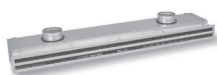


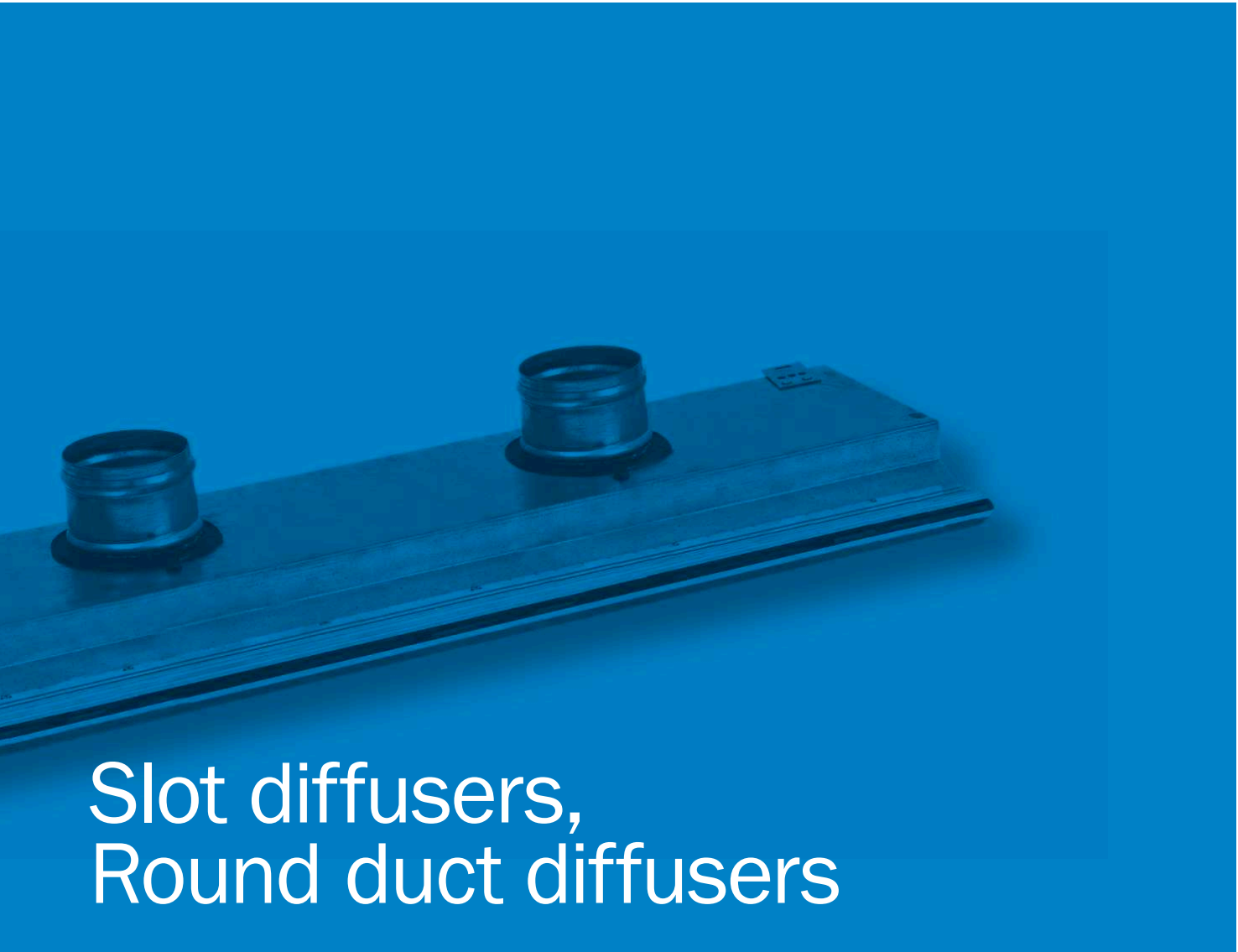
04



Slot diffusers



Round duct diffusers



Slot diffusers, Round duct diffusers

Slot diffusers are designed for air supply in rooms with floor to ceiling heights of 2.5 to 4 m. They are suitable for supplying either cold or warm air, in particular in applications where air conditioning comfort demands are stringent. Due to their high induction rate and rapid decrease of temperature difference, these diffusers are also suitable for variable systems.

Round duct diffusers can be installed at various locations within the duct network. They are suitable for supplying either cold or warm air.

VENTILATING GRILLES,
VENTILATING VALVES

CIRCULAR DIFFUSERS,
SQUARE DIFFUSERS

SWIRL DIFFUSERS,
VARIABLE SWIRL
DIFFUSERS

SLOT DIFFUSERS,
ROUND DUCT DIFFUSERS

AIR DISPLACEMENT
UNITS

SUPPLY AIR NOZZLES

EXTERNAL ELEMENTS

AIR FLOW
CONTROL UNITS

SOUND ATTENUATORS,
SOUND ATTENUATING
LOUVRES

Overview

Slot diffusers

Slot diffusers are designed for air supply in rooms with floor to ceiling heights of 2.5 to 4 m. They are suitable for supplying either cold or warm air, in particular in applications where air conditioning comfort demands are stringent. Due to their high induction rate and rapid decrease of temperature difference, these diffusers are also suitable for variable systems.

Nozzle diffusers

Nozzle diffusers LD-19 are designed for supply of warm or cold air and can be mounted in the wall or in the ceiling. Adjustable deflectors allow us to set different directions of air discharge.

Nozzle diffusers LD-20 are designed to supply low quantities of air on big window surfaces to prevent condensation (ceiling installation near windows) or for big throws for cooling when wall installation (Coanda effect).

Panel design slot diffusers

A panel design slot diffuser consists of a face plate and a plenum box. Cylindrical air deflectors, equal to those in LD-13 and LD-14 diffusers, are installed in the slots, to allow continuous adjustment of discharged air direction within the 360° range. On order, diverse plate designs and slot patterns are available.

Floor slot diffusers

LD-16N floor slot diffusers are a suitable solution for swimming pools and similar rooms with large glass surfaces and windows. They are designed for installation in the floor. Warm air is supplied in the upwards direction, towards the window.

Round duct diffusers

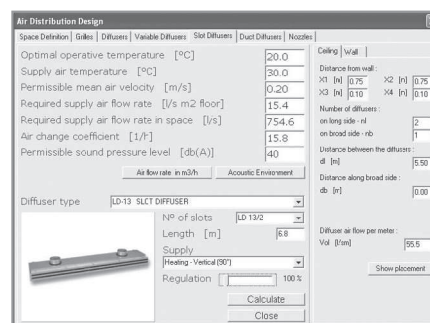
Round duct diffusers can be installed at various locations within the duct network. They are suitable for supplying either cold or warm air.

Software: KLIMA ADE

LD and SKD Software:

- available calculation and graphical display of air supply for slot diffusers LD-13, LD-14 and LD-15
- available calculation of technical specifications for the application of wall- or ceiling-mounted slot diffusers
- available calculation of ceiling-mounted multiple-diffuser configuration air supply
- application of vertical or horizontal slot diffuser air supply into the room, depending on the mode of operation – heating or cooling
- the package supports basic air supply mode models for the SKD-13 round duct diffuser
- available calculation of SKD-13 round duct diffusers cooling mode: single-side and two-side horizontal supply and alternating horizontal supply heating mode: vertical air supply

Software: Klima ADE



Slot diffusers



LD-13

LD-14



LD-15

LD-18

Nozzle diffusers



LD-19

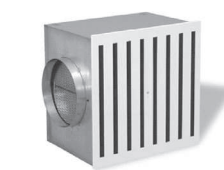
LD-20

Floor slot diffusers



LD-16N

Panel design slot diffusers



LDP-14

Round duct diffusers












SKD-13D

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Legend of symbols

- | | | |
|--|---|---|
| Al Element is made of aluminium profiles, aluminium sheet or aluminium casting. |  Element is intended to be built in the wall. |  Element is suitable for the supply of cool air (cooling). |
| St Element is made of steel sheet. |  Element is intended to be built in the ceiling or in the wall. | M Element allows regulation by electric motor (Belimo electric motors). |
|  Element is powder painted in standard RAL 9010 colour. Other desired colour is to be specified in the order. |  Element for air conditioning of rooms with floor to ceiling heights room up to 4 m. | F Element is intended for air filtration. The filter of class ... is built in. |
|  Shady symbol means possibility of optional material, surface protection, motor version, ... |  Element for air conditioning of rooms with floor to ceiling heights from 6 to 15 m. | CD The possibility of the automatic selection and calculation of the technical characteristics of grilles and difusers in regard to the given conditions with the assistance of the Klima ADE program. |
|  Element is intended to be built in the floor. |  Element is suitable for the supply of warm air (heating). | INOX The element is made of stainless sheet steel AISI 304. |

■ Floor Slot Diffusers LD-16N

Application

LD-16N floor slot diffusers are a suitable solution for swimming pools and similar rooms with large glass surfaces and windows. They are designed for installation in the floor. Warm air is supplied in the upwards direction, towards the window. With appropriate dimensions, proper air supply is guaranteed, free of excessive draught or noise ($L_{WA} < 35 \text{ dB(A)}$).

Description

LD-16N slot diffusers are designed in 1, 2, 3, 4, 5 and 6 slot versions. They are made of fixed aluminium sections and an aluminium structural frame.

The diffusers are available in single piece lengths 200 mm to 2000 mm. Painting according to the customer's specification is available on order.

Advantages

- No glass misting
- Optimal ventilation
- No heat losses
- Low pressure drop
- Prevents the descent of cold air along windows
- Does not cause heating of air near the windows even in the sunshine
- Easy installation

Al



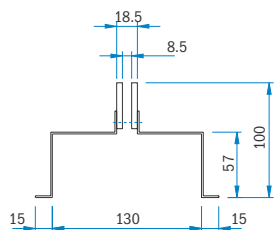
RAL 9010

CD

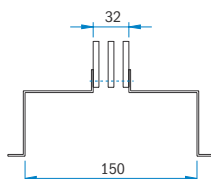


Versions

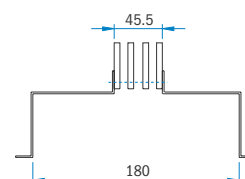
single slot LD-16N/1



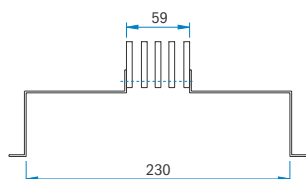
two slots LD-16N/2



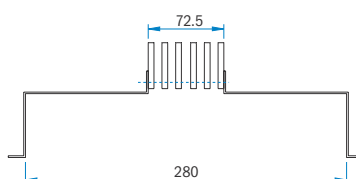
three slots LD-16N/3



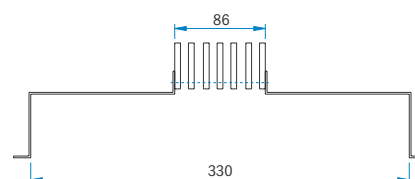
four slots LD-16N/4



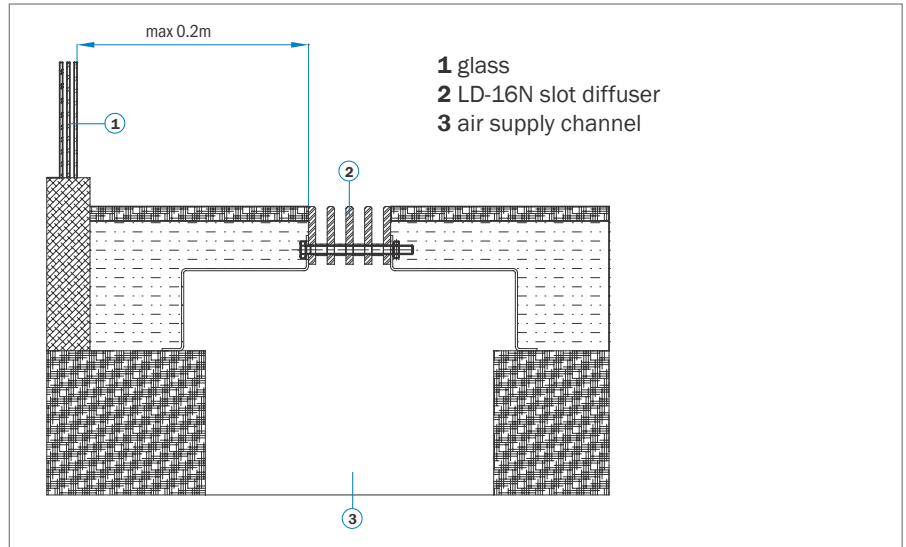
five slots LD-16N/5



six slots LD-16N/6

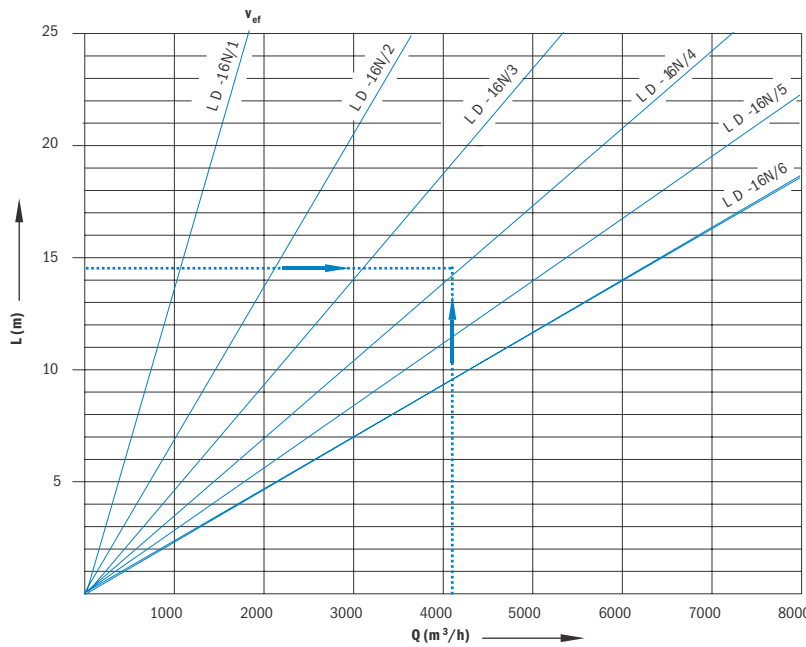


Installation method



Fast selection diagram

$L_{WA} < 35 \text{ dB(A)}$; $V_{ef} = 2,5 \text{ m/s}$; $\Delta p_t = 16 \text{ Pa}$



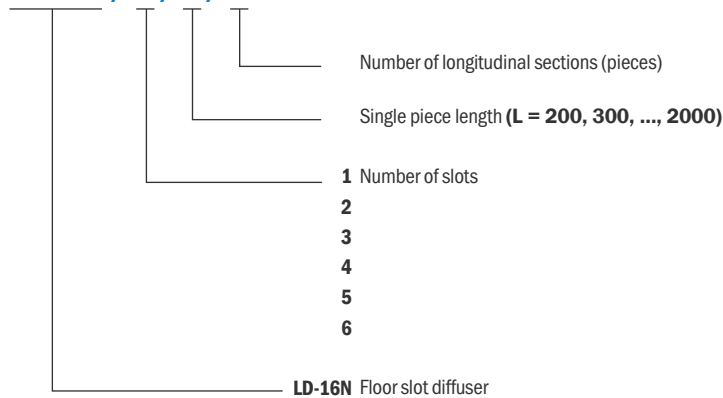
Example

The available floor area next to the glass surface is 15 m in length. The calculated supplied air flow rate is 4000 m^3/h . From the diagram, the type:
LD-16N/3 $L=15\text{m}$ is selected.

- Q (m^3/h)** Air flow rate
- L_{WA} (dB(A))** Sound power level
- Δp_t (Pa)** Pressure drop
- L (m)** Slot diffuser length
- v_{ef} (m/s)** Effective air velocity

Ordering key

LD-16N / 1 / L / n



Note:

Standard colour is RAL 9010.