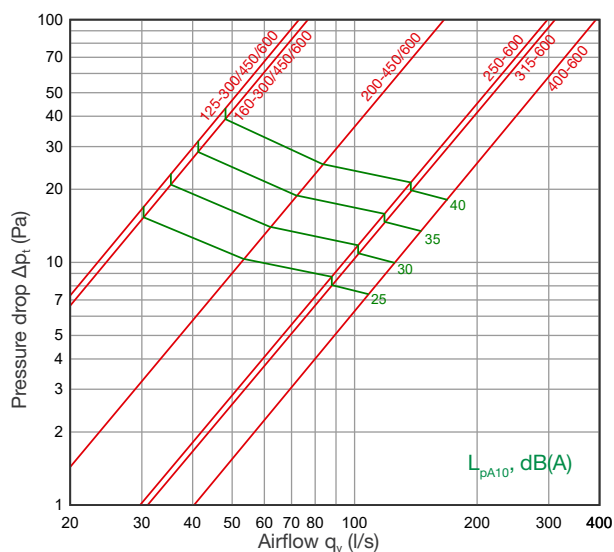
### Nozzles area (A/C mm)



## Technical data

### Diffuser without plenum box

#### DKZ

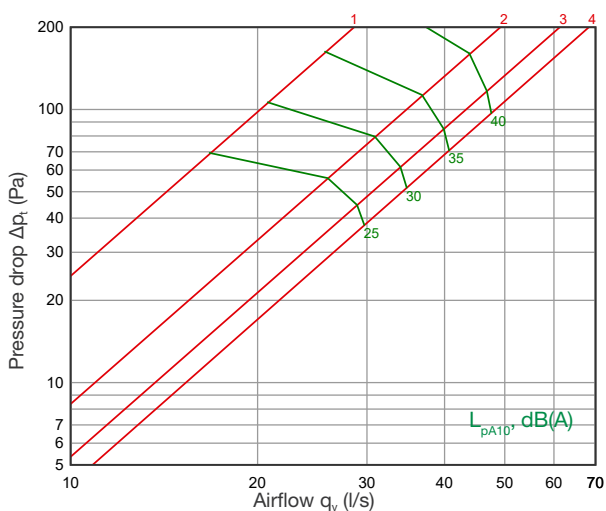


| Tuote   | Sound level correction factor $K_{akt}$ (dB) |     |     |     |    |     |     |     |
|---------|----------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|         | 63                                           | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DKZ125  | -9                                           | -6  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 160 | -9                                           | -6  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 200 | -9                                           | -6  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 250 | -9                                           | -6  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 315 | -9                                           | -6  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 400 | -9                                           | -6  | -4  | -1  | -3 | -16 | -25 | -34 |

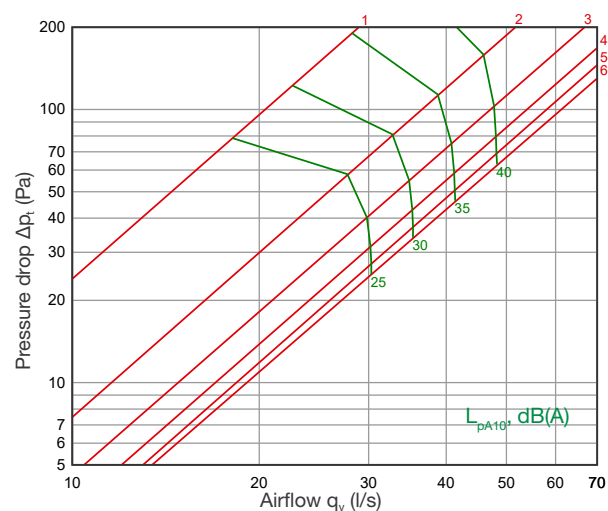
| Tuote   | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|---------|------------------------------------|-----|-----|-----|----|----|----|----|
|         | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|         | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DKZ125  | 21                                 | 15  | 8   | 8   | 3  | 4  | 5  | 6  |
| DKZ 160 | 20                                 | 14  | 7   | 8   | 2  | 4  | 5  | 6  |
| DKZ 200 | 20                                 | 11  | 6   | 3   | 2  | 3  | 4  | 6  |
| DKZ 250 | 18                                 | 10  | 4   | 3   | 2  | 4  | 4  | 6  |
| DKZ 315 | 15                                 | 9   | 4   | 2   | 2  | 4  | 6  | 8  |
| DKZ 400 | 15                                 | 9   | 5   | 2   | 2  | 3  | 6  | 9  |

### Diffuser with plenum box

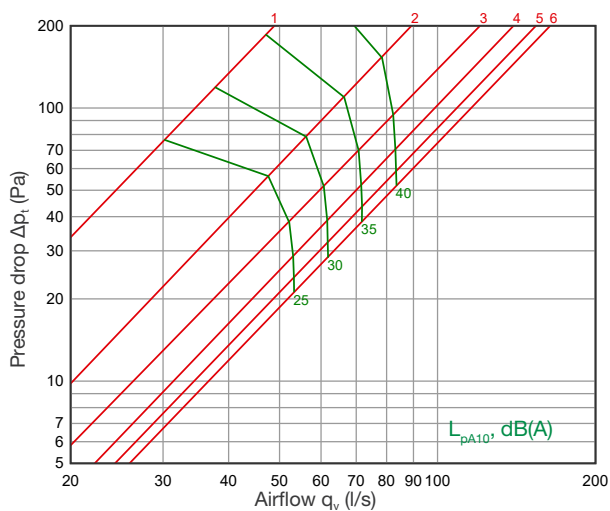
#### DKZ 125-300/450/600 + SKDM 100/125



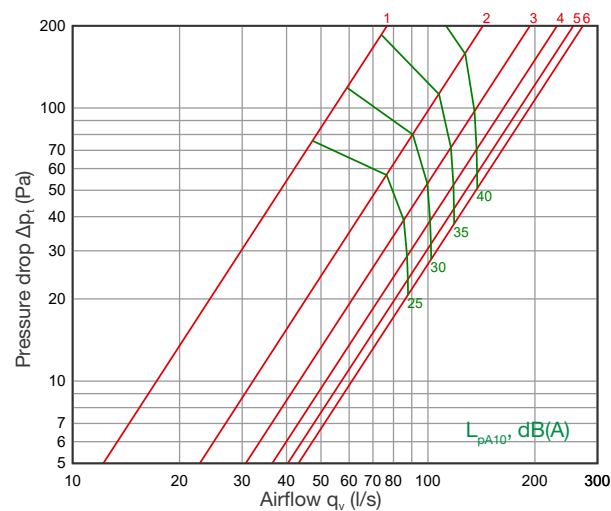
#### DKZ 160-300/450/600 + SKDM 125/160



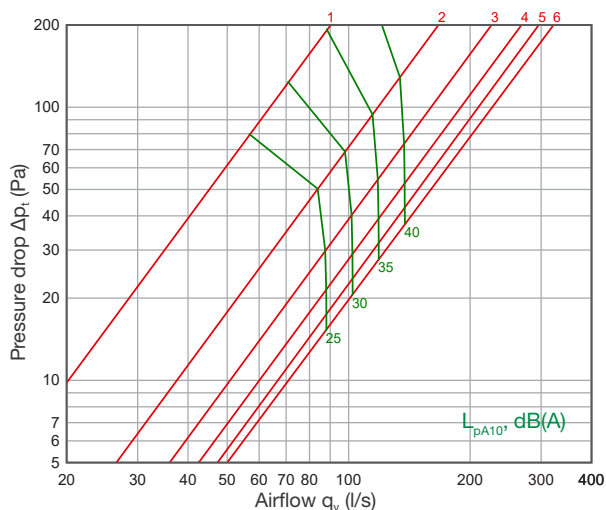
#### DKZ 200-450/600 + SKDM 160/200



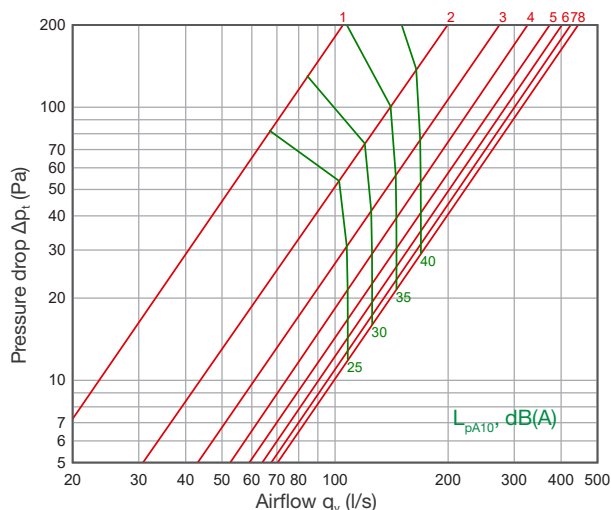
#### DKZ 250-600 + SKDM 200/250



**DKZ 315-600 + SKDM 250/315**



**DKZ 400-600 + SKDM 315/400**



Acoustic data,  $L_w = L_{p10A} + K_{okt}$

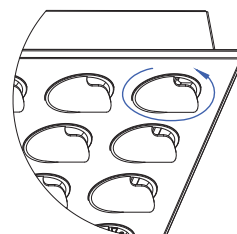
| Product                   | Position | K-factor | Sound level correction factor $K_{okt}$ (dB) |     |     |     |    |     |     |     |
|---------------------------|----------|----------|----------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|                           |          |          | 63                                           | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DKZ 125<br>+ SKDM 100/125 | s = 1    | 2,1      | 0                                            | 0   | 0   | -2  | -5 | -10 | -13 | -18 |
|                           | s = 2    | 3,8      | 1                                            | 1   | 0   | -1  | -4 | -13 | -17 | -22 |
|                           | s = 3    | 5,2      | 0                                            | 1   | -1  | -1  | -4 | -15 | -22 | -28 |
|                           | s = 4    | 6,3      | -1                                           | 0   | -2  | -1  | -3 | -16 | -24 | -31 |
| DKZ 160<br>+ SKDM 125/160 | s = 1    | 2,2      | -2                                           | -2  | -1  | -2  | -5 | -10 | -12 | -17 |
|                           | s = 2    | 4,1      | -3                                           | -2  | -2  | -1  | -4 | -13 | -18 | -23 |
|                           | s = 3    | 5,8      | -6                                           | -4  | -3  | -1  | -3 | -15 | -23 | -29 |
|                           | s = 4    | 7,3      | -7                                           | -5  | -4  | -1  | -3 | -16 | -24 | -32 |
|                           | s = 5    | 8,5      | -7                                           | -5  | -4  | -1  | -3 | -16 | -25 | -33 |
|                           | s = 6    | 9,6      | -8                                           | -5  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 200<br>+ SKDM 160/200 | s = 1    | 3,6      | 3                                            | 1   | -1  | -2  | -5 | -10 | -12 | -17 |
|                           | s = 2    | 6,8      | 2                                            | 1   | -2  | -1  | -4 | -13 | -17 | -23 |
|                           | s = 3    | 9,6      | -1                                           | -1  | -3  | -1  | -3 | -15 | -22 | -29 |
|                           | s = 4    | 12,1     | -2                                           | -2  | -4  | -1  | -3 | -16 | -24 | -32 |
|                           | s = 5    | 14,2     | -2                                           | -2  | -4  | -1  | -3 | -16 | -25 | -33 |
|                           | s = 6    | 15,9     | -3                                           | -2  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 250<br>+ SKDM 200/250 | s = 1    | 5,6      | 3                                            | 1   | -1  | -2  | -5 | -10 | -12 | -17 |
|                           | s = 2    | 10,7     | 3                                            | 1   | -1  | -1  | -4 | -13 | -17 | -22 |
|                           | s = 3    | 15,1     | 0                                            | 0   | -3  | -1  | -3 | -15 | -22 | -28 |
|                           | s = 4    | 19,0     | -1                                           | -1  | -3  | -1  | -3 | -16 | -24 | -32 |
|                           | s = 5    | 22,2     | -2                                           | -2  | -4  | -1  | -3 | -16 | -25 | -33 |
|                           | s = 6    | 24,9     | -2                                           | -2  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 315<br>+ SKDM 250/315 | s = 1    | 6,6      | 2                                            | 1   | -1  | -2  | -5 | -10 | -12 | -18 |
|                           | s = 2    | 12,8     | -1                                           | -1  | -3  | -1  | -3 | -14 | -20 | -26 |
|                           | s = 3    | 18,4     | -3                                           | -2  | -4  | -1  | -3 | -16 | -24 | -32 |
|                           | s = 4    | 23,5     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -33 |
|                           | s = 5    | 28,1     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -34 |
|                           | s = 6    | 32,1     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -34 |
| DKZ 400<br>+ SKDM 315/400 | s = 1    | 7,8      | 2                                            | 0   | -1  | -2  | -5 | -9  | -12 | -17 |
|                           | s = 2    | 15,1     | -1                                           | -2  | -3  | -1  | -3 | -14 | -19 | -25 |
|                           | s = 3    | 22,0     | -3                                           | -3  | -4  | -1  | -3 | -16 | -24 | -31 |
|                           | s = 4    | 28,4     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -33 |
|                           | s = 5    | 34,5     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -34 |
|                           | s = 6    | 40,1     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -34 |
|                           | s = 7    | 45,2     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -34 |
|                           | s = 8    | 49,9     | -4                                           | -3  | -4  | -1  | -3 | -16 | -25 | -34 |

| DKZ                    | Position | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|------------------------|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|                        |          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                        |          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DKZ 125 + SKDM 100/125 | s = 1    | 20                                 | 15  | 10  | 17  | 24 | 23 | 22 | 20 |
|                        | s = 4    | 19                                 | 13  | 10  | 18  | 21 | 19 | 22 | 17 |
| DKZ 160 + SKDM 125/160 | s = 1    | 17                                 | 14  | 10  | 15  | 21 | 20 | 20 | 19 |
|                        | s = 6    | 16                                 | 13  | 9   | 15  | 19 | 17 | 19 | 17 |
| DKZ 200 + SKDM 160/200 | s = 1    | 15                                 | 13  | 9   | 12  | 18 | 16 | 18 | 18 |
|                        | s = 6    | 13                                 | 13  | 8   | 13  | 17 | 16 | 17 | 18 |
| DKZ 250 + SKDM 200/250 | s = 1    | 12                                 | 13  | 9   | 10  | 15 | 13 | 16 | 18 |
|                        | s = 6    | 10                                 | 13  | 7   | 11  | 14 | 14 | 15 | 18 |
| DKZ 315 + SKDM 250/315 | s = 1    | 10                                 | 12  | 9   | 8   | 12 | 9  | 14 | 17 |
|                        | s = 6    | 8                                  | 13  | 7   | 9   | 12 | 12 | 13 | 18 |
| DKZ 400 + SKDM 315/400 | s = 1    | 8                                  | 12  | 9   | 6   | 9  | 6  | 12 | 16 |
|                        | s = 8    | 5                                  | 14  | 6   | 7   | 10 | 10 | 11 | 19 |

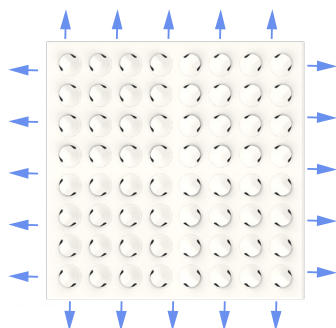
## Nozzle settings

The nozzles are located on the front panel of the diffuser, allowing variable options for different airflow patterns. Depending on rooms characteristics and supply air temperature, the airflow can be distributed either horizontally or vertically. By facing nozzles to the sides, horizontal airflow is enabled. By facing nozzles to the center, vertical airflow is enabled.

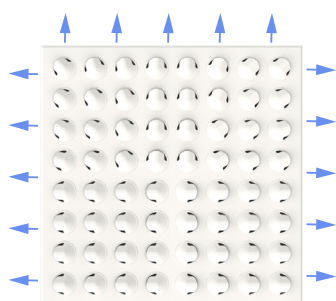
The nozzles are preset on 4-way diffusion.



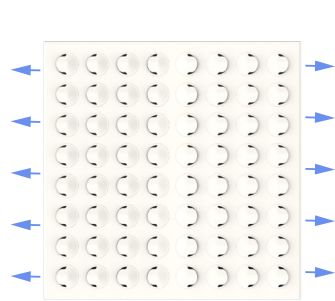
### 1. 4-way



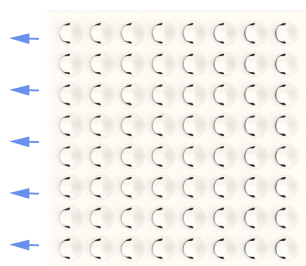
### 2. 3-way



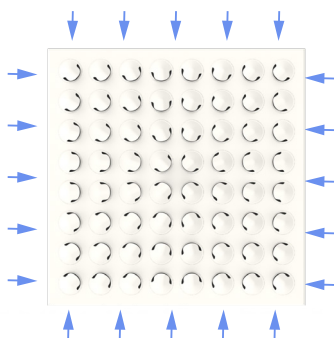
### 3. 2-way



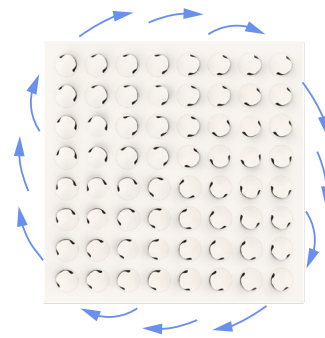
### 4. 1-way



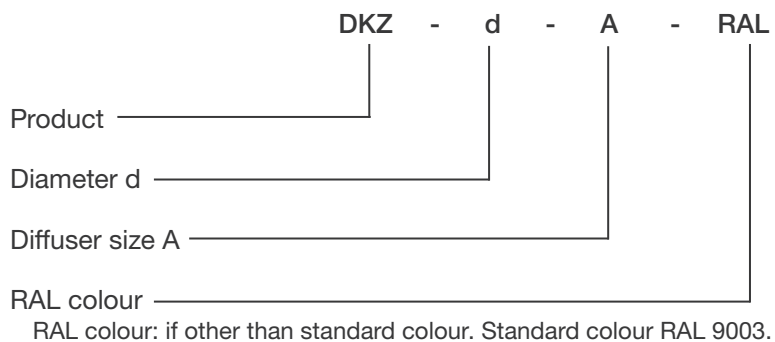
### 5. Vertical



### 6. Swirl



## Product codes



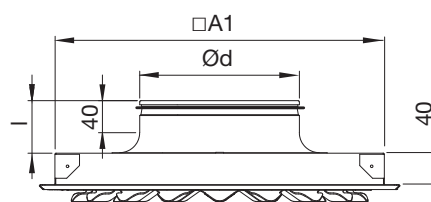
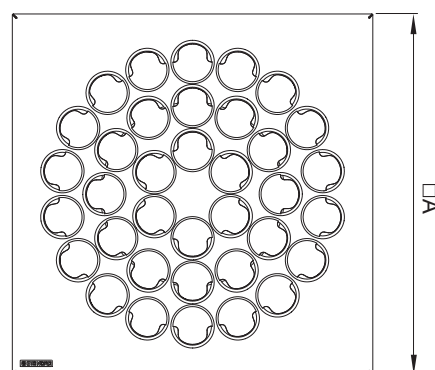
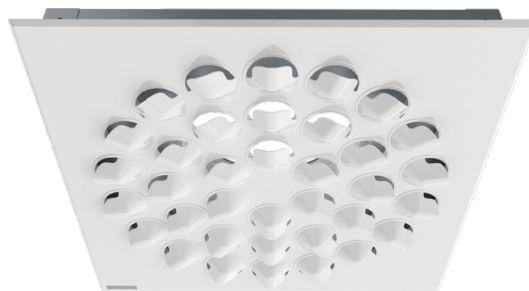
Example: DKZ 200-600

## DOZ Nozzle diffuser

DOZ is a rectangular nozzle diffuser with a circular nozzle pattern, which is designed to provide effective supply air distribution, while also avoiding draft in the occupied zone. Diffusers front plate is easily removable, making the cleaning process more comfortable and less time consuming.

DOZ is suitable for using in rooms with or without suspended ceiling.

- Nozzles can be rotated by 360°
- Suitable for rooms with false ceiling
- Suitable for CAV and VAV systems
- High mixing ratio
- Can be used for heating, cooling and isothermal supply air
- Multiple air distribution patterns:
  - horizontal
  - vertical
- Easy access front panel
- Easy to clean
- Can be installed straight to the duct or used together with a SKDM plenum box
- Duct sizes Ø125-400 mm



### Material and surface treatment

Nozzle diffuser DOZ is manufactured from galvanized steel and the nozzles are from ABS. The front plate and nozzles have a white (RAL 9003), grey (RAL 9006) or black (RAL 9005) finish by standard, but are also available in any other RAL colours.

| Nominal size d-A (mm) | A   | A1  | I  | Quantity of nozzles (pcs) | Weight (kg) |
|-----------------------|-----|-----|----|---------------------------|-------------|
| 125-450               | 450 | 410 | 60 | 18                        | 2,9         |
| 125-600               | 595 | 560 | 60 | 18                        | 4,8         |
| 160-450               | 450 | 410 | 65 | 18                        | 2,9         |
| 160-600               | 595 | 560 | 65 | 18                        | 4,8         |
| 200-450               | 450 | 410 | 65 | 36                        | 2,8         |
| 200-600               | 595 | 560 | 65 | 36                        | 4,8         |
| 250-600               | 595 | 560 | 65 | 60                        | 4,7         |
| 315-600               | 595 | 560 | 65 | 60                        | 4,6         |
| 400-600               | 595 | 560 | 65 | 60                        | 4,8         |

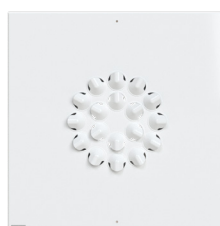
Nozzles area (A, mm / Quantity of nozzles)



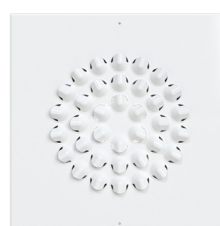
450 / 18 pcs



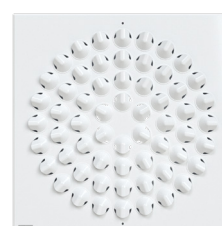
450 / 36 pcs



595 / 18 pcs



595 / 36 pcs



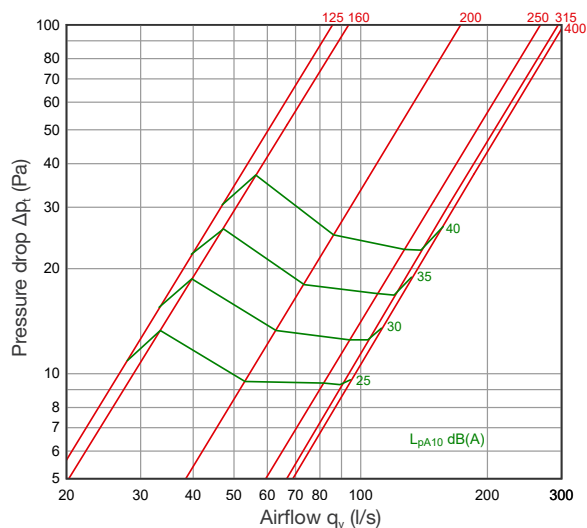
595 / 60 pcs



## Technical data

### Diffuser without plenum box

#### DOZ

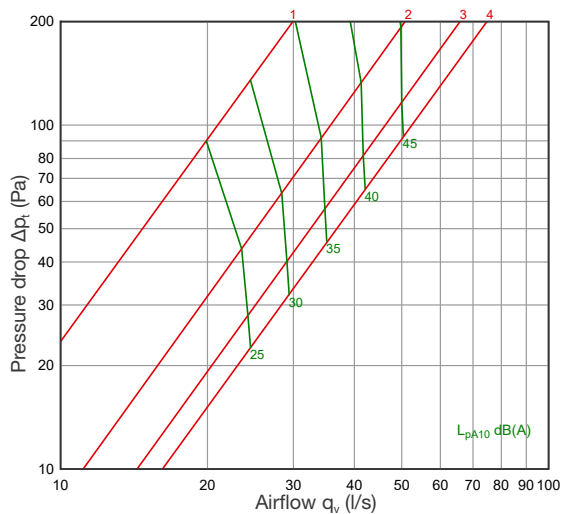


| Product | Sound level correction factor $K_{akt}$ (dB) |      |      |     |      |       |       |       |
|---------|----------------------------------------------|------|------|-----|------|-------|-------|-------|
|         | 63                                           | 125  | 250  | 500 | 1k   | 2k    | 4k    | 8k    |
| DOZ 125 | -1,4                                         | -0,1 | 6,7  | 3,0 | -3,6 | -11,9 | -19,6 | -23,8 |
| DOZ 160 | 0,5                                          | -1,7 | 6,6  | 3,5 | -3,9 | -10,2 | -16,8 | -23,7 |
| DOZ 200 | 2,7                                          | -1,8 | 3,5  | 5,2 | -4,6 | -11,0 | -19,7 | -24,9 |
| DOZ 250 | -0,6                                         | 1,1  | 0,5  | 4,7 | -3,4 | -12,1 | -20,7 | -24,8 |
| DOZ 315 | -2,8                                         | 0,9  | -0,2 | 4,5 | -2,8 | -12,1 | -20,5 | -24,7 |
| DOZ 400 | 0,5                                          | 2,2  | 0,3  | 3,6 | -2,5 | -10,6 | -18,1 | -24,8 |

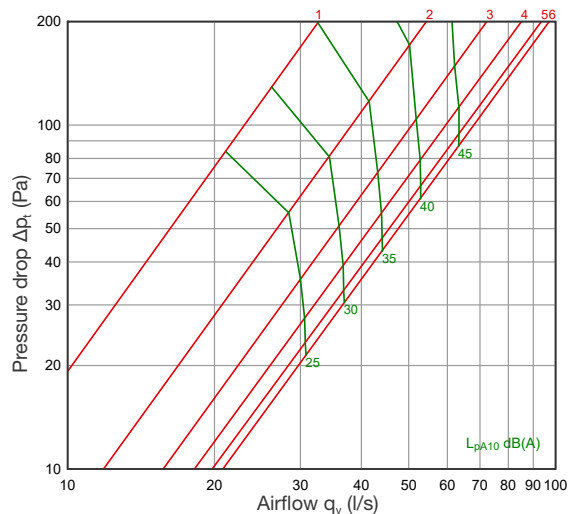
| Product | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|---------|------------------------------------|-----|-----|-----|----|----|----|----|
|         | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|         | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DOZ 125 | 23                                 | 15  | 7   | 9   | 4  | 4  | 4  | 6  |
| DOZ 160 | 22                                 | 15  | 6   | 7   | 3  | 4  | 4  | 5  |
| DOZ 200 | 17                                 | 12  | 4   | 4   | 1  | 3  | 4  | 6  |
| DOZ 250 | 18                                 | 10  | 5   | 2   | 1  | 3  | 4  | 6  |
| DOZ 315 | 16                                 | 10  | 4   | 2   | 2  | 3  | 4  | 6  |
| DOZ 400 | 15                                 | 9   | 3   | 2   | 2  | 3  | 5  | 6  |

### Diffuser with plenum box

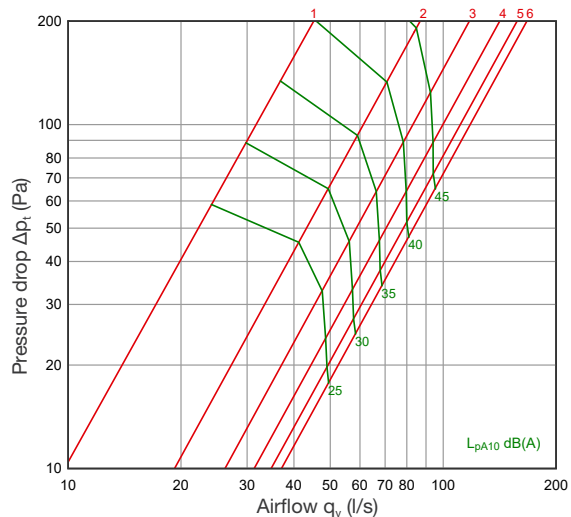
#### DOZ 125-450/600 + SKDM 100/125



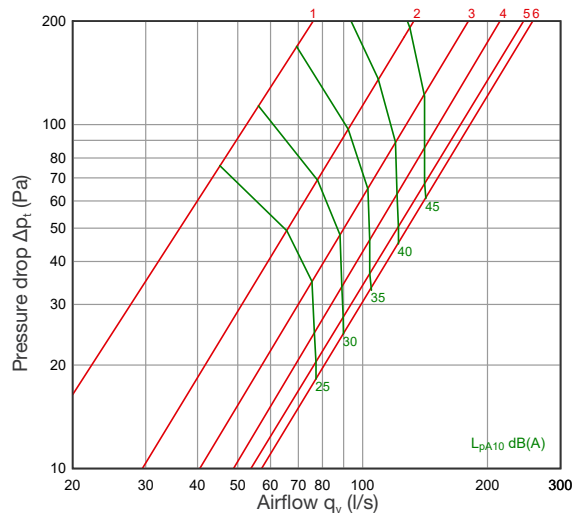
#### DOZ 160-450/600 + SKDM 125/160



#### DOZ 200-450/600 + SKDM 160/200

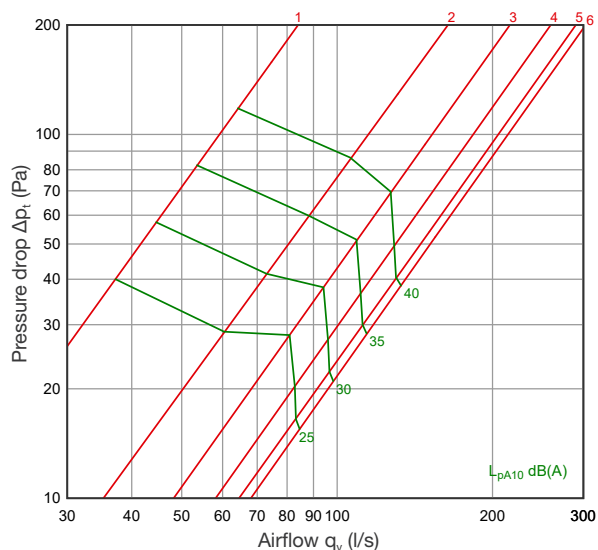


#### DOZ 250-600 + SKDM 200/250

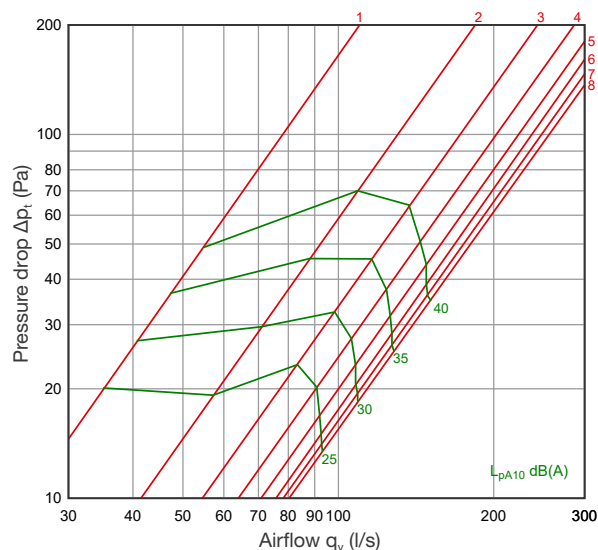




**DOZ 315-600 + SKDM 250/315**



**DOZ 400-600 + SKDM 315/400**



Acoustic data,  $L_w = L_{p10A} + K_{okt}$

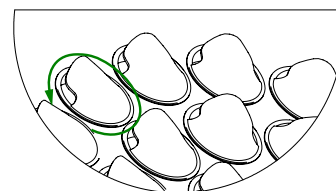
| Product                   | Position | K-factor | Sound level correction factor $K_{okt}$ (dB) |      |      |      |      |       |       |       |
|---------------------------|----------|----------|----------------------------------------------|------|------|------|------|-------|-------|-------|
|                           |          |          | 63                                           | 125  | 250  | 500  | 1k   | 2k    | 4k    | 8k    |
| DOZ 125<br>+ SKDM 100/125 | 1        | 2,19     | 0,2                                          | 6,4  | 6,8  | 1,2  | -4,8 | -6,3  | -8,2  | -14,3 |
|                           | 2        | 3,93     | 1,7                                          | 6,8  | 7,5  | 2,9  | -5,6 | -12,7 | -17,6 | -22,9 |
|                           | 3        | 5,43     | 0,4                                          | 5,2  | 7,0  | 3,3  | -5,2 | -12,9 | -19,6 | -24,0 |
|                           | 4        | 6,38     | 0,8                                          | 5,6  | 6,9  | 3,5  | -5,2 | -12,9 | -19,9 | -24,3 |
| DOZ 160<br>+ SKDM 125/160 | 1        | 2,39     | 0,9                                          | 5,1  | 5,0  | -0,5 | -2,6 | -7,1  | -4,3  | -10,7 |
|                           | 2        | 4,17     | 0,3                                          | 5,9  | 6,7  | 2,5  | -3,8 | -10,7 | -11,4 | -15,7 |
|                           | 3        | 5,87     | -0,2                                         | 5,6  | 6,2  | 3,3  | -4,1 | -11,8 | -17,8 | -23,6 |
|                           | 4        | 7,27     | -0,8                                         | 5,1  | 5,9  | 3,6  | -3,8 | -11,6 | -18,5 | -23,9 |
|                           | 5        | 8,44     | -0,3                                         | 4,9  | 5,7  | 3,6  | -3,9 | -11,6 | -18,8 | -23,9 |
|                           | 6        | 9,11     | -0,4                                         | 4,8  | 5,7  | 3,7  | -3,8 | -11,6 | -18,8 | -23,8 |
| DOZ 200<br>+ SKDM 160/200 | 1        | 3,25     | 1,4                                          | 5,2  | 4,2  | 0,4  | -0,8 | -5,6  | -8,9  | -12,6 |
|                           | 2        | 6,57     | 1,6                                          | 8,8  | 6,6  | 2,4  | -3,3 | -9,3  | -13,2 | -19,2 |
|                           | 3        | 9,38     | 0,5                                          | 6,3  | 4,5  | 4,3  | -3,2 | -10,9 | -18,1 | -23,7 |
|                           | 4        | 11,9     | 0,1                                          | 5,7  | 3,5  | 4,6  | -3,1 | -10,9 | -19,2 | -24,4 |
|                           | 5        | 13,9     | 1,5                                          | 4,9  | 3,2  | 4,7  | -3,2 | -10,6 | -19,3 | -24,2 |
|                           | 6        | 15,0     | 6,1                                          | 5,1  | 2,7  | 4,8  | -3,0 | -10,9 | -19,4 | -24,4 |
| DOZ 250<br>+ SKDM 200/250 | 1        | 5,44     | 2,9                                          | 6,8  | 3,5  | -0,5 | -3,2 | -3,4  | -5,2  | -9,6  |
|                           | 2        | 9,95     | 4,0                                          | 10,5 | 7,8  | 1,3  | -4,9 | -10,0 | -11,7 | -16,4 |
|                           | 3        | 14,3     | 5,7                                          | 5,5  | 2,3  | 4,1  | -2,8 | -10,2 | -14,1 | -21,0 |
|                           | 4        | 18,3     | 5,6                                          | 4,5  | 1,1  | 4,2  | -2,7 | -10,5 | -18,0 | -23,4 |
|                           | 5        | 21,4     | 5,5                                          | 4,2  | 0,7  | 4,2  | -2,5 | -10,5 | -18,9 | -24,2 |
|                           | 6        | 23,3     | 4,9                                          | 4,7  | 1,0  | 4,2  | -2,1 | -11,3 | -19,9 | 2,0   |
| DOZ 315<br>+ SKDM 250/315 | 1        | 6,03     | -4,6                                         | -1,6 | -7,5 | -9,8 | -3,2 | -5,1  | -4,2  | -13,6 |
|                           | 2        | 12,4     | -1,4                                         | 5,0  | 1,6  | 0,3  | -1,5 | -5,2  | -12,3 | -21,1 |
|                           | 3        | 17,7     | 1,1                                          | 6,5  | 1,5  | 3,6  | -2,9 | -8,5  | -19,6 | -24,4 |
|                           | 4        | 22,9     | -0,6                                         | 5,4  | 1,5  | 4,2  | -3,2 | -12,0 | -20,6 | -24,2 |
|                           | 5        | 27,0     | -1,1                                         | 5,9  | 1,2  | 4,3  | -3,1 | -12,5 | -20,4 | -24,3 |
|                           | 6        | 29,5     | 1,8                                          | 4,9  | 1,6  | 4,3  | -2,8 | -11,8 | -18,4 | 0,0   |
| DOZ 400<br>+ SKDM 315/400 | 1        | 8,09     | -5,5                                         | -5,2 | -6,6 | -0,3 | -1,1 | -13,2 | -21,7 | -24,5 |
|                           | 2        | 14,4     | -0,6                                         | 2,0  | -4,9 | 1,4  | -0,7 | -10,2 | -17,7 | -21,7 |
|                           | 3        | 21,0     | -0,2                                         | 6,4  | 0,2  | 3,1  | -1,3 | -10,6 | -20,0 | -22,1 |
|                           | 4        | 27,0     | 2,1                                          | 7,0  | 1,4  | 3,5  | -2,1 | -11,8 | -20,0 | -24,2 |
|                           | 5        | 32,6     | 1,1                                          | 6,3  | 1,3  | 3,6  | -2,3 | -11,2 | -19,2 | -24,9 |
|                           | 6        | 37,2     | 2,2                                          | 5,9  | 1,4  | 3,6  | -2,0 | -11,1 | -14,6 | -25,0 |
|                           | 7        | 40,5     | 2,0                                          | 6,2  | 1,4  | 3,7  | -2,4 | -11,2 | -19,1 | -25,0 |
|                           | 8        | 43,7     | 1,3                                          | 6,0  | 1,4  | 3,6  | -2,2 | -10,9 | -18,6 | -25,0 |

| DOZ                    | Position | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|------------------------|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|                        |          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|                        |          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DOZ 125 + SKDM 100/125 | 2        | 28                                 | 15  | 12  | 20  | 23 | 21 | 20 | 5  |
| DOZ 160 + SKDM 125/160 | 3        | 24                                 | 14  | 9   | 17  | 24 | 21 | 21 | 18 |
| DOZ 200 + SKDM 160/200 | 3        | 24                                 | 12  | 9   | 14  | 20 | 18 | 19 | 13 |
| DOZ 250 + SKDM 200/250 | 3        | 18                                 | 11  | 10  | 15  | 19 | 18 | 19 | 12 |
| DOZ 315 + SKDM 250/315 | 3        | 17                                 | 7   | 10  | 15  | 17 | 18 | 17 | 16 |
| DOZ 400 + SKDM 315/400 | 4        | 17                                 | 9   | 13  | 15  | 16 | 20 | 14 | 18 |

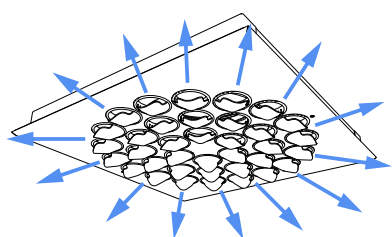
## Nozzle settings

The nozzles are located on the front panel of the diffuser, allowing variable options for different air flow patterns. Depending on rooms characteristics and supply air temperature, the air flow can be distributed either horizontally or vertically. By facing nozzles to the sides, horizontal air flow is enabled. By facing nozzles to the center, vertical air flow is enabled.

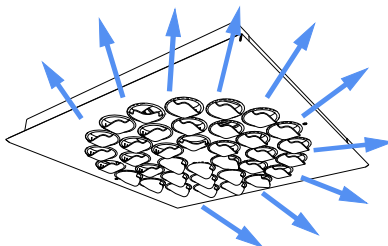
The nozzles are preset on 4-way diffusion.



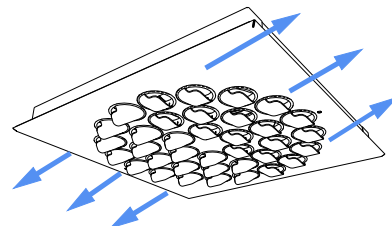
**1. 4-way**



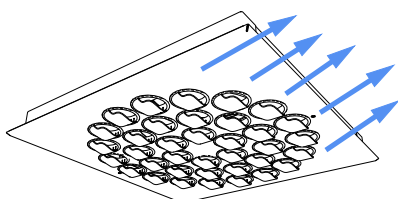
**2. 3-way**



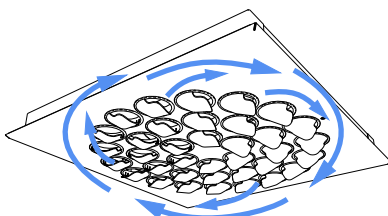
**3. 2-way**



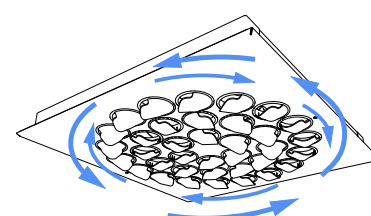
**4. 1-way**



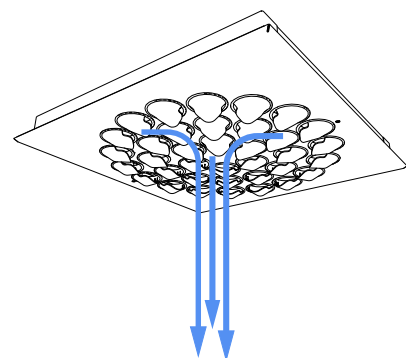
**5. Swirl**



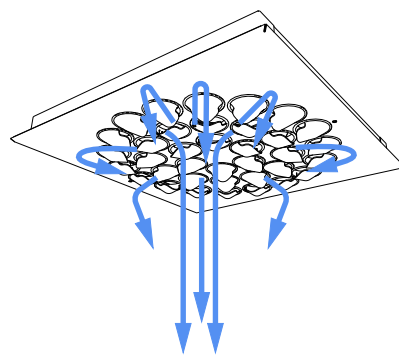
**6. Counter flow**



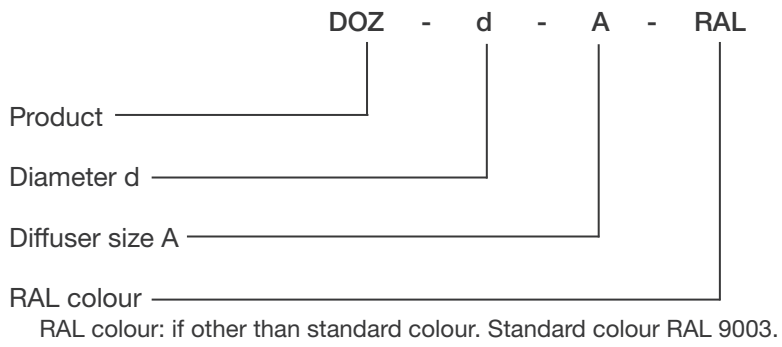
**7. Vertical**



**8. Vertical diffused**



## Product marking



**Example: DOZ 200-600**

## DJM Nozzle diffuser

The DJM is a jet nozzle diffuser designed to provide effective supply air distribution due to its high initial velocity and long throw length. The nozzles are designed to allow the air jet to be directed at different angles.

Jet nozzles are suitable for use in commercial and industrial applications, making them ideal for large areas such as theaters, cinemas, concert halls, train stations, and airports. They can be installed for both horizontal and vertical air supply.

- Nozzles can be rotated by  $\pm 30^\circ$
- Long throw length
- Low sound level
- Easy to clean
- Can be installed straight to the duct or on the flat surface
- Duct sizes Ø100-500 mm



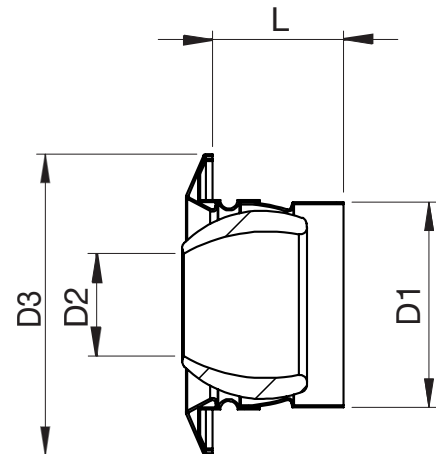
### Function

Fresh air is supplied to the room at a high initial velocity, causing a significant mixing effect with the room air due to the strong induction effect. The jet nozzle design allows the supply air jet to be adjusted by directing the nozzle at up to 30 degrees in any direction within a 360-degree roll. This versatility makes the product suitable for both cooled and heated air applications.

### Material and surface treatment

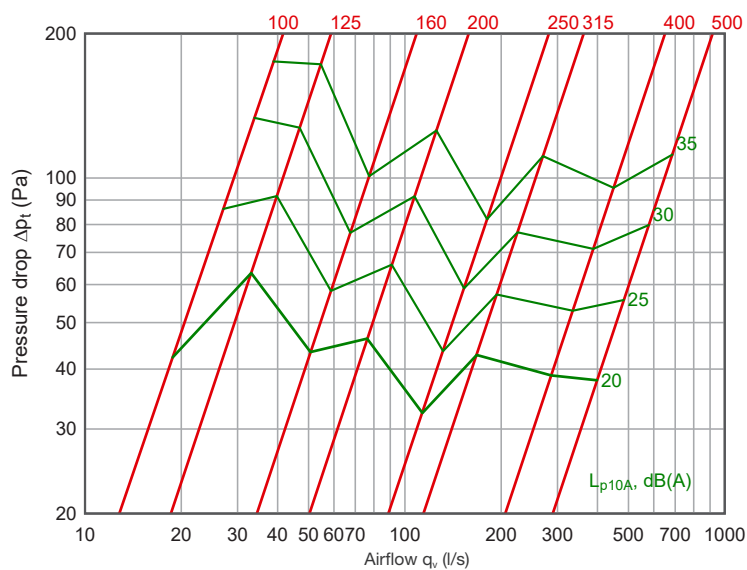
DJM body and nozzle is manufactured from aluminium. The jet nozzle diffuser has a standard white (RAL 9003) finish.

| Nominal size | ØD1 (mm) | ØD2 (mm) | ØD3 (mm) | L (mm) |
|--------------|----------|----------|----------|--------|
| 100          | 98       | 45       | 139      | 63     |
| 125          | 122      | 61       | 172      | 72     |
| 160          | 157      | 80       | 210      | 91     |
| 200          | 197      | 105      | 265      | 107    |
| 250          | 247      | 128      | 314      | 135    |
| 315          | 312      | 165      | 390      | 174    |
| 400          | 397      | 210      | 495      | 218    |
| 500          | 497      | 256      | 622      | 259    |

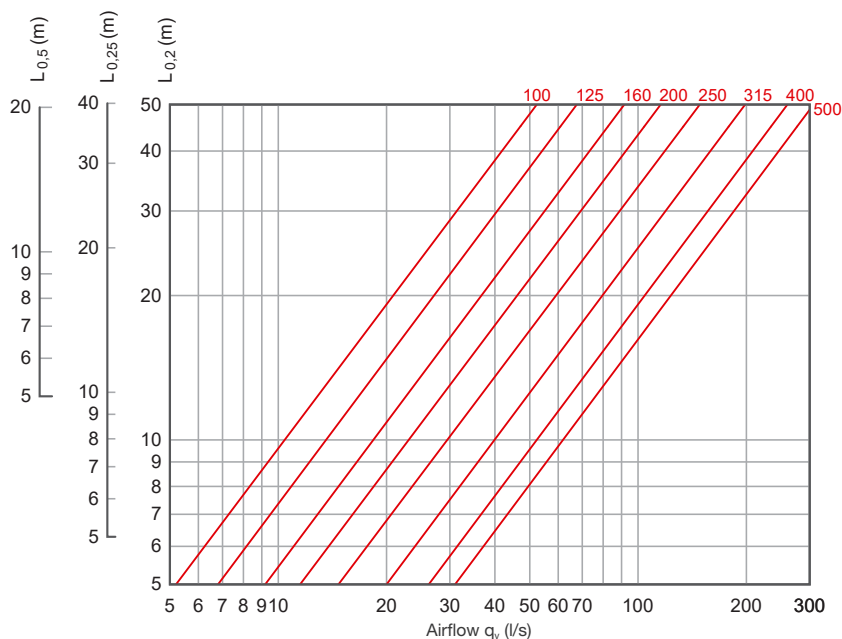


## Technical data

### Pressure loss and sound data

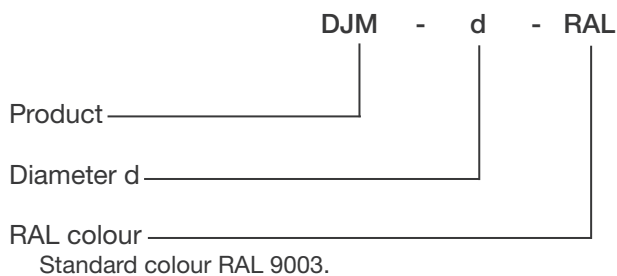


### Throw length



\* Given throw length corresponds to isothermal conditions.

## Product marking

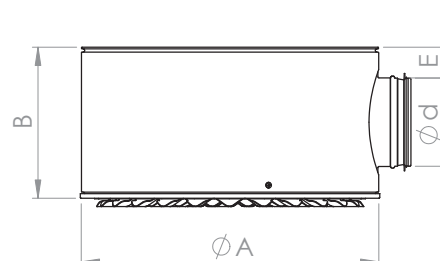
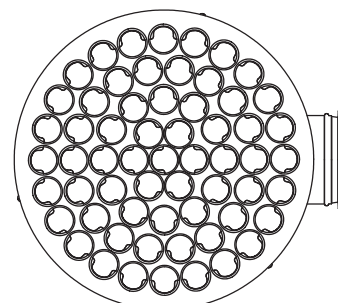


Example: DJM 200

## DEZ Nozzle diffuser

DEZ is a round nozzle diffuser, which is designed to provide effective supply air distribution with low noise level, while also avoiding draft in the occupied zone. DEZ diffuser has an integrated circular plenum box, and may be used for either supply or exhaust air. Diffusers front plate is easily removable, making the cleaning process more comfortable and less time consuming.

- Nozzles can be rotated by 360°
- Suitable for rooms without false ceiling
- Suitable for CAV and VAV systems
- High mixing ratio
- Can be used for heating, cooling and isothermal supply air
- Multiple air distribution patterns:
  - horizontal
  - swirl
  - vertical
- Round plenum box
- Cylindrical air volume regulator
- Easy access front panel
- Easy to clean
- Low noise level
- Available in alternative colors
- Duct sizes Ø100-315 mm



### Material and surface treatment

Nozzle diffuser DEZ is manufactured from galvanized steel and the nozzles are from ABS. The front plate and nozzles have a white (RAL 9003), grey (RAL 9006) or black (RAL 9005) finish by standard, but are also available in any other RAL colours.

| Nominal size | ØA  | B   | E  | Nozzles (pc) | Weight (kg) |
|--------------|-----|-----|----|--------------|-------------|
| 100          | 435 | 226 | 62 | 37           | 4,9         |
| 125          | 435 | 226 | 50 | 37           | 5,1         |
| 160          | 541 | 273 | 55 | 61           | 7,2         |
| 200          | 631 | 322 | 60 | 85           | 10,0        |
| 250          | 631 | 379 | 64 | 85           | 11,2        |
| 315          | 745 | 471 | 77 | 121          | 15,2        |

### Nozzle pattern on different sizes



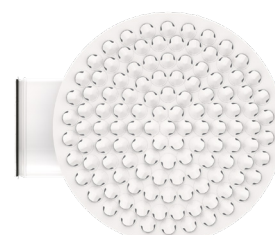
DEZ 100 ja 125



DEZ 160



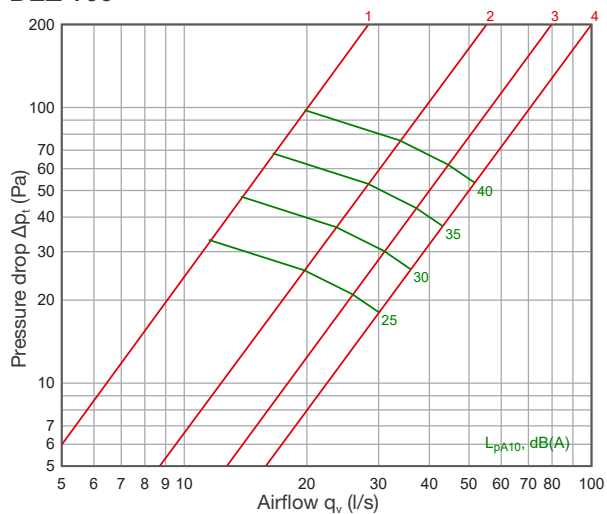
DEZ 200 ja 250



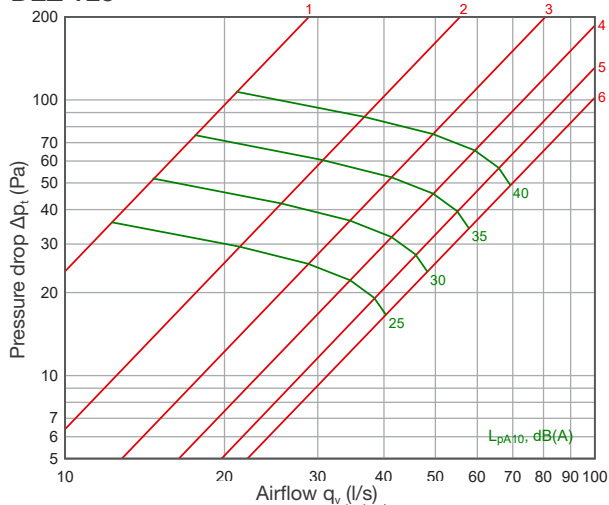
DEZ 315

## Technical data

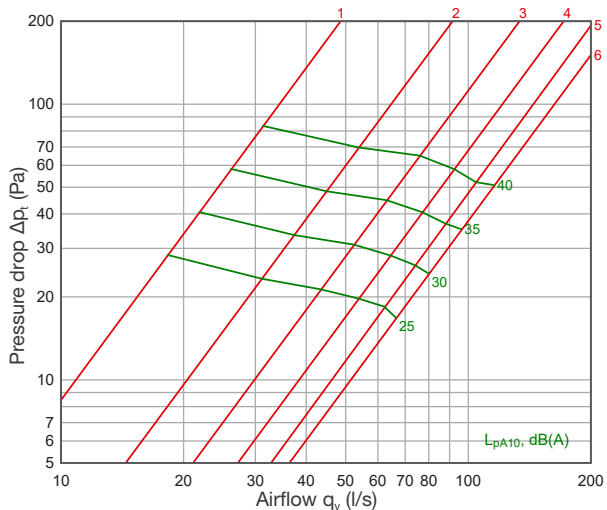
**DEZ 100**



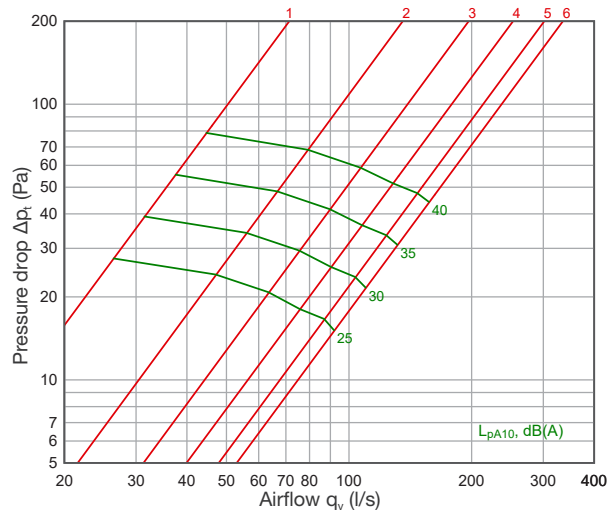
**DEZ 125**



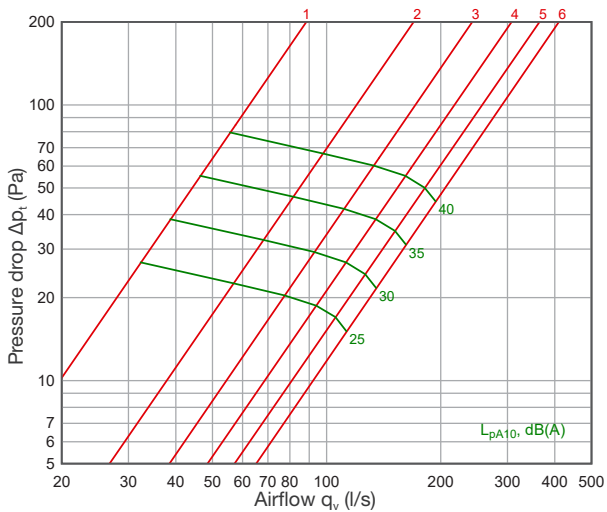
**DEZ 160**



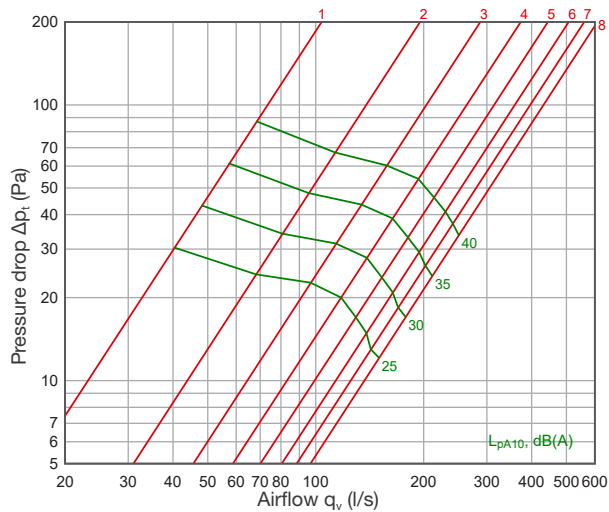
**DEZ 200**



**DEZ 250**



**DEZ 315**



## Acoustic data

| DEZ     | Position | K-factor | Sound level correction factor $K_{\text{okt}}$ (dB) |     |     |     |    |     |     |     |
|---------|----------|----------|-----------------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|         |          |          | 63                                                  | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DEZ 100 | s = 1    | 2,0      | -8                                                  | 0   | 1   | -4  | -4 | -8  | -13 | -22 |
|         | s = 2    | 4,0      | -7                                                  | 2   | 3   | -3  | -5 | -11 | -16 | -25 |
|         | s = 3    | 5,9      | -6                                                  | 3   | 4   | -2  | -6 | -13 | -18 | -27 |
|         | s = 4    | 7,5      | -5                                                  | 4   | 5   | -2  | -6 | -14 | -19 | -28 |
| DEZ 125 | s = 1    | 2,1      | -9                                                  | -1  | 0   | -4  | -3 | -7  | -11 | -20 |
|         | s = 2    | 4,1      | -8                                                  | 1   | 2   | -3  | -4 | -9  | -14 | -23 |
|         | s = 3    | 6,0      | -7                                                  | 2   | 3   | -3  | -5 | -11 | -16 | -25 |
|         | s = 4    | 7,9      | -6                                                  | 3   | 4   | -3  | -5 | -12 | -17 | -26 |
|         | s = 5    | 9,5      | -6                                                  | 3   | 4   | -2  | -6 | -13 | -18 | -27 |
|         | s = 6    | 10,7     | -5                                                  | 4   | 5   | -2  | -6 | -14 | -19 | -28 |
| DEZ 160 | s = 1    | 3,5      | -8                                                  | -1  | -1  | -4  | -4 | -8  | -14 | -21 |
|         | s = 2    | 6,7      | -7                                                  | 1   | 2   | -3  | -5 | -10 | -16 | -25 |
|         | s = 3    | 9,9      | -6                                                  | 3   | 4   | -3  | -6 | -12 | -17 | -26 |
|         | s = 4    | 12,9     | -5,0                                                | 5   | 4   | -2  | -6 | -13 | -18 | -27 |
|         | s = 5    | 15,6     | -5,0                                                | 4   | 4   | -2  | -7 | -12 | -19 | -27 |
|         | s = 6    | 17,7     | -5,0                                                | 4   | 5   | -2  | -7 | -14 | -20 | -28 |
| DEZ 200 | s = 1    | 5,1      | -4                                                  | 3   | 0   | -4  | -4 | -8  | -14 | -23 |
|         | s = 2    | 9,9      | -1                                                  | 6   | 2   | -3  | -6 | -10 | -16 | -25 |
|         | s = 3    | 14,7     | -1                                                  | 7   | 3   | -3  | -6 | -12 | -18 | -27 |
|         | s = 4    | 19,4     | -1                                                  | 6   | 3   | -2  | -7 | -13 | -20 | -28 |
|         | s = 5    | 23,6     | -1                                                  | 6   | 3   | -2  | -7 | -14 | -20 | -29 |
|         | s = 6    | 26,8     | -1                                                  | 6   | 3   | -2  | -7 | -15 | -22 | -29 |
| DEZ 250 | s = 1    | 6,3      | -4                                                  | 3   | -1  | -4  | -4 | -6  | -12 | -21 |
|         | s = 2    | 12,5     | -3                                                  | 5   | 1   | -3  | -5 | -9  | -15 | -24 |
|         | s = 3    | 18,5     | -2                                                  | 6   | 2   | -3  | -6 | -10 | -17 | -26 |
|         | s = 4    | 24,4     | -1                                                  | 6   | 3   | -3  | -6 | -12 | -18 | -27 |
|         | s = 5    | 30,0     | 0                                                   | 7   | 3   | -2  | -7 | -13 | -19 | -28 |
|         | s = 6    | 35,3     | 0                                                   | 7   | 4   | -2  | -7 | -13 | -20 | -29 |
| DEZ 315 | s = 1    | 7,4      | -3                                                  | 2   | -4  | -2  | -4 | -9  | -15 | -22 |
|         | s = 2    | 14,2     | -1                                                  | 5   | -2  | -1  | -5 | -11 | -17 | -26 |
|         | s = 3    | 21,5     | 0                                                   | 5   | 0   | -1  | -6 | -13 | -19 | -27 |
|         | s = 4    | 29,0     | 0                                                   | 6   | 1   | 0   | -7 | -15 | -22 | -29 |
|         | s = 5    | 36,0     | 2                                                   | 7   | 1   | 0   | -7 | -16 | -23 | -29 |
|         | s = 6    | 43,1     | 1                                                   | 6   | 0   | 0   | -7 | -17 | -24 | -31 |
|         | s = 7    | 50,0     | 1                                                   | 6   | 0   | 0   | -7 | -15 | -24 | -32 |
|         | s = 8    | 56,4     | 2                                                   | 6   | 0   | 0   | -7 | -17 | -24 | -32 |

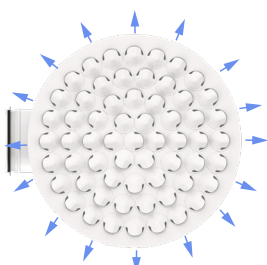
| DEZ     | Position | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|---------|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|         |          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|         |          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DEZ 100 | s = 1    | 24                                 | 14  | 13  | 12  | 12 | 14 | 14 | 18 |
|         | s = 4    | 23                                 | 13  | 11  | 11  | 9  | 8  | 10 | 12 |
| DEZ 125 | s = 1    | 22                                 | 12  | 12  | 12  | 12 | 14 | 14 | 18 |
|         | s = 6    | 21                                 | 12  | 10  | 11  | 9  | 8  | 10 | 12 |
| DEZ 160 | s = 1    | 19                                 | 10  | 11  | 11  | 12 | 14 | 14 | 18 |
|         | s = 6    | 19                                 | 10  | 11  | 10  | 7  | 8  | 11 | 13 |
| DEZ 200 | s = 1    | 16                                 | 10  | 13  | 9   | 9  | 11 | 13 | 17 |
|         | s = 6    | 13                                 | 9   | 10  | 9   | 6  | 7  | 9  | 11 |
| DEZ 250 | s = 1    | 13                                 | 9   | 13  | 9   | 9  | 11 | 13 | 17 |
|         | s = 6    | 12                                 | 8   | 11  | 9   | 6  | 7  | 9  | 11 |
| DEZ 315 | s = 1    | 9                                  | 8   | 13  | 11  | 12 | 14 | 16 | 20 |
|         | s = 8    | 9                                  | 7   | 11  | 9   | 8  | 8  | 12 | 14 |



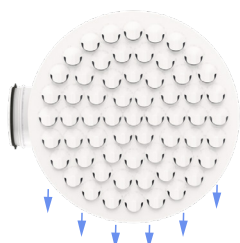
## Nozzle settings

The nozzles are located on the front panel of the diffuser, allowing variable options for different airflow patterns. Depending on rooms characteristics and supply air temperature, the airflow can be distributed either horizontally, vertically or by swirl. By facing nozzles to the sides, horizontal airflow is enabled. By facing nozzles to the center, vertical airflow is enabled. By facing nozzles circularly, swirl airflow is enabled.

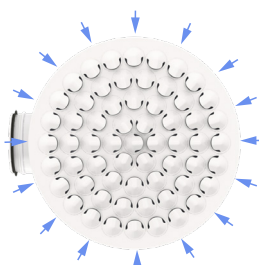
The nozzles are preset on 4-way diffusion.



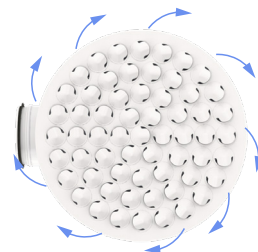
**1. 4-way**



**2. 1-way**

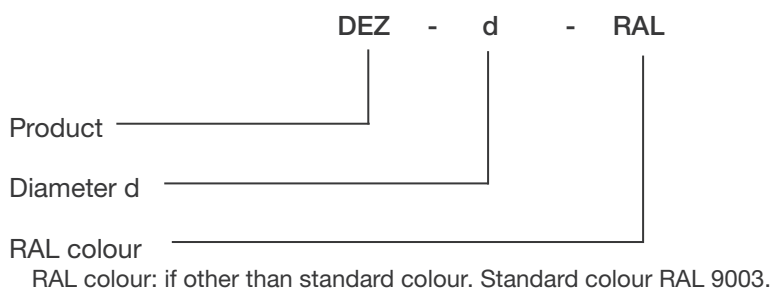


**3. Vertical**



**4. Swirl**

## Product codes

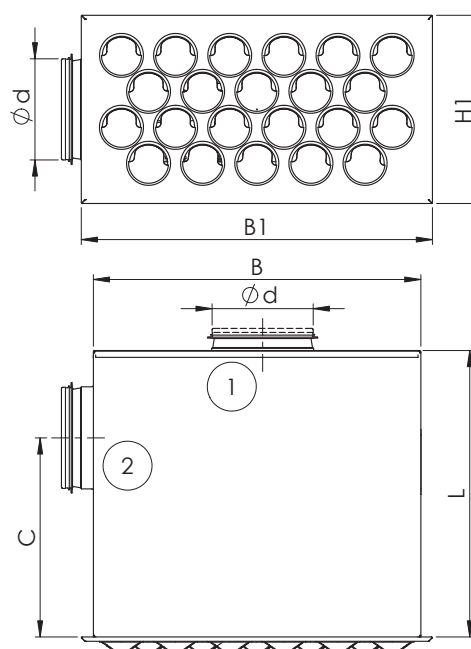


**Example: DEZ 200 RAL 9003**

## DRZ Nozzle diffuser

DRZ is a rectangular nozzle diffuser with integrated plenum box, which is designed to provide effective supply air distribution at low noise level, while also avoiding draft in the occupied zone.

- Nozzles can be rotated by 360°
- Suitable for wall installation
- Suitable for CAV and VAV systems
- High mixing ratio
- Can be used for heating, cooling and isothermal supply air
- Multiple air distribution patterns:
  - horizontal
  - vertical
- Easy access front panel
- Easy to clean
- With integrated plenum box
- Exact measuring and adjusting of air volumes



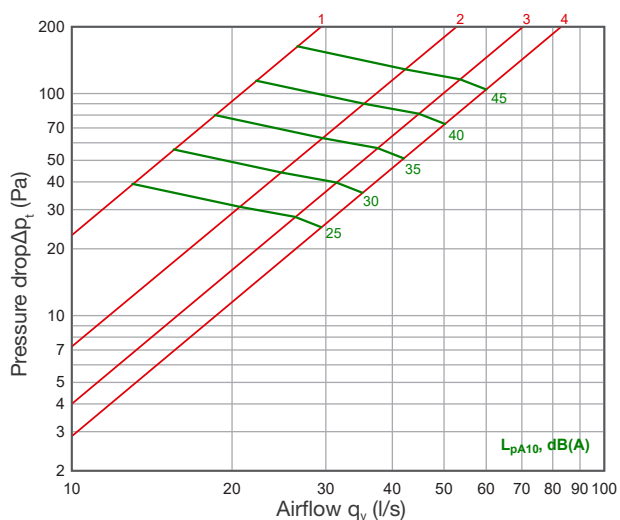
### Material and dimensions

Nozzle diffuser box and front panel is manufactured from galvanized steel and the nozzles are from ABS. The front plate and nozzles have a white (RAL 9003), grey (RAL 9006) or black (RAL 9005) finish by standard, but are also available in any other RAL colours.

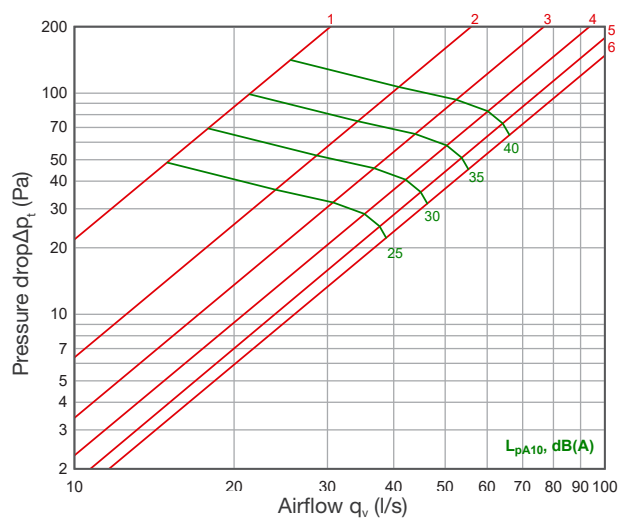
| Nominal size<br>Bx H mm | B   | H   | d   | B1  | H1  | Nozzles<br>(pcs) | L   | C   | Weight<br>(kg) |
|-------------------------|-----|-----|-----|-----|-----|------------------|-----|-----|----------------|
| 400x150-1               | 400 | 150 | 100 | 431 | 181 | 17               | 350 | 230 | 4,8            |
| 400x200-1               | 400 | 200 | 125 | 431 | 231 | 22               | 380 | 243 | 5,9            |
| 500x200-1               | 500 | 200 | 160 | 531 | 231 | 30               | 415 | 260 | 6,9            |
| 600x250-1               | 600 | 250 | 200 | 631 | 281 | 48               | 435 | 280 | 9,2            |
| 750x300-1               | 750 | 300 | 250 | 781 | 331 | 75               | 415 | 305 | 10,5           |
| 400x150-2               | 400 | 150 | 100 | 431 | 181 | 17               | 331 | 230 | 4,8            |
| 400x200-2               | 400 | 200 | 125 | 431 | 231 | 22               | 356 | 243 | 5,9            |
| 500x200-2               | 500 | 200 | 160 | 531 | 231 | 30               | 391 | 260 | 6,9            |
| 600x250-2               | 600 | 250 | 200 | 631 | 281 | 48               | 431 | 280 | 9,2            |
| 750x300-2               | 750 | 300 | 250 | 781 | 331 | 75               | 481 | 305 | 10,5           |

## Technical data

**DRZ 400x150**

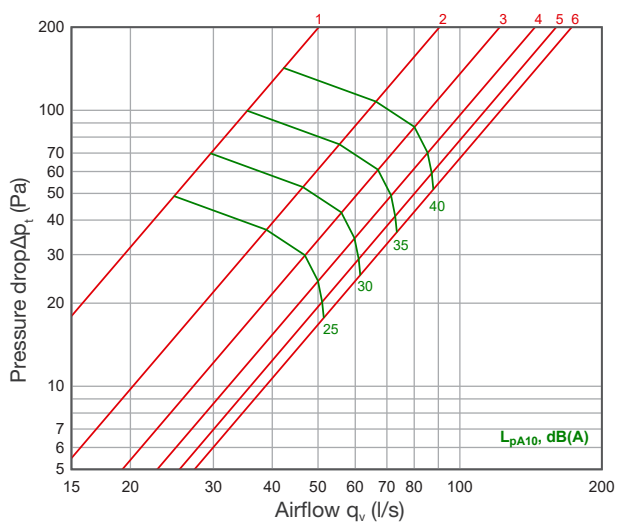


**DRZ 400x200**

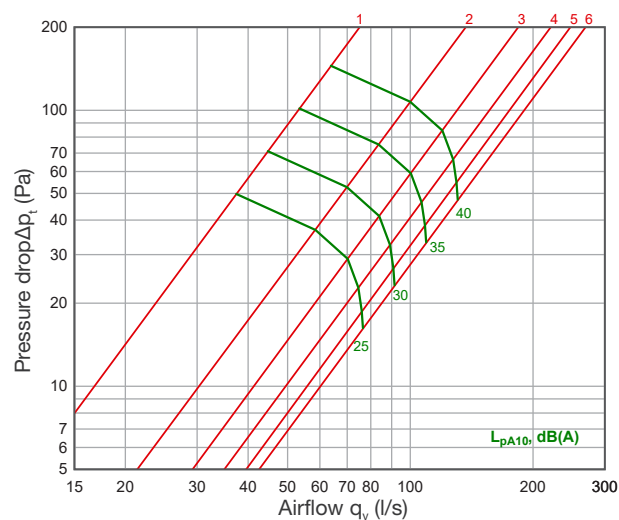


## Acoustic data

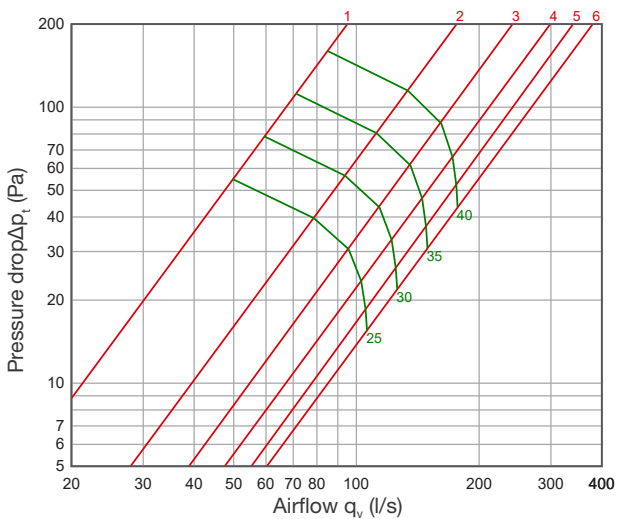
**DRZ 500x200**



**DRZ 600x250**



**DRZ 750x300**



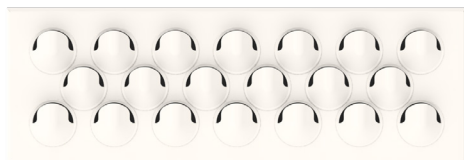
| DRZ         | Asento | Sound level correction factor $K_{\text{okt}}$ (dB) |     |     |     |    |     |     |     |
|-------------|--------|-----------------------------------------------------|-----|-----|-----|----|-----|-----|-----|
|             |        | 63                                                  | 125 | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DRZ 400x150 | s = 1  | -7                                                  | -3  | -2  | -2  | -5 | -9  | -16 | -21 |
|             | s = 2  | -6                                                  | -1  | 0   | -1  | -5 | -12 | -20 | -27 |
|             | s = 3  | -5                                                  | 0   | 2   | -1  | -5 | -13 | -22 | -30 |
|             | s = 4  | -4                                                  | 1   | 2   | 0   | -5 | -14 | -24 | -32 |
| DRZ 400x200 | s = 1  | -8                                                  | -5  | -4  | -3  | -5 | -8  | -13 | -17 |
|             | s = 2  | -7                                                  | -2  | -1  | -2  | -5 | -10 | -17 | -23 |
|             | s = 3  | -6                                                  | -1  | 0   | -1  | -5 | -12 | -20 | -26 |
|             | s = 4  | -5                                                  | 0   | 1   | -1  | -5 | -13 | -21 | -29 |
|             | s = 5  | -5                                                  | 1   | 2   | -1  | -5 | -13 | -23 | -30 |
|             | s = 6  | -4                                                  | 1   | 2   | 0   | -5 | -14 | -24 | -32 |
| DRZ 500x200 | s = 1  | -7                                                  | -3  | -3  | -3  | -6 | -8  | -11 | -16 |
|             | s = 2  | -5                                                  | -1  | -1  | -2  | -5 | -10 | -15 | -22 |
|             | s = 3  | -4                                                  | 1   | 1   | -2  | -5 | -12 | -18 | -25 |
|             | s = 4  | -3                                                  | 2   | 2   | -1  | -5 | -13 | -19 | -27 |
|             | s = 5  | -3                                                  | 2   | 3   | -1  | -5 | -13 | -21 | -29 |
|             | s = 6  | -3                                                  | 3   | 3   | -1  | -5 | -14 | -22 | -31 |
| DRZ 600x250 | s = 1  | -5                                                  | -1  | -2  | -3  | -7 | -8  | -9  | -14 |
|             | s = 2  | -4                                                  | 1   | 1   | -3  | -6 | -10 | -13 | -20 |
|             | s = 3  | -3                                                  | 2   | 1   | -2  | -6 | -11 | -15 | -23 |
|             | s = 4  | -2                                                  | 3   | 2   | -2  | -6 | -12 | -17 | -25 |
|             | s = 5  | -1                                                  | 4   | 3   | -1  | -6 | -13 | -18 | -27 |
|             | s = 6  | -1                                                  | 5   | 4   | -1  | -7 | -14 | -19 | -29 |
| DRZ 750x300 | s = 1  | -6                                                  | -2  | -3  | -4  | -7 | -7  | -7  | -12 |
|             | s = 2  | -4                                                  | 0   | -1  | -3  | -6 | -9  | -11 | -18 |
|             | s = 3  | -3                                                  | 1   | 0   | -2  | -6 | -10 | -14 | -21 |
|             | s = 4  | -3                                                  | 2   | 1   | -2  | -6 | -11 | -16 | -24 |
|             | s = 5  | -2                                                  | 3   | 2   | -2  | -6 | -12 | -17 | -25 |
|             | s = 6  | -2                                                  | 4   | 3   | -1  | -6 | -13 | -18 | -27 |

| DRZ         | Position | Sound attenuation (dB)             |     |     |     |    |    |    |    |
|-------------|----------|------------------------------------|-----|-----|-----|----|----|----|----|
|             |          | Mean frequency of octave band (Hz) |     |     |     |    |    |    |    |
|             |          | 63                                 | 125 | 250 | 500 | 1k | 2k | 4k | 8k |
| DRZ 400x150 | s = 1    | 16                                 | 12  | 8   | 8   | 10 | 9  | 13 | 20 |
|             | s = 4    | 17                                 | 11  | 8   | 8   | 8  | 6  | 11 | 15 |
| DRZ 400x200 | s = 1    | 15                                 | 11  | 7   | 7   | 10 | 10 | 13 | 19 |
|             | s = 6    | 15                                 | 10  | 7   | 7   | 8  | 6  | 10 | 14 |
| DRZ 500x200 | s = 1    | 13                                 | 10  | 6   | 7   | 9  | 10 | 13 | 19 |
|             | s = 6    | 13                                 | 9   | 6   | 5   | 8  | 7  | 9  | 13 |
| DRZ 600x250 | s = 1    | 13                                 | 7   | 5   | 6   | 8  | 10 | 13 | 18 |
|             | s = 6    | 12                                 | 7   | 5   | 4   | 6  | 6  | 8  | 12 |
| DRZ 750x300 | s = 1    | 15                                 | 5   | 5   | 6   | 8  | 11 | 14 | 18 |
|             | s = 6    | 12                                 | 4   | 4   | 3   | 5  | 6  | 8  | 11 |

## Nozzle settings

The nozzles are located on the front panel of the diffuser, allowing variable options for different airflow patterns. Depending on rooms characteristics and supply air temperature, the airflow can be distributed either horizontally or vertically. The nozzles are preset on 1-way diffusion.

### 1. 1-way



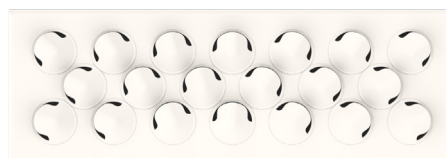
### 2. 1-side



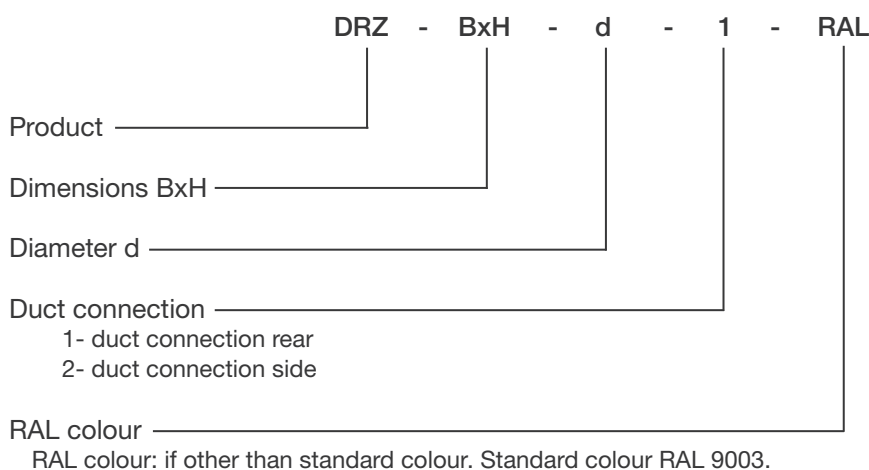
### 3. 2-side



### 4. 3-way



## Product codes



**Example: DRZ 300x150/100-1-1 RAL9006**

## DDR Diffuser

Diffuser for supply air for large air quantities.

Wall or ceiling installation. Diffusion pattern adjustable between narrow or wide by rotating the inner cone.

Suitable also for heated supply air.

| DDR     | l/s      |          |          |
|---------|----------|----------|----------|
|         | 30 dB(A) | 35 dB(A) | 40 dB(A) |
| DDR 200 | 150      | 180      | 220      |
| DDR 250 | 230      | 280      | 390      |
| DDR 315 | 350      | 410      | 580      |
| DDR 400 | 540      | 610      | 900      |
| DDR 500 | 700      | 850      | 1150     |

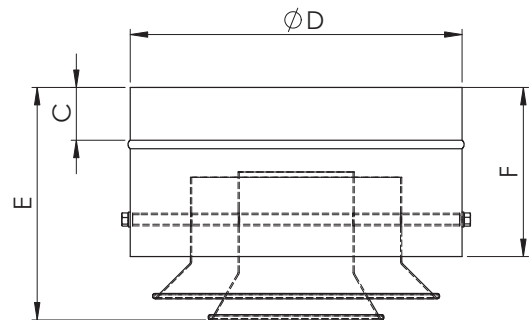


### Material and sizes

Manufactured of galvanized steel and coated white (RAL 9003). Available in other RAL colours.

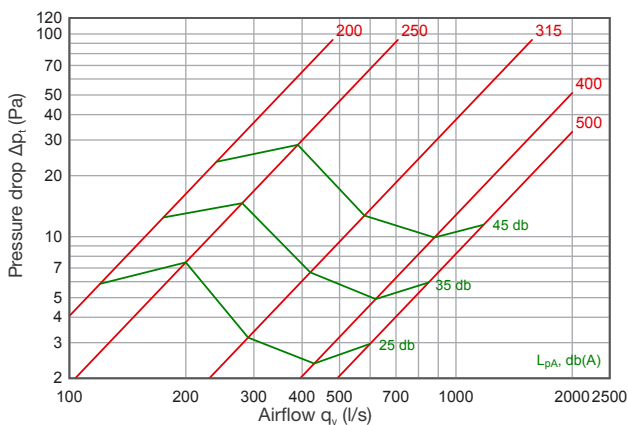
| Nominal size (mm) | *ØD | F   | E   | C  | Weight (kg) |
|-------------------|-----|-----|-----|----|-------------|
| 200               | 200 | 110 | 150 | 35 | 2,5         |
| 250               | 250 | 140 | 190 | 50 | 3,0         |
| 315               | 315 | 160 | 220 | 50 | 4,5         |
| 400               | 400 | 200 | 280 | 50 | 6,8         |
| 500               | 500 | 270 | 375 | 65 | 11          |

\*ØD duct size.

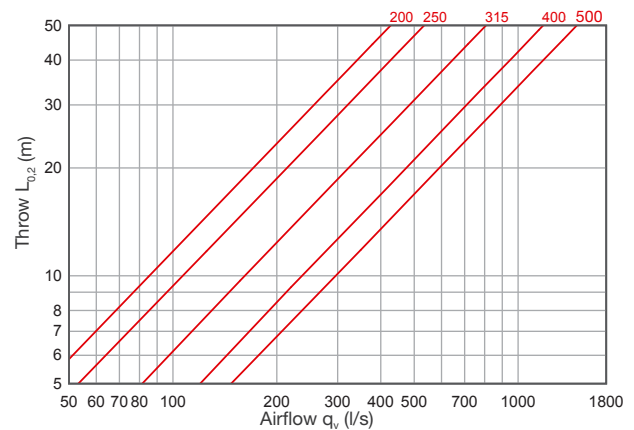


### Technical data

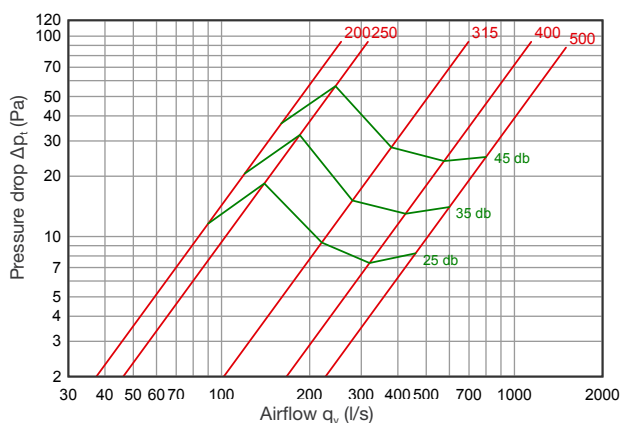
DDR wide air jet dispersal



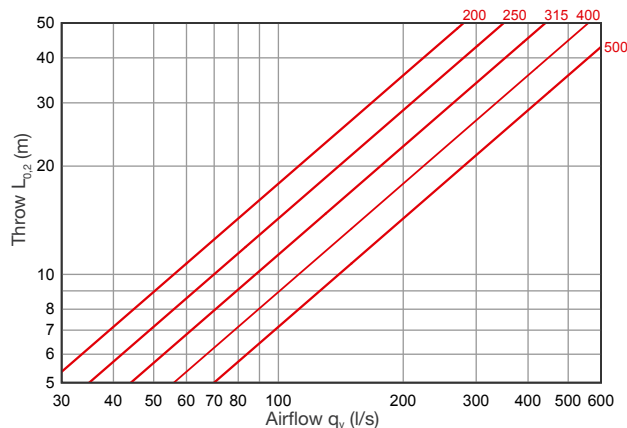
DDR wide air jet dispersal



DDR narrow air jet dispersal



DDR narrow air jet dispersal



## Acoustic data

Wide air jet dispersal

$L_w$ (dB)

| Product | Sound level correction factor $K_{okt}$ (dB) |     |     |    |    |     |     |
|---------|----------------------------------------------|-----|-----|----|----|-----|-----|
|         | 125                                          | 250 | 500 | 1k | 2k | 4k  | 8k  |
| DDR 200 | 3                                            | 2   | -1  | 0  | -3 | -12 | -29 |
| DDR 250 | 1                                            | 2   | -1  | 1  | -4 | -11 | -27 |
| DDR 315 | 3                                            | 1   | -1  | 2  | -5 | -16 | -28 |
| DDR 400 | 7                                            | 1   | 1   | 1  | -7 | -18 | -29 |
| DDR 500 | 12                                           | 2   | 3   | -2 | -9 | -17 | -30 |

Narrow air jet dispersal

$L_w$ (dB)

| Product | Sound level correction factor $K_{okt}$ (dB) |     |     |    |     |     |     |
|---------|----------------------------------------------|-----|-----|----|-----|-----|-----|
|         | 125                                          | 250 | 500 | 1k | 2k  | 4k  | 8k  |
| DDR 200 | 2                                            | -1  | -2  | 1  | -3  | -16 | -31 |
| DDR 250 | 0                                            | -1  | -4  | 2  | -5  | -18 | -31 |
| DDR 315 | 2                                            | -1  | -2  | 3  | -9  | -19 | -31 |
| DDR 400 | 4                                            | -1  | 2   | 2  | -9  | -19 | -31 |
| DDR 500 | 7                                            | -1  | 3   | 2  | -22 | -22 | -32 |

$\Delta L$ , dB

| Product | Sound attenuation (dB)             |     |     |    |    |    |    |
|---------|------------------------------------|-----|-----|----|----|----|----|
|         | Mean frequency of octave band (Hz) |     |     |    |    |    |    |
|         | 125                                | 250 | 500 | 1k | 2k | 4k | 8k |
| DDR 200 | 13                                 | 7   | 3   | 1  | -  | -  | -  |
| DDR 250 | 11                                 | 6   | 2   | -  | -  | -  | -  |
| DDR 315 | 9                                  | 4   | 2   | -  | -  | -  | -  |
| DDR 400 | 7                                  | 4   | 1   | -  | -  | -  | -  |
| DDR 500 | 5                                  | 2   | -   | -  | -  | -  | -  |

## Product codes

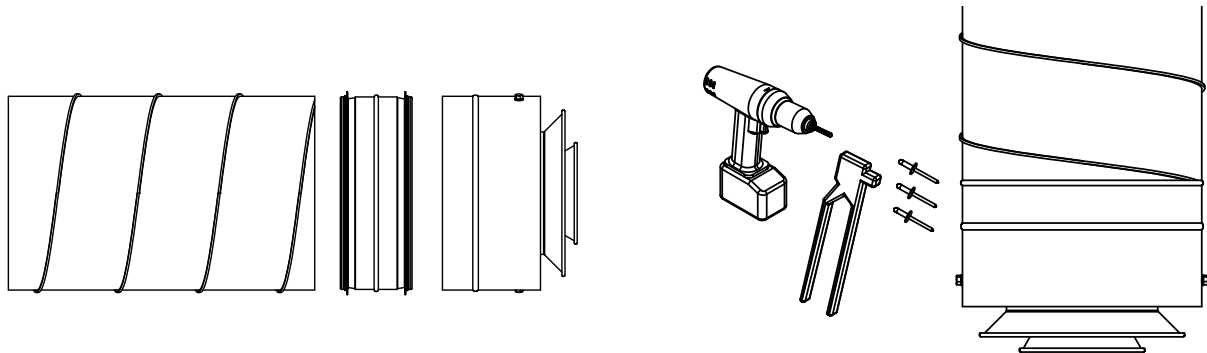


RAL colour: if other than standard colour. Standard colour RAL 9003.

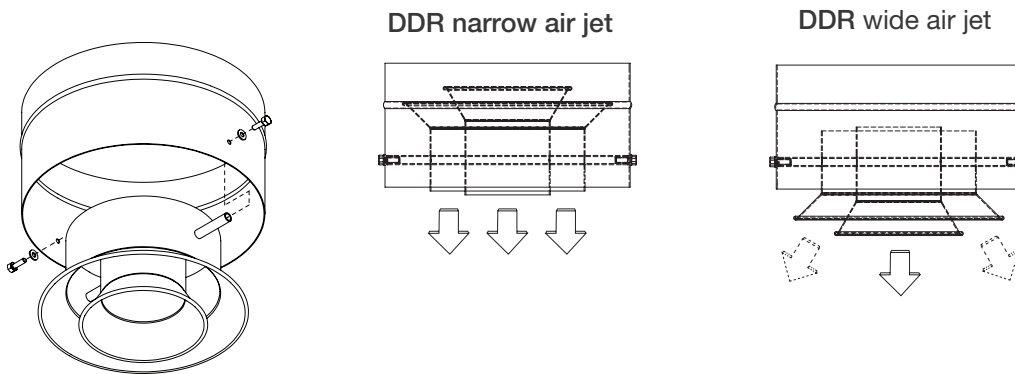
Example: DDR 200

## Installation and maintenance

Installation directly to duct or SKDM plenum box using an inner coupling and fixed with rivets.



## Adjustable diffusion pattern



## Maintenance

Clean visible parts with a damp cloth.



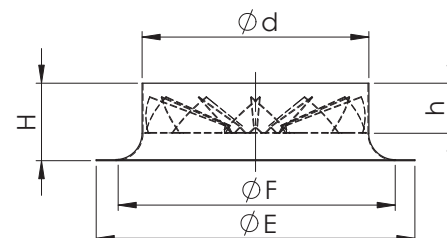
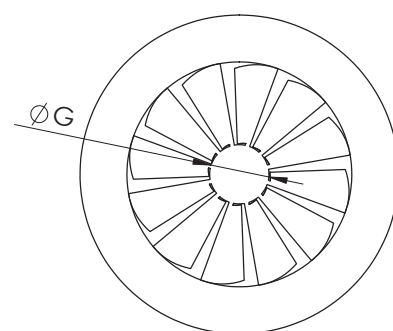
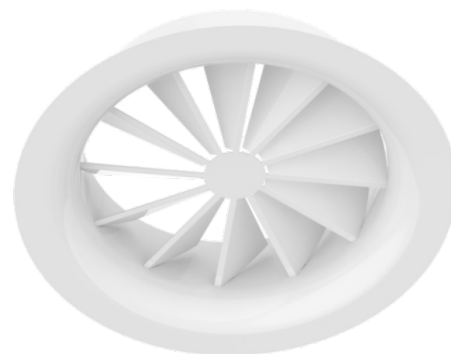
## DPR Swirl diffuser

Diffuser for supply air for ceiling or free hanging installation.

### Features:

- horizontal radial swirl air jet
- installation in ceiling or free hanging

Suitable for hospitals, offices etc.

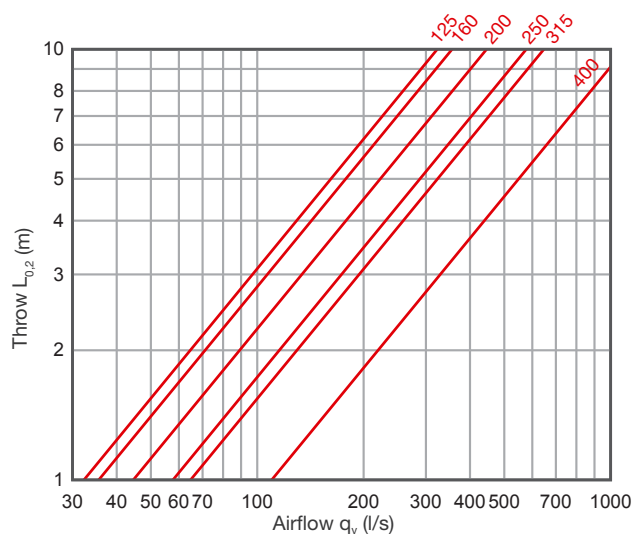
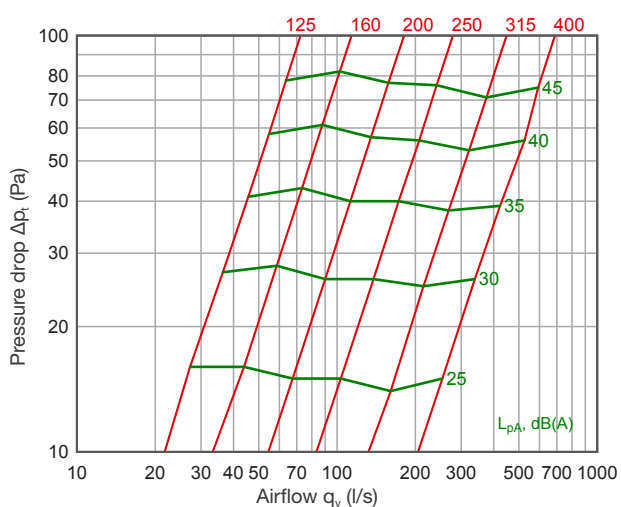


### Structure and dimensions

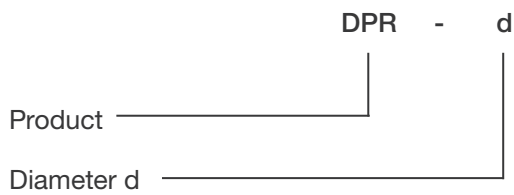
Manufactured of galvanized steel and coated white (RAL 9003).

| Nominal-size Ød | d   | E   | F   | G  | h  | H   |
|-----------------|-----|-----|-----|----|----|-----|
| 125             | 122 | 225 | 195 | 28 | 55 | 82  |
| 160             | 157 | 250 | 220 | 50 | 55 | 82  |
| 200             | 197 | 300 | 270 | 50 | 55 | 82  |
| 250             | 247 | 350 | 320 | 65 | 55 | 85  |
| 315             | 312 | 415 | 375 | 87 | 55 | 85  |
| 400             | 398 | 520 | 470 | 87 | 60 | 107 |

### Technical data



## Product codes



Example: DPR 125

## Installation

Directly to duct with rivets.

## Adjustment

It is not possible to control the airflows in the DPR diffuser itself. It is recommended to connect a diffuser to the SKDM plenum box for air volume control and measurement.

## Maintenance

Clean visible parts with a damp cloth.

## DPL Adjustable swirl diffuser

DPL/DPLS/DPLT is a adjustable swirl diffuser for high-ceilinged rooms. Thanks to its adjustable blades the airflow can be either horizontal or vertical and is thus suitable for both cooling and heating.

Positioning the blades at angles between 45° to 90° is suitable for cooling, and angles below 45° are suitable for heating. Adjusting can either be done manually or with the help of an electrical or thermal actuator.

Suitable usage locations are hospitals, office rooms, restaurants and other public premises.



- Suitable for both cooling and heating
- Horizontal and vertical airflow
- High inductance
- Suitable for connecting to an actuator

### Quick selection

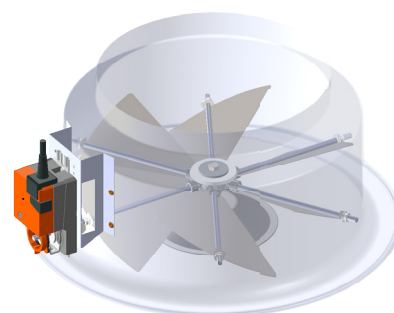
| Nominal size<br>Ød | Air volume (l/s)<br>(blades positioned at 45°) |             |             | Recommended<br>installation height (m) |
|--------------------|------------------------------------------------|-------------|-------------|----------------------------------------|
|                    | Lw 20 dB(A)                                    | Lw 35 dB(A) | Lw 50 dB(A) |                                        |
| 250                | 50                                             | 145         | 250         | 3-5,3                                  |
| 315                | 75                                             | 240         | 405         | 3,3-6                                  |
| 400                | 125                                            | 385         | 515         | 4,3-7,5                                |
| 500                | 210                                            | 525         | 890         | 5,5-16                                 |
| 630                | 320                                            | 935         | 1615        | 7,5-26                                 |

### Models

DPL - manually adjustable rotary diffuser (the blades can be adjusted individually)

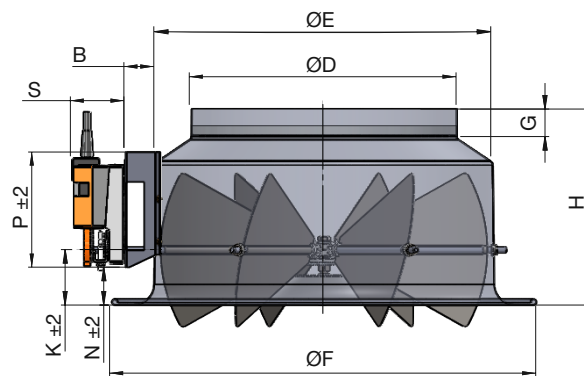
DPLS - rotary diffuser with simultaneously adjustable blades. When using an actuator to adjust, Belimo LM24A-SR, NM24A-SR or SM24A-SR actuators are recommended.

DPLT - rotary diffuser equipped with a thermostat. The blades of the air diffuser are adjusted automatically without using electrical control. When using an actuator equipped with a thermostat, blade adjustment is based on the supply air temperature. The operating temperature of the air diffuser is -15 °C to 40 °C.



## Design and dimensions

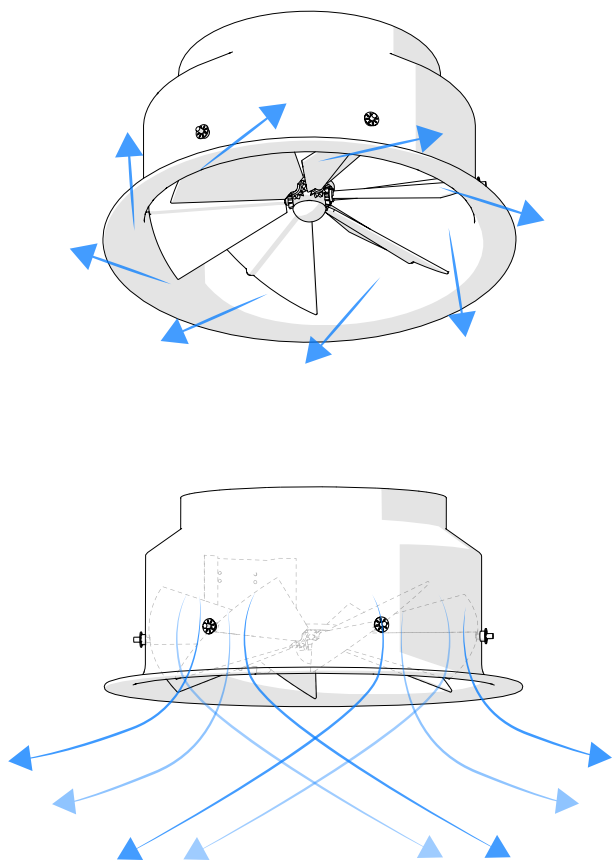
The casing of the DPL rotary diffuser is made of an aluminium sheet and blades of steel sheet. The diffuser is powder coated white (RAL 9003).



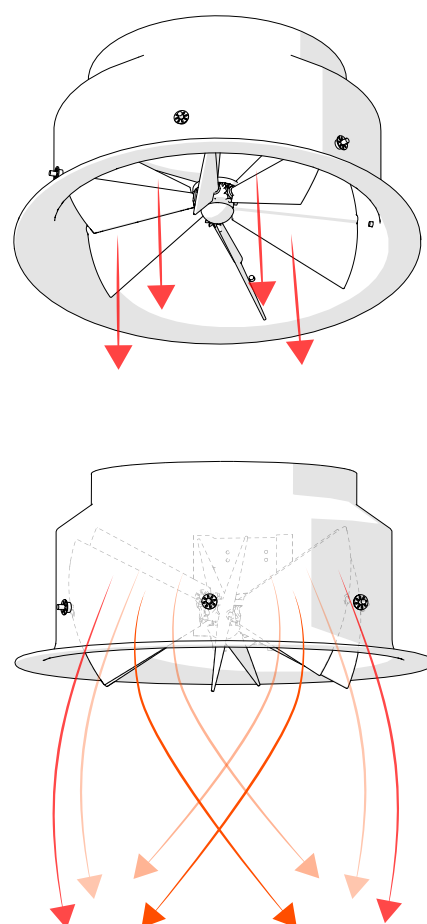
| Nominal size Ød | D   | E   | G  | H   | F   | K   | B   | P   | S  | N  | Belimo actuator |
|-----------------|-----|-----|----|-----|-----|-----|-----|-----|----|----|-----------------|
| 200             | 198 | 248 | 40 | 180 | 350 | 47  | 30  | 135 | 61 | 28 | LM24A-SR 5 Nm   |
| 250             | 248 | 298 | 40 | 205 | 400 | 55  | 30  | 135 | 61 | 36 | LM24A-SR 5 Nm   |
| 315             | 313 | 398 | 40 | 230 | 500 | 64  | 30  | 135 | 61 | 45 | LM24A-SR 5 Nm   |
| 400             | 398 | 465 | 60 | 270 | 615 | 64  | 60  | 160 | 62 | 45 | NM24A-SR 10 Nm  |
| 500             | 498 | 565 | 60 | 320 | 780 | 90  | 80  | 160 | 62 | 71 | NM24A-SR 10 Nm  |
| 630             | 628 | 665 | 80 | 390 | 935 | 120 | 100 | 196 | 64 | 84 | SM24A-SR 20 Nm  |

## Technical data

### Cooling mode



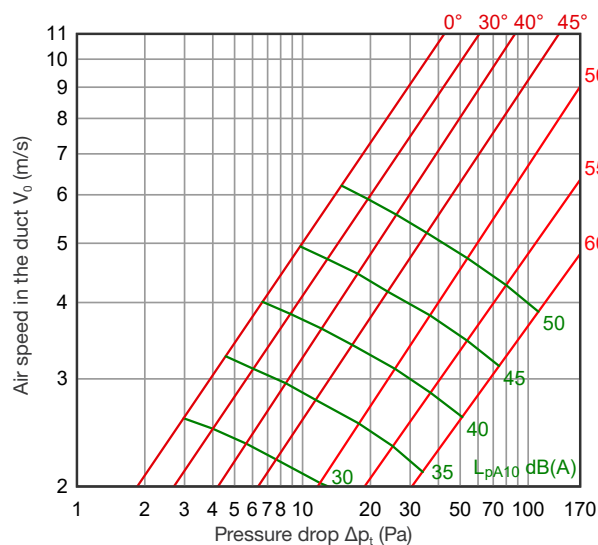
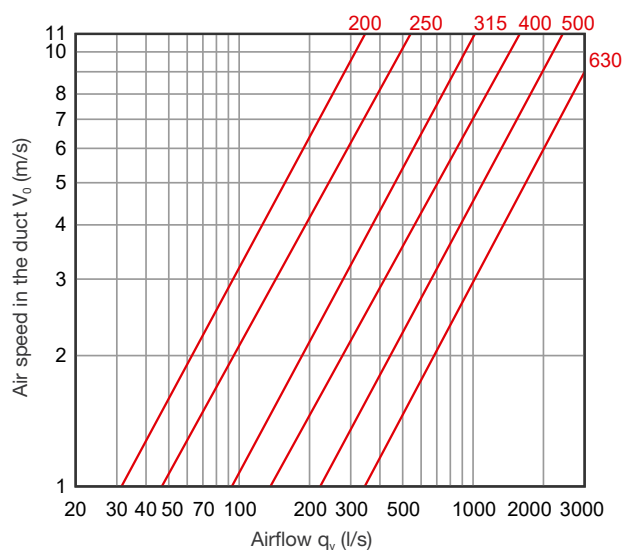
### Heating mode



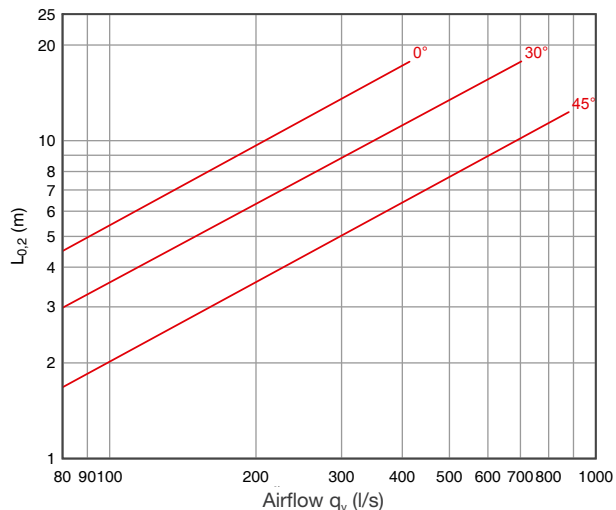
Terms used:

$V_o$  [m/s] – airflow rate in the channel

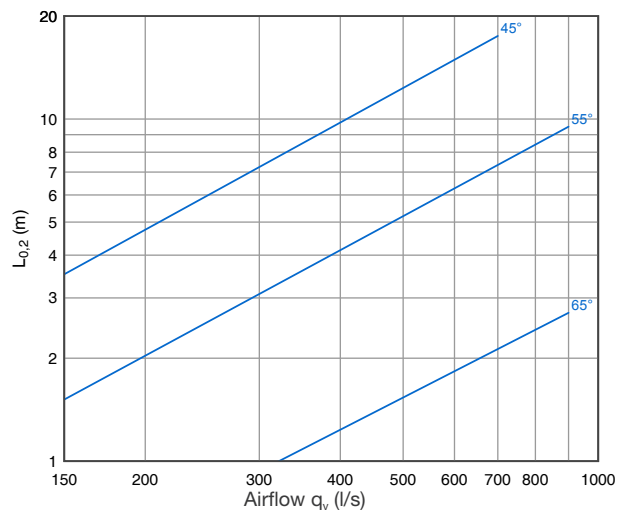
$L_{0,2}$  [m] – airflow range



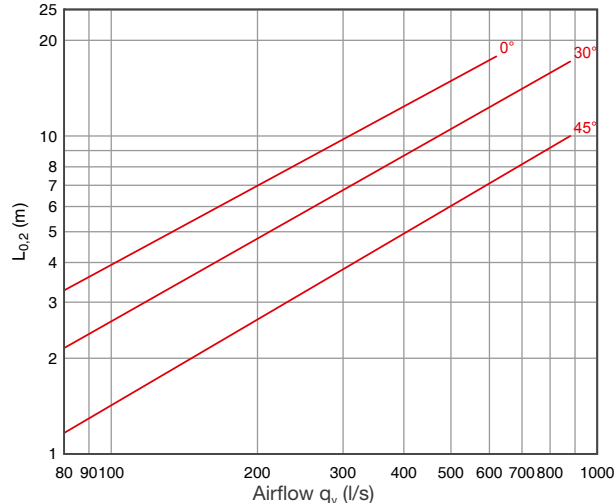
**DPL 250 +5K**



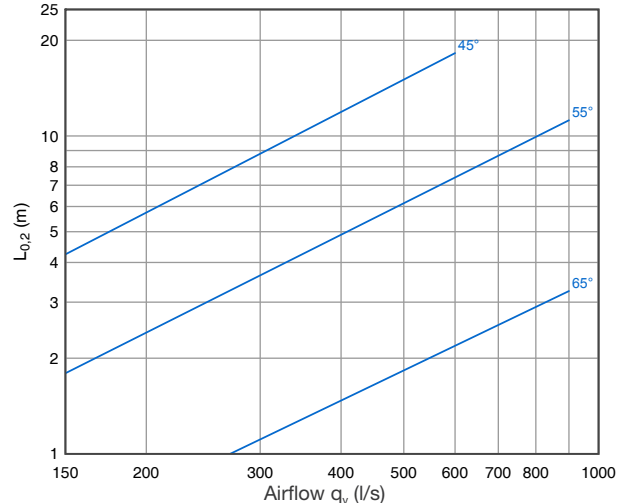
**DPL 250 -5K**



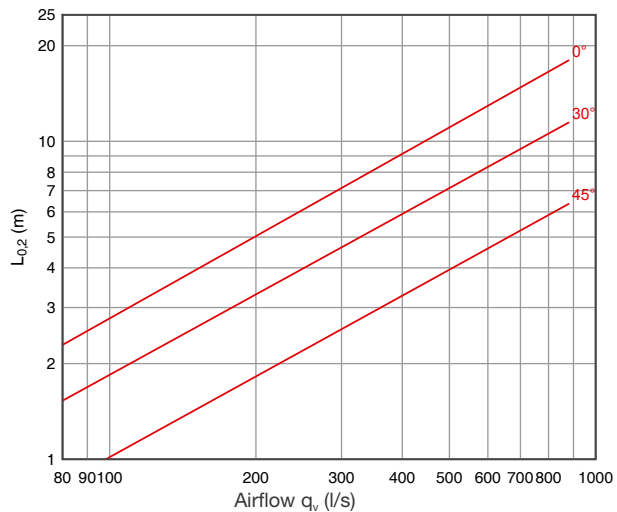
**DPL 250 +10**



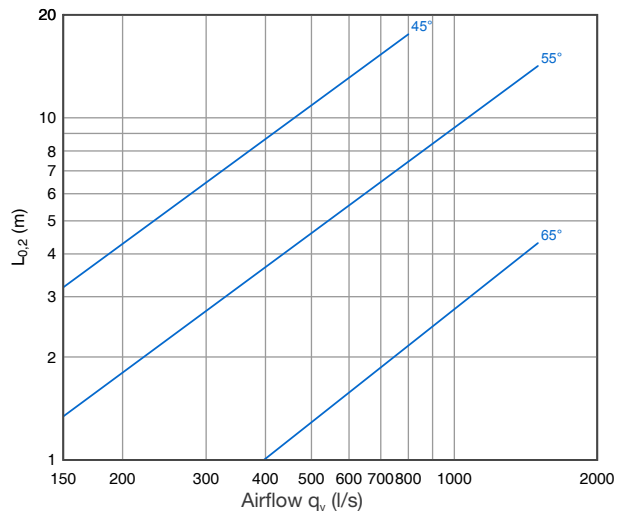
**DPL 250 -10K**



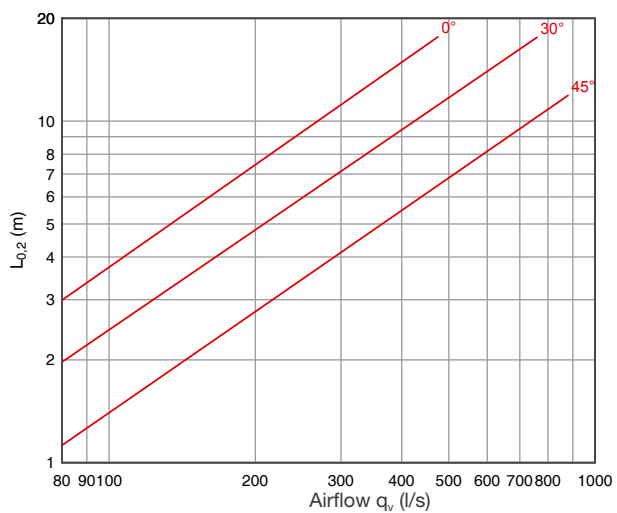
**DPL 250 +15K**



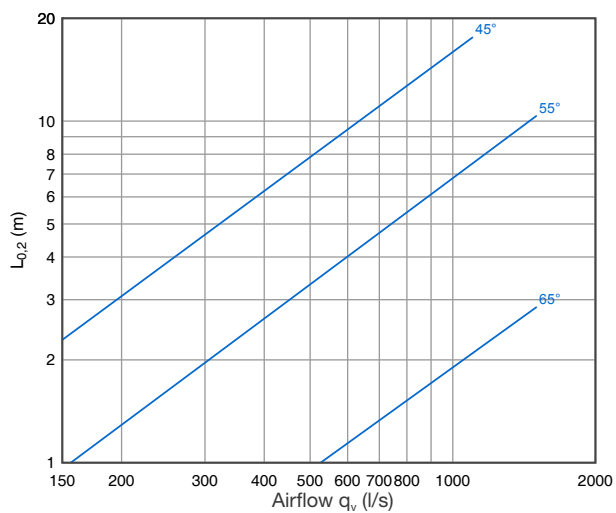
**DPL 250 -15K**



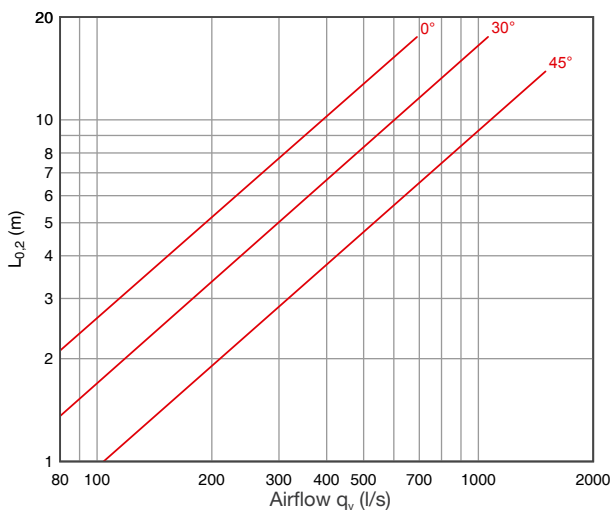
**DPL 315 +5K**



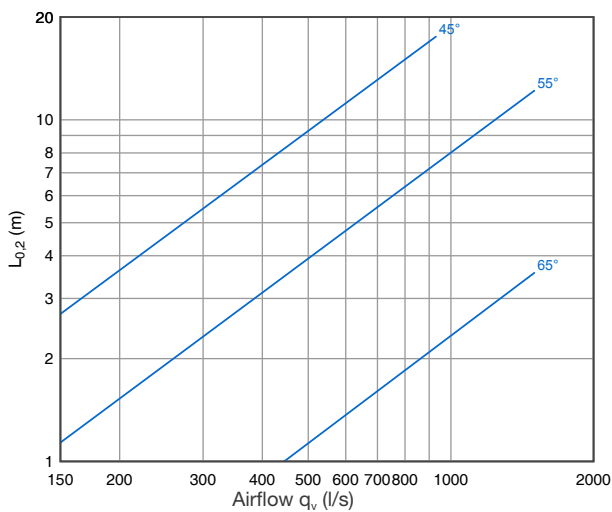
**DPL 315 -5K**



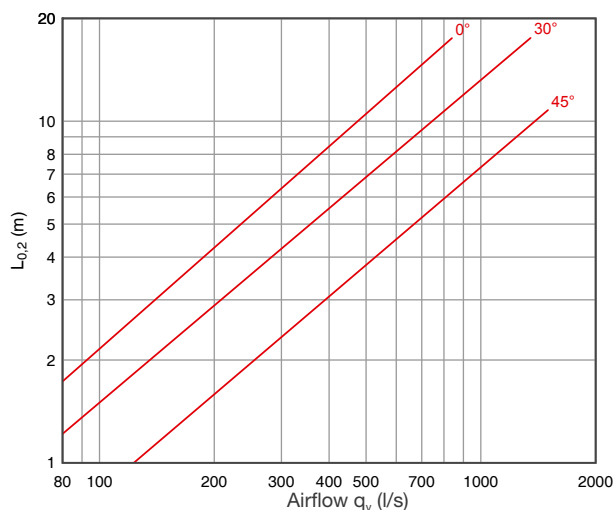
**DPL 315 +10K**



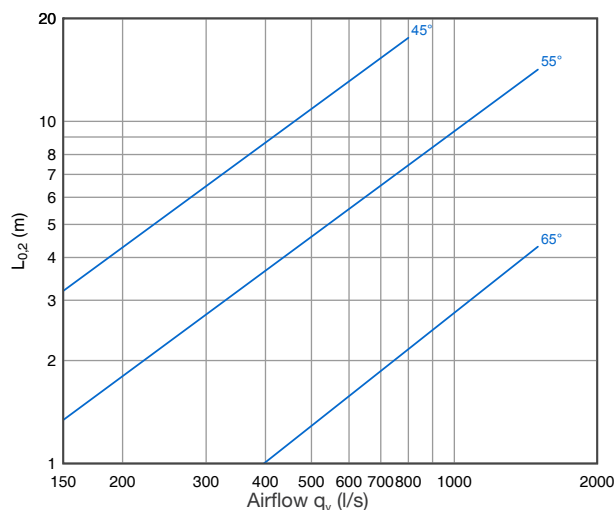
**DPL 315 -10K**



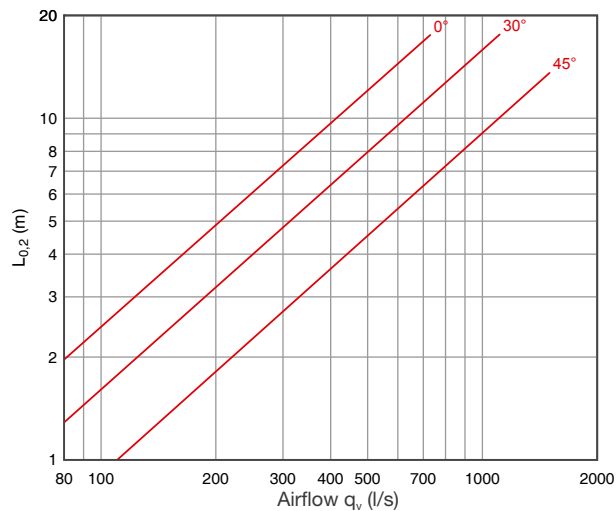
**DPL 315 +15K**



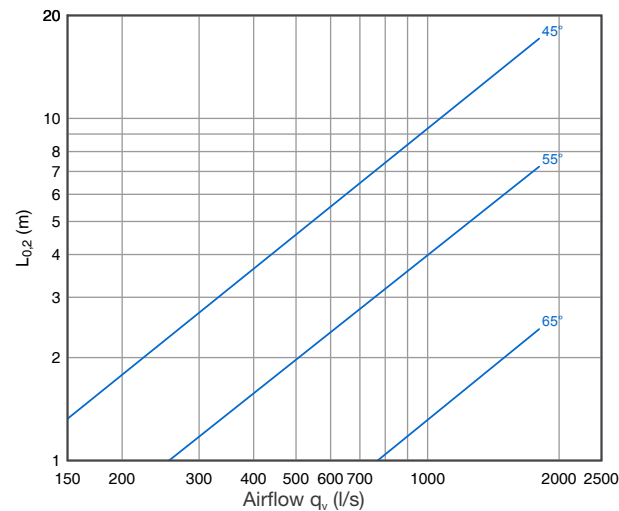
**DPL 315 -15K**



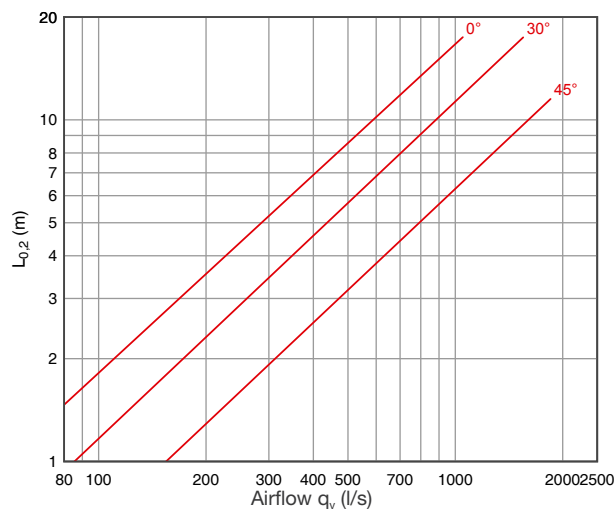
**DPL 400 +5K**



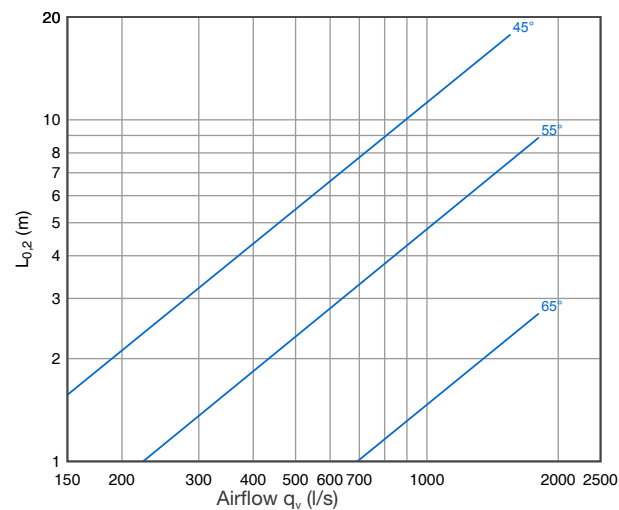
**DPL 400 -5K**



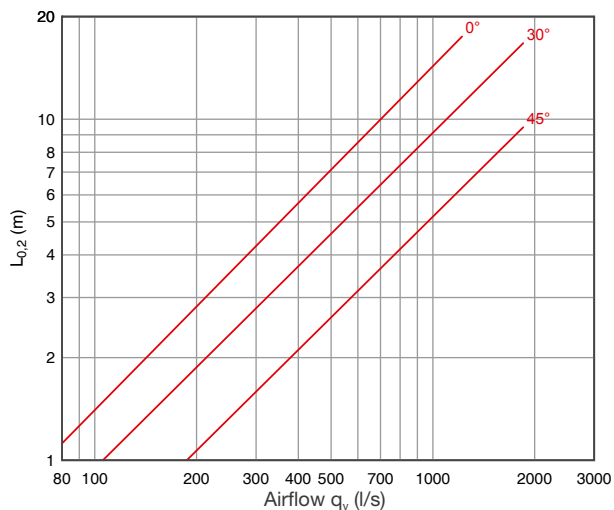
**DPL 400 +10K**



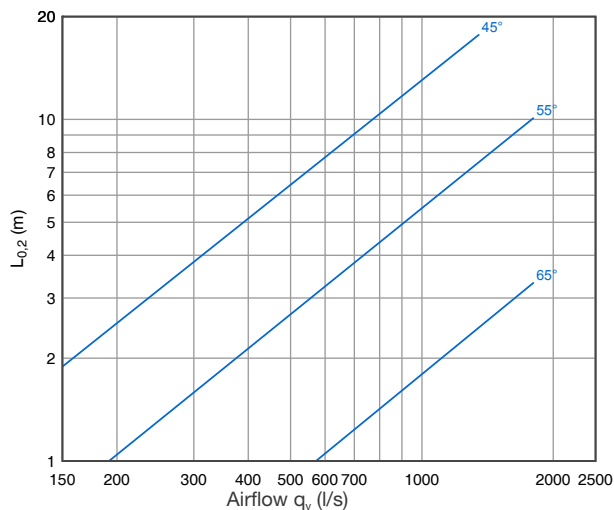
**DPL 400 -10K**



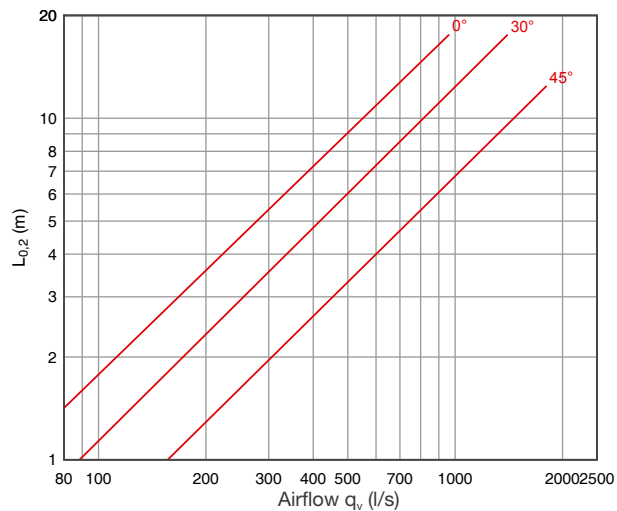
**DPL 400 +15K**



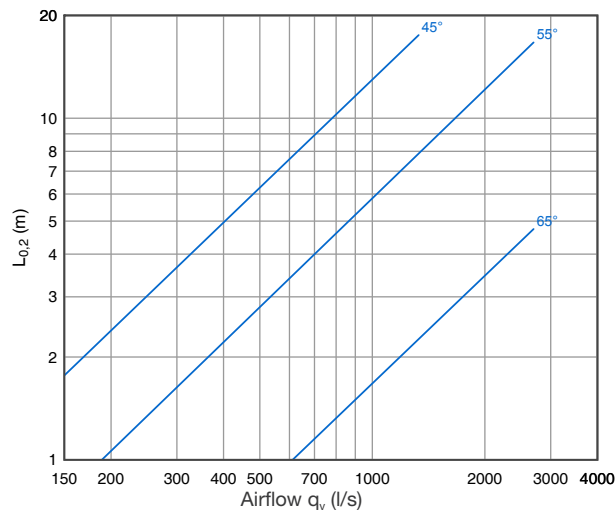
**DPL 400-15K**



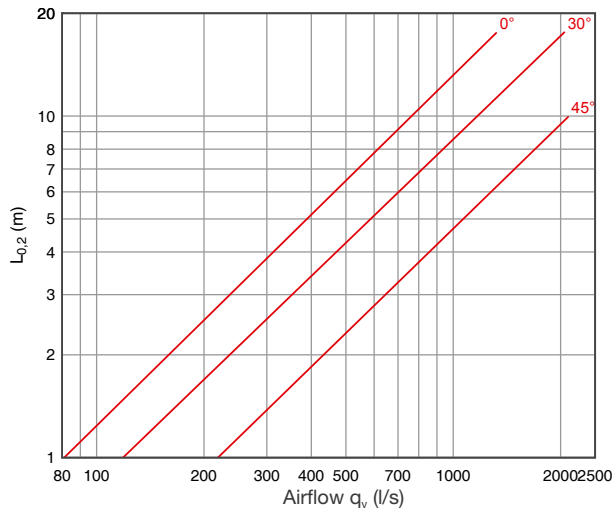
**DPL 500 +5K**



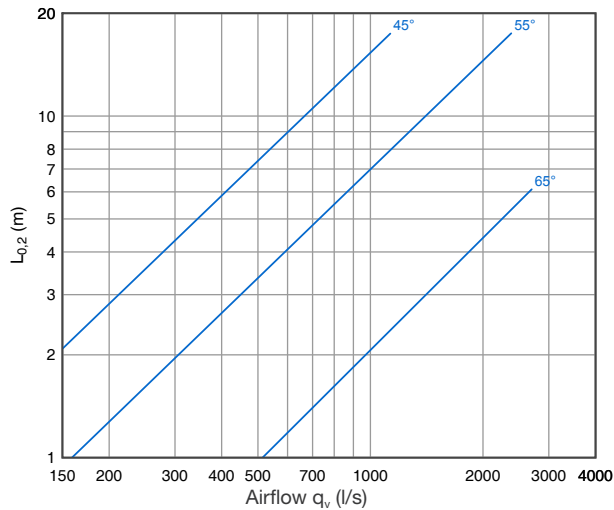
**DPL 500 -5K**



**DPL 500 +10K**

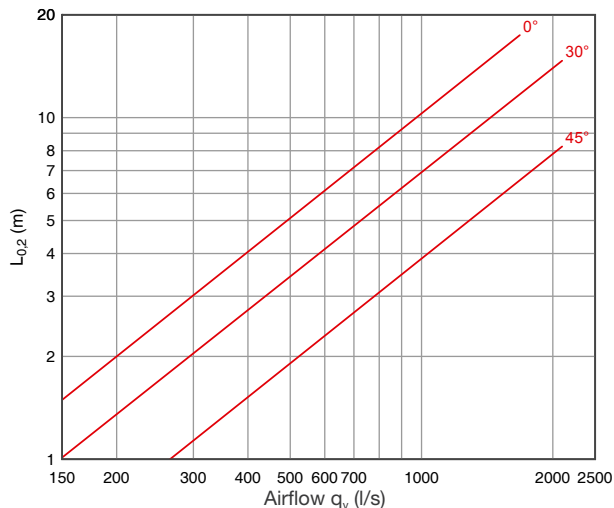


**DPL 500 -10K**

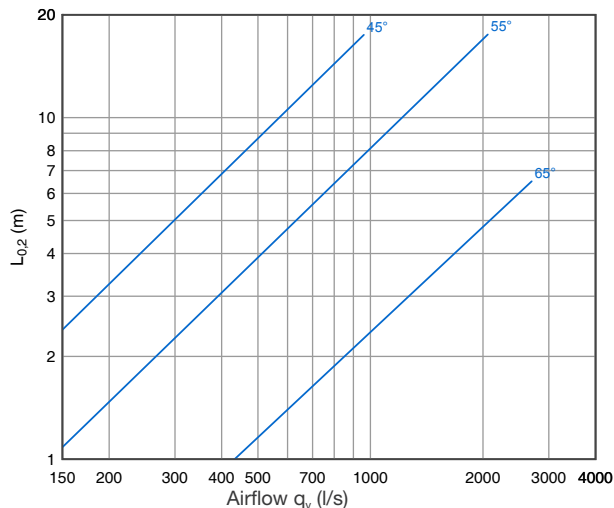




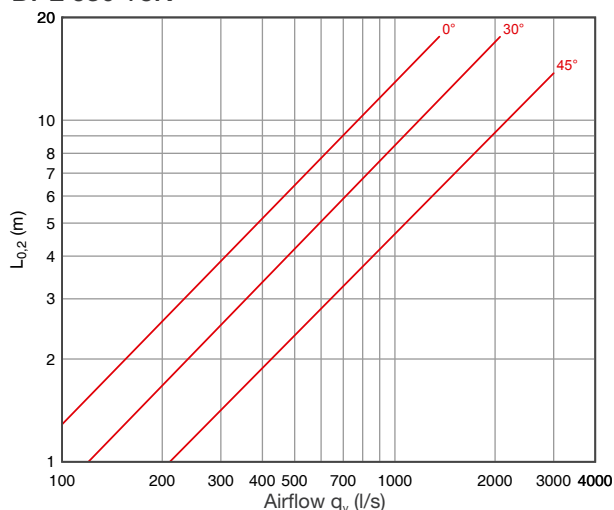
**DPL 500 +15K**



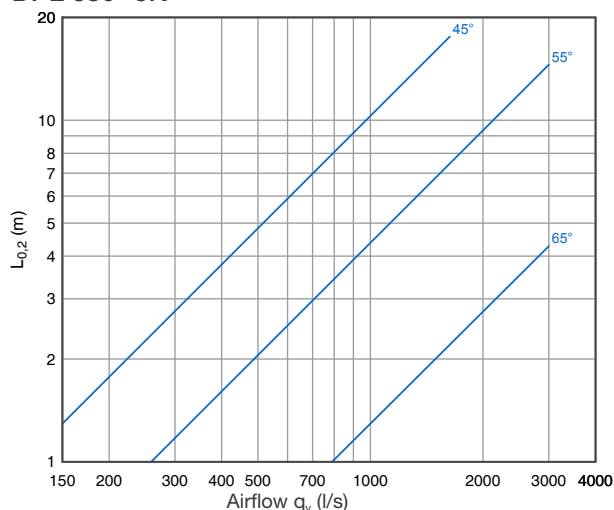
**DPL 500 -15K**



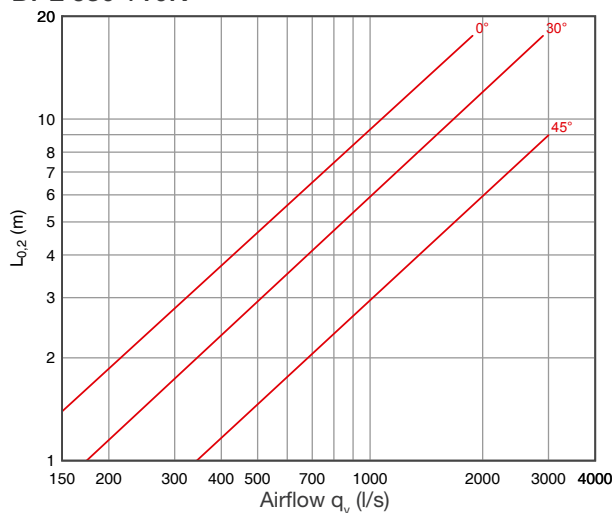
**DPL 630 +5K**



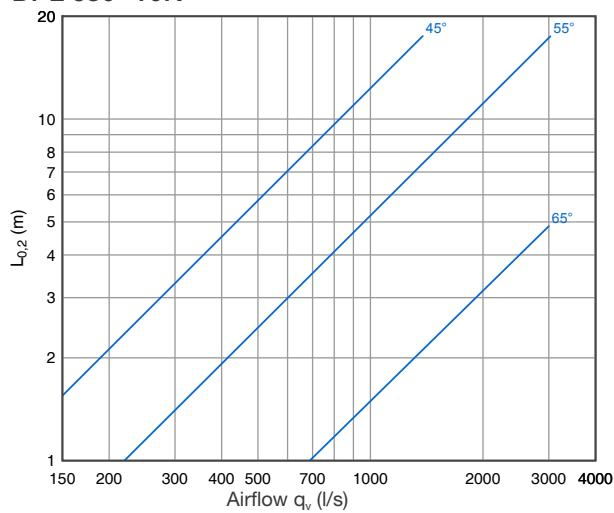
**DPL 630 -5K**



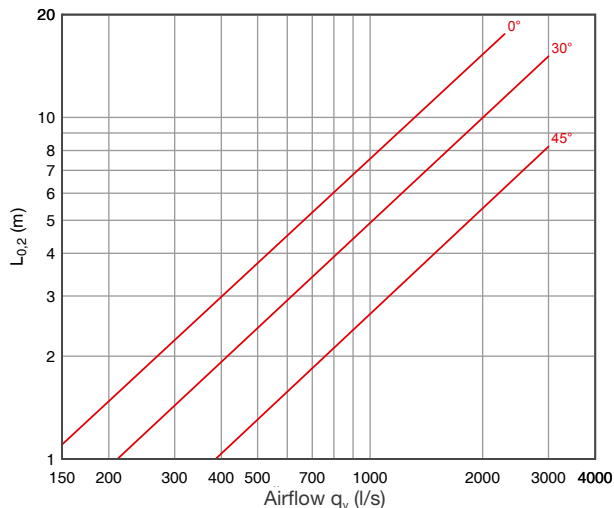
**DPL 630 +10K**



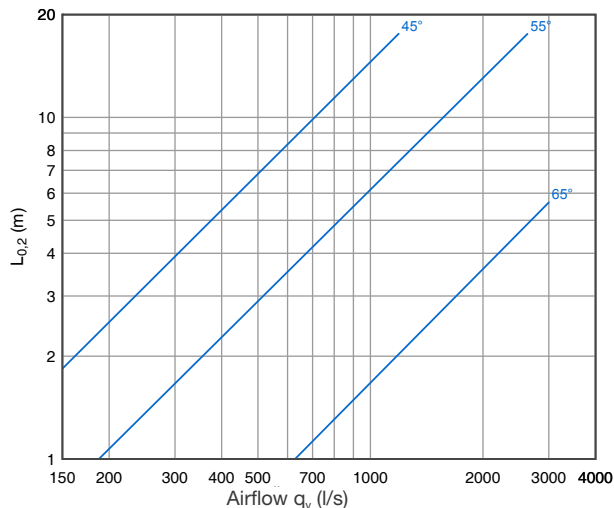
**DPL 630 -10K**



**DPL 630 +15K**



**DPL 630 -15K**



## Markeerimine



Näidis: DPL 200

## Installation

The DPL air distributors are suitable for connecting either directly to the duct or to a blenum box.

## Blade positioning

Air distributors are supplied from the factory with their blades preset at a 50° angle. If another position is desired, adjustment must be performed on the site.

The DPLT air distributor does not require factory presetting.

## DSP Jet duct



Ceiling-installed air distribution system.

### Features:

- suitable for schools, offices, meeting halls, sports halls and warehouses
- especially designed for cooling
- large induction rate
- easy to install, measure, regulate and maintenance

### Quick selection

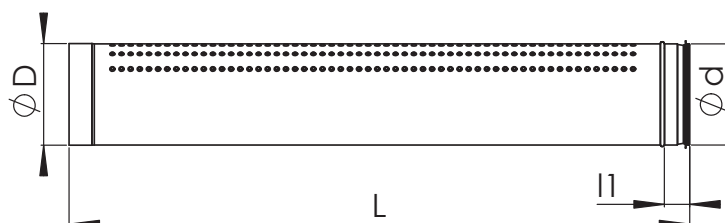
| DSP          | 20 dB |    | 25 dB |    | 30 dB |    |
|--------------|-------|----|-------|----|-------|----|
|              | l/s   | Pa | l/s   | Pa | l/s   | Pa |
| DSP 160-1250 | 46    | 43 | 54    | 58 | 68    | 92 |
| DSP 200-1250 | 64    | 37 | 76    | 52 | 95    | 80 |
| DSP 250-1250 | 83    | 34 | 97    | 47 | 122   | 73 |
| DSP 315-1250 | 98    | 32 | 124   | 43 | 150   | 67 |
| DSP 400-1250 | 125   | 30 | 147   | 41 | 175   | 64 |
| DSP 500-1250 | 145   | 28 | 165   | 39 | 194   | 60 |

### Structure and dimensions

Standard material galvanized steel. The duct is patterned with a certain quantity of nozzles. One end with rubber gasket and the other end fits a duct. Other materials and finishes available.

Extra ducts (DSPO, L = 1250) and parts available.

| Nominal-size | $I_1$ | L    | Weight (kg) |
|--------------|-------|------|-------------|
| 160          | 29    | 600  |             |
| 160          | 29    | 1250 | 3,5         |
| 200          | 29    | 600  |             |
| 200          | 29    | 1250 | 4,5         |
| 250          | 50    | 600  |             |
| 250          | 50    | 1250 | 5,5         |
| 315          | 50    | 600  |             |
| 315          | 50    | 1250 | 6,9         |
| 400          | 50    | 600  |             |
| 400          | 50    | 1250 | 8,7         |
| 500          | 65    | 600  |             |
| 500          | 65    | 1250 | 11          |

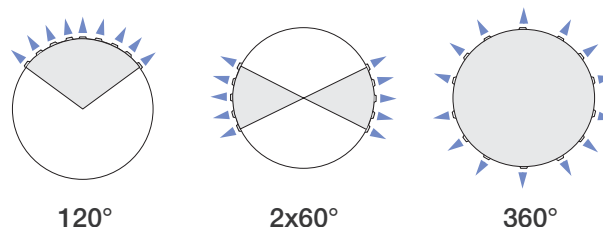


## Principle

Designed for optimal cooling effect. Nozzles optimized for dynamic induction and provide effective distribution with low noise level. Each nozzle “takes in” a seven-fold quantity of room air, blending the supply air evenly and makes it possible to supply a large quantity of cooled air without draft to the occupied zone.

As seen on the diagram next page, the nozzles on the duct conform into various patterns (60°-360°).

Airflow depends on diameter.



120°

2x60°

360°

Supply air sectors

### Upward airflow (120°)

The most common application. With an upward airflow, the mixing of the cooler supply air with the warm room air occurs already near the supply air duct. This allows to provide the room with supply air up to 15°C cooler than the room air.

### Downward airflow (120°)

Downward air distribution is optimal for warm supply air or in high rooms where air distribution directed at workstations is desired. Difference between supply air and room air +3°C to -8°C.

### Horizontal airflow (2x60°)

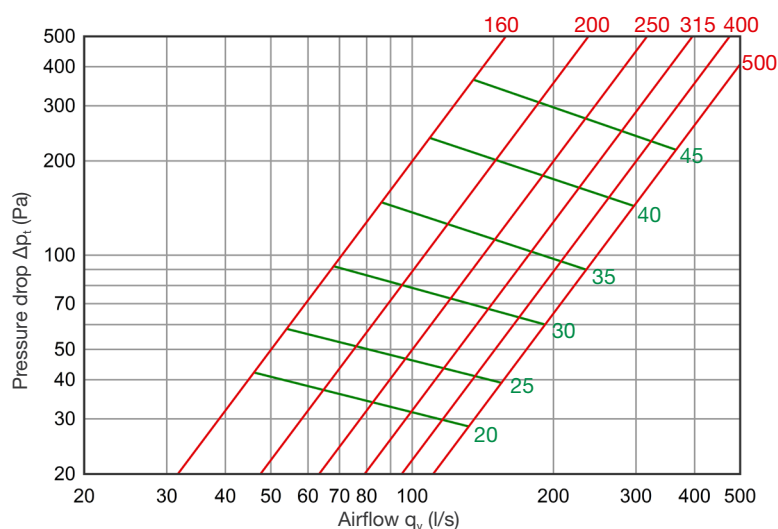
Suitable for lower ceiling heights. This type of air distribution provides a longer air stream and the nozzle pipes are placed at longer intervals. Difference between supply air and room air 0°C to -12°C.

### 360° airflow

This application is used for large and stable air quantities. Difference between supply air and room air 0°C to -12°C.

|                                         | Upward 120° | Downward 120° | Horizontal 2x60° | Circular 360° |
|-----------------------------------------|-------------|---------------|------------------|---------------|
| Min distance between nozzle pipes (m)   | 1,5         | 1,5           | 2,5              | 1,5           |
| Installation height (m)                 | 2,2-4,5     | 3-8           | 2,5-5            | 2,2-4,5       |
| Ceiling distance from the duct (mm)     | 220         | 50            | 120              | 200           |
| Supply air temperature, $\Delta t$ (°C) | 0-15        | 3-8           | 0-12             | 0-12          |

## Technical data

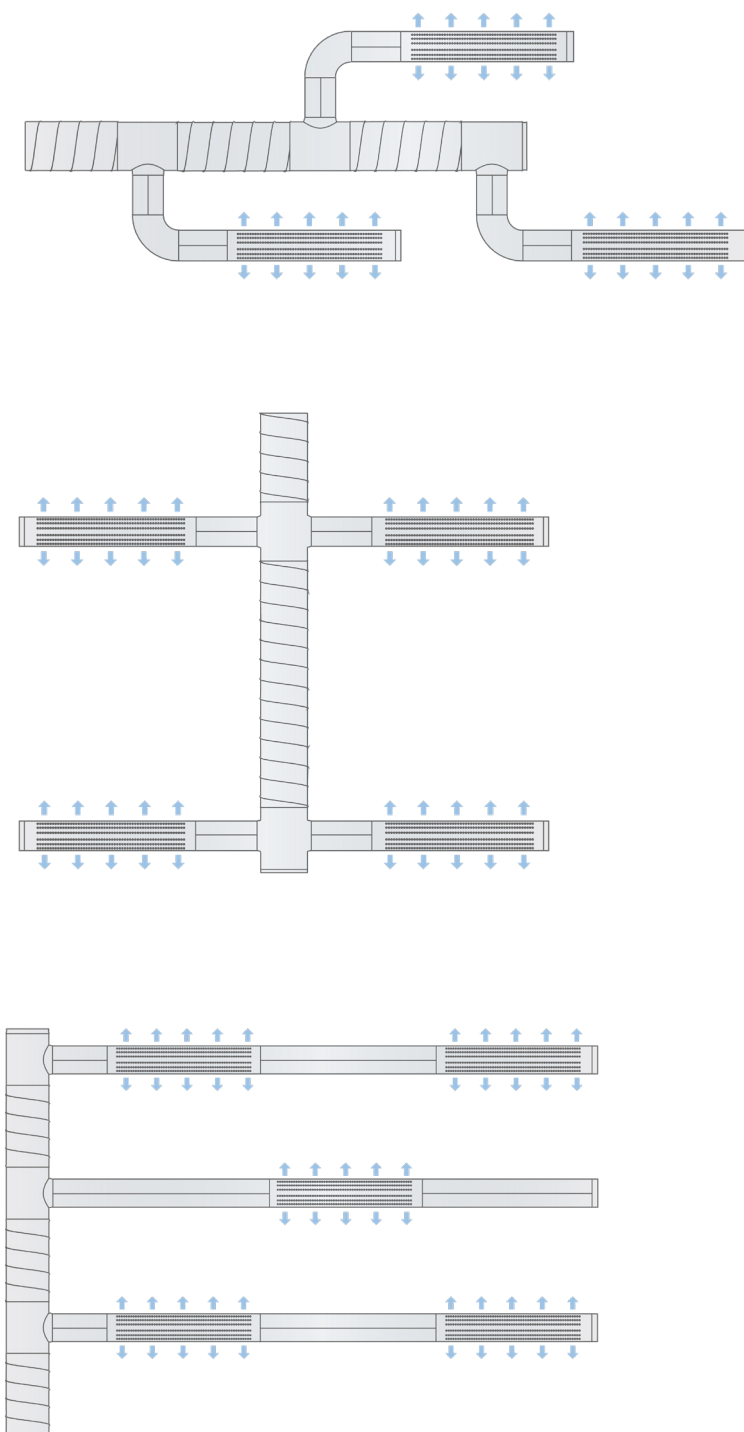


## System design

The size of the DSP Jet duct is selected according to the airflow.

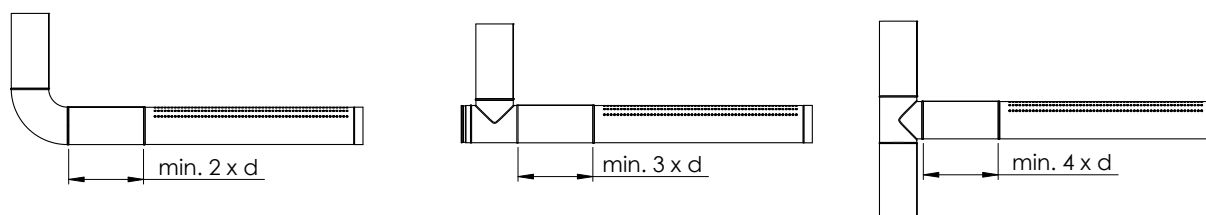
In order to achieve efficient operation of the nozzle, the pressure distance should not be less than 20 Pa, which ensures a fair distribution of air in the room.

## DSP installation examples

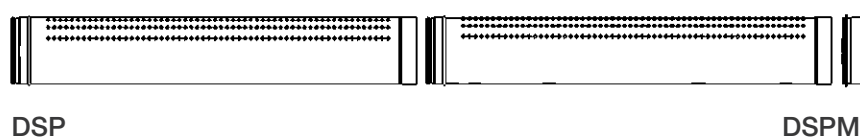


## Installation

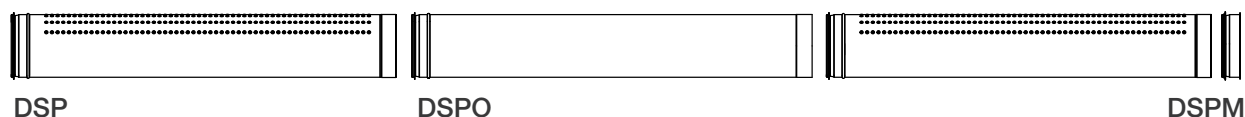
DSP Jet duct should not be designed and installed too close to bends, tees or other elements that may create turbulence and hence noise. Straight duct sections should be installed between Jet duct and potentially disruptive components, as shown in the illustration below. Air quantity is preadjusted and no extra dampers are needed.



## Lengthening of duct



DSP lengthening duct between two jet pipes



## Product codes

|                                  | DSP | - | H | - | d | - | 120 | - | 1 | - | l/s | - | RAL |
|----------------------------------|-----|---|---|---|---|---|-----|---|---|---|-----|---|-----|
| Product                          |     |   |   |   |   |   |     |   |   |   |     |   |     |
| Material                         |     |   |   |   |   |   |     |   |   |   |     |   |     |
| (-)                              |     |   |   |   |   |   |     |   |   |   |     |   |     |
| Zn – zinc-magnesium coated steel |     |   |   |   |   |   |     |   |   |   |     |   |     |
| H – acid-proof steel             |     |   |   |   |   |   |     |   |   |   |     |   |     |
| Diameter d                       |     |   |   |   |   |   |     |   |   |   |     |   |     |
| Supply air pattern               |     |   |   |   |   |   |     |   |   |   |     |   |     |
| 120, 2x60, 360                   |     |   |   |   |   |   |     |   |   |   |     |   |     |
| Direction                        |     |   |   |   |   |   |     |   |   |   |     |   |     |
| 1 - upward                       |     |   |   |   |   |   |     |   |   |   |     |   |     |
| 2 - horizontal                   |     |   |   |   |   |   |     |   |   |   |     |   |     |
| 3 - downward                     |     |   |   |   |   |   |     |   |   |   |     |   |     |
| Air quantity (l/s)               |     |   |   |   |   |   |     |   |   |   |     |   |     |
| RAL colours                      |     |   |   |   |   |   |     |   |   |   |     |   |     |

## SKDM Plenum box

Designed to facilitate installing air supply units to duct systems.

Makes it possible to adjust unit's air volume and attenuate sound from the duct system. Sizes for duct connections Ø 100-315 mm and unit connections Ø 125-400 mm.

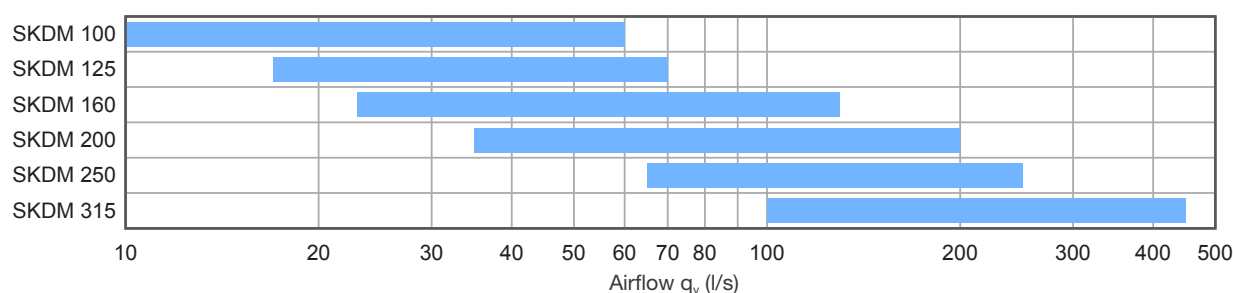


### Features:

- exact measuring and adjusting of air quantities
- quiet even with high pressures
- removable measuring and adjusting unit

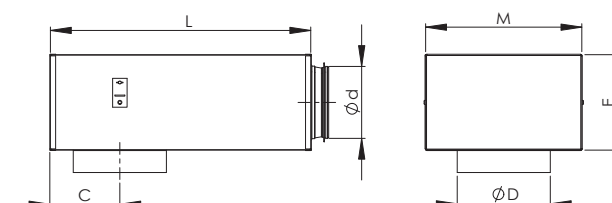


### Quick selection



### Materials and sizes

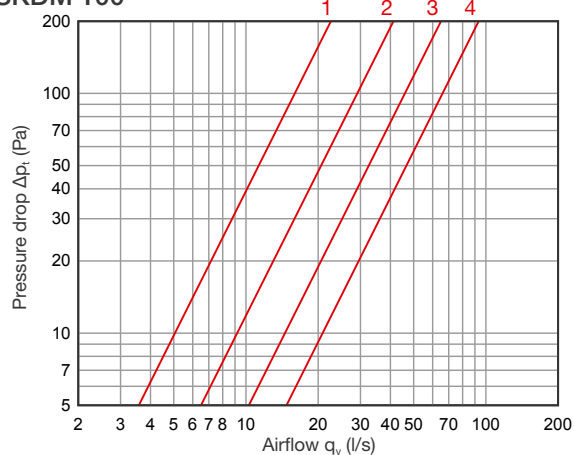
Manufactured of galvanized steel sheet.  
Equipped with duct connection with gasket.  
Synthetic sound absorption material.



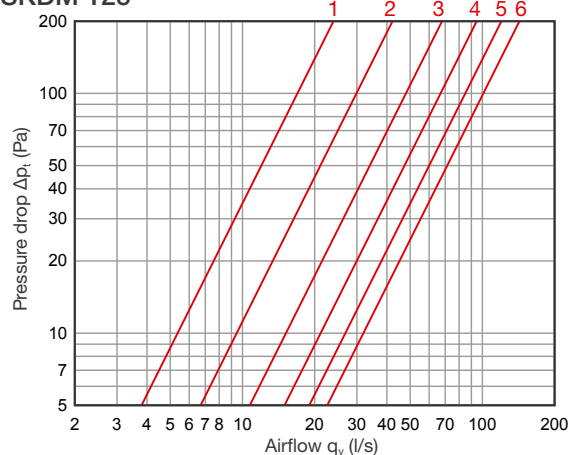
| Nominal size | d   | D   | M   | E   | L   | C   |
|--------------|-----|-----|-----|-----|-----|-----|
| 100/125      | 100 | 125 | 270 | 140 | 450 | 100 |
| 100/160      | 100 | 160 | 270 | 140 | 450 | 120 |
| 125/125      | 125 | 125 | 270 | 165 | 450 | 120 |
| 125/160      | 125 | 160 | 270 | 165 | 450 | 120 |
| 125/200      | 125 | 200 | 270 | 165 | 450 | 140 |
| 125/250      | 125 | 250 | 340 | 200 | 500 | 165 |
| 160/160      | 160 | 160 | 270 | 200 | 500 | 140 |
| 160/200      | 160 | 200 | 340 | 200 | 500 | 140 |
| 160/250      | 160 | 250 | 340 | 200 | 500 | 165 |
| 160/315      | 160 | 315 | 400 | 200 | 570 | 197 |
| 200/200      | 200 | 200 | 340 | 240 | 650 | 165 |
| 200/250      | 200 | 250 | 400 | 240 | 650 | 165 |
| 200/315      | 200 | 315 | 400 | 240 | 650 | 200 |
| 200/400      | 200 | 400 | 450 | 290 | 700 | 240 |
| 250/250      | 250 | 250 | 400 | 290 | 700 | 197 |
| 250/315      | 250 | 315 | 450 | 290 | 700 | 197 |
| 250/400      | 250 | 400 | 450 | 290 | 700 | 240 |
| 315/315      | 315 | 315 | 450 | 355 | 800 | 265 |
| 315/400      | 315 | 400 | 500 | 355 | 800 | 265 |

**Technical data**

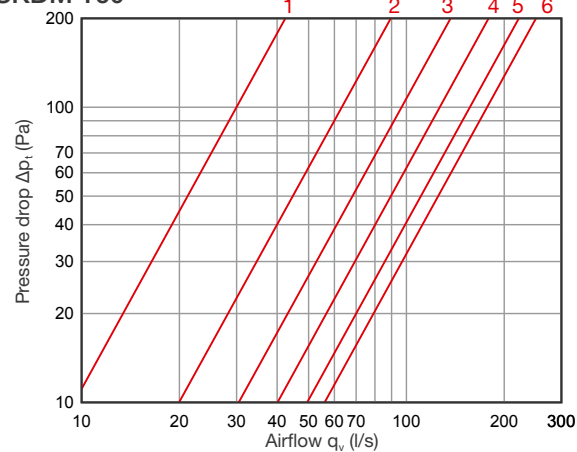
**SKDM 100**



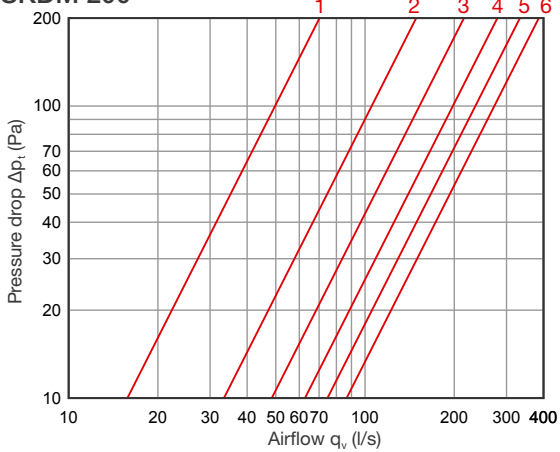
**SKDM 125**



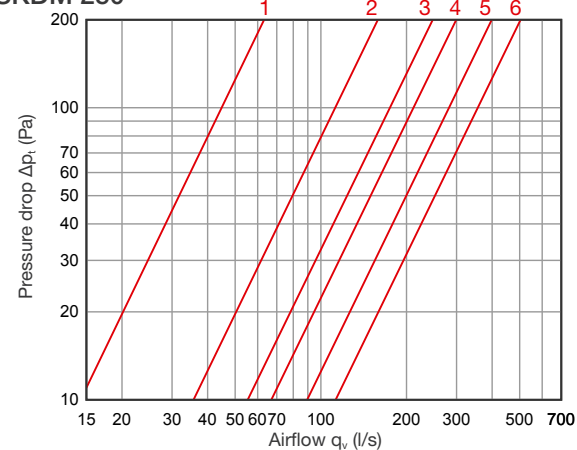
**SKDM 160**



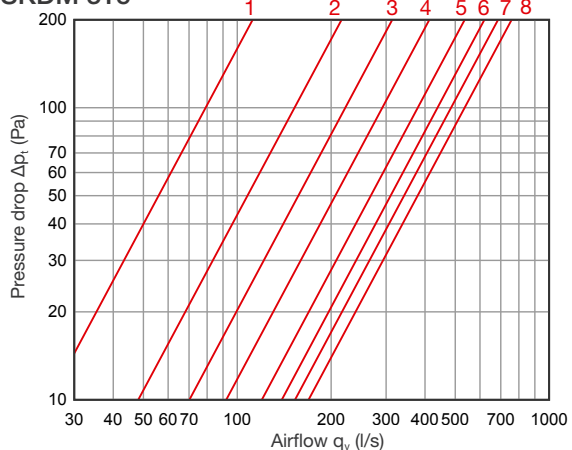
**SKDM 200**



**SKDM 250**

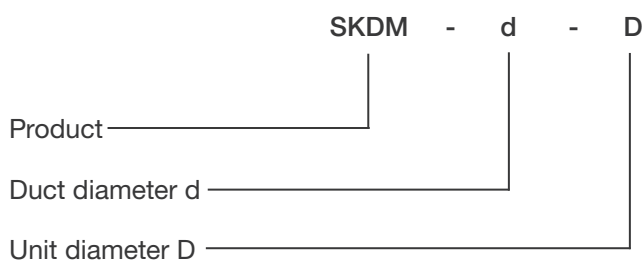


**SKDM 315**





## Product codes



Example: SKDM 200-250

## Adjustment and measuring

The supply volume flow rate for the attached diffuser is determined using the measurement and adjustment module (NRO).

The tubes and control spindle are passed through the diffuser front plate. Replace the diffuser. Measure the differential pressure. The flow rate is calculated using the formula below:

$$q_v = k \cdot \sqrt{\Delta p_m}$$

k = k-value

$\Delta p_m$  = Measured differential pressure (Pa)

Adjust the airflow rate by rotating the control spindle until the desired setting is achieved. Calculate airflow by means of the k-value indicated on the control spindle. Replace the tubes and spindle into the plenum box and replace the diffuser.

### NRO-adjustment and measuring unit

| Nominal size<br>Ød (mm) | Adjustment position |       |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-------------------------|---------------------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                         | s=1                 | s=1,5 | s=2  | s=2,5 | s=3  | s=3,5 | s=4  | s=4,5 | s=5  | s=5,5 | s=6  | s=6,5 | s=7  | s=7,5 | s=8  |
| 100                     | 1,6                 | 2,3   | 2,9  | 3,8   | 4,6  | 5,5   | 6,3  |       |      |       |      |       |      |       |      |
| 125                     | 1,7                 | 2,4   | 3,0  | 3,9   | 4,7  | 5,6   | 6,4  | 7,2   | 8,0  | 8,7   | 9,3  |       |      |       |      |
| 160                     | 3,0                 | 4,6   | 6,2  | 7,8   | 9,4  | 10,9  | 12,3 | 13,5  | 14,6 | 15,7  | 16,7 |       |      |       |      |
| 200                     | 5,0                 | 7,8   | 10,5 | 12,7  | 14,9 | 16,9  | 18,8 | 20,3  | 21,7 | 22,7  | 23,6 |       |      |       |      |
| 250                     | 5,6                 | 10,6  | 15,5 | 19,3  | 23,0 | 26,9  | 30,7 | 34,6  | 38,4 | 42,2  | 46,0 |       |      |       |      |
| 315                     | 9,5                 | 13,9  | 18,3 | 22,5  | 26,6 | 31,1  | 35,5 | 40,0  | 44,4 | 47,7  | 51,0 | 54,3  | 57,5 | 60,3  | 63,0 |



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*Let's move the air **together!***

