

EDLS - EDLSB Linear Diffuser for Hidden Installation



Description

Hidden linear diffuser with single 20 mm or 30 mm slot with aerodynamic aluminum profile and adjustable deflectors for optimal air throw control. Also available with sliding volume damper.

Features

Material: aluminium.

EDLS finish: black RAL9005 painted aluminum frame and deflectors.

EDLSB finish: white RAL9016 painted aluminum frame and deflectors.

Slot: 20 mm or 30 mm.

Installation: by plenum box with mounting bridge, ceiling finishing with anti-crack tape on the frame and subsequent plaster skimming.

Possible dimensions in one piece:

- minimum length 300 mm;
- maximum length 2000 mm.

Use

Diffuser suitable for both air supply and exhaust in large rooms. Its modularity allows great freedom of design.

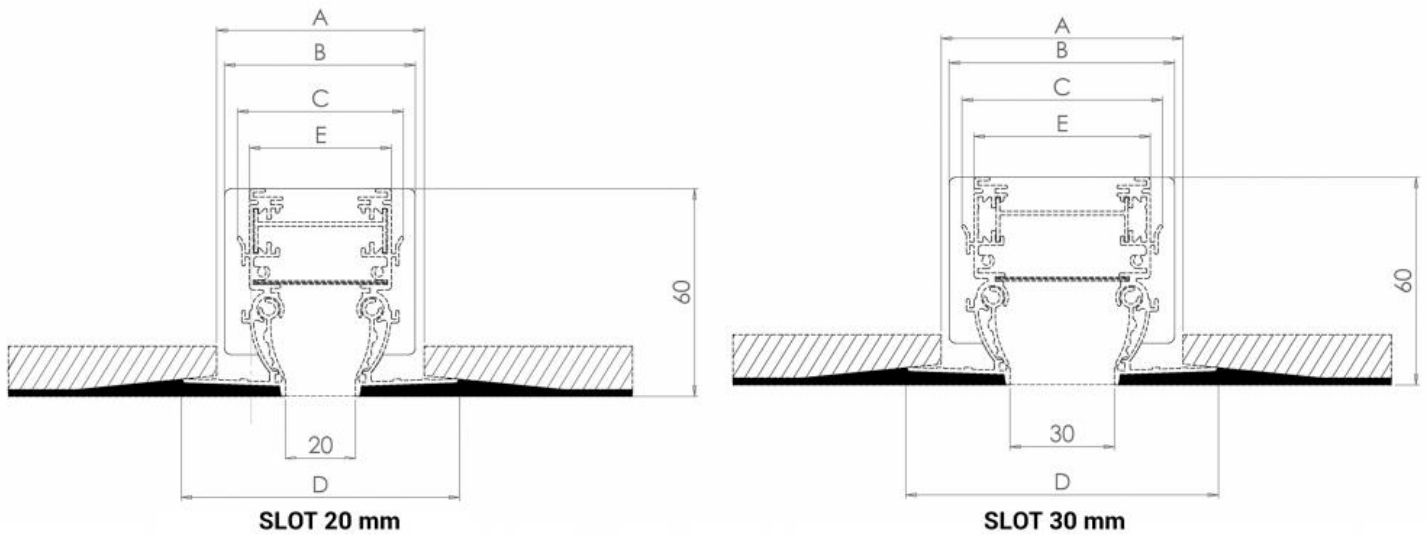
Models

- EDLS10-FA - EDLSB10-FA hidden linear diffusers 20 mm slot without deflectors (exhaust).
- EDLS20-FA - EDLSB20-FA hidden linear diffusers 20 mm slot with deflectors (supply).
- EDLS30-FA - EDLSB30-FA hidden linear diffusers 20 mm slot without deflectors, with sliding damper (exhaust).
- EDLS40-FA - EDLSB40-FA hidden linear diffusers 20 mm slot with deflectors and sliding damper (supply).
- EDLS10-FB - EDLSB10-FB hidden linear diffusers 30 mm slot without deflectors (exhaust).
- EDLS20-FB - EDLSB20-FB hidden linear diffusers 30 mm slot with deflectors (supply).
- EDLS30-FB - EDLSB30-FB hidden linear diffusers 30 mm slot without deflectors, with sliding damper (exhaust).
- EDLS40-FB - EDLSB40-FB hidden linear diffusers 30 mm slot with deflectors and sliding damper (supply).

Accessories

- galvanized plenum box;
- insulated plenum box;
- mounting bridge;
- continues line kit.

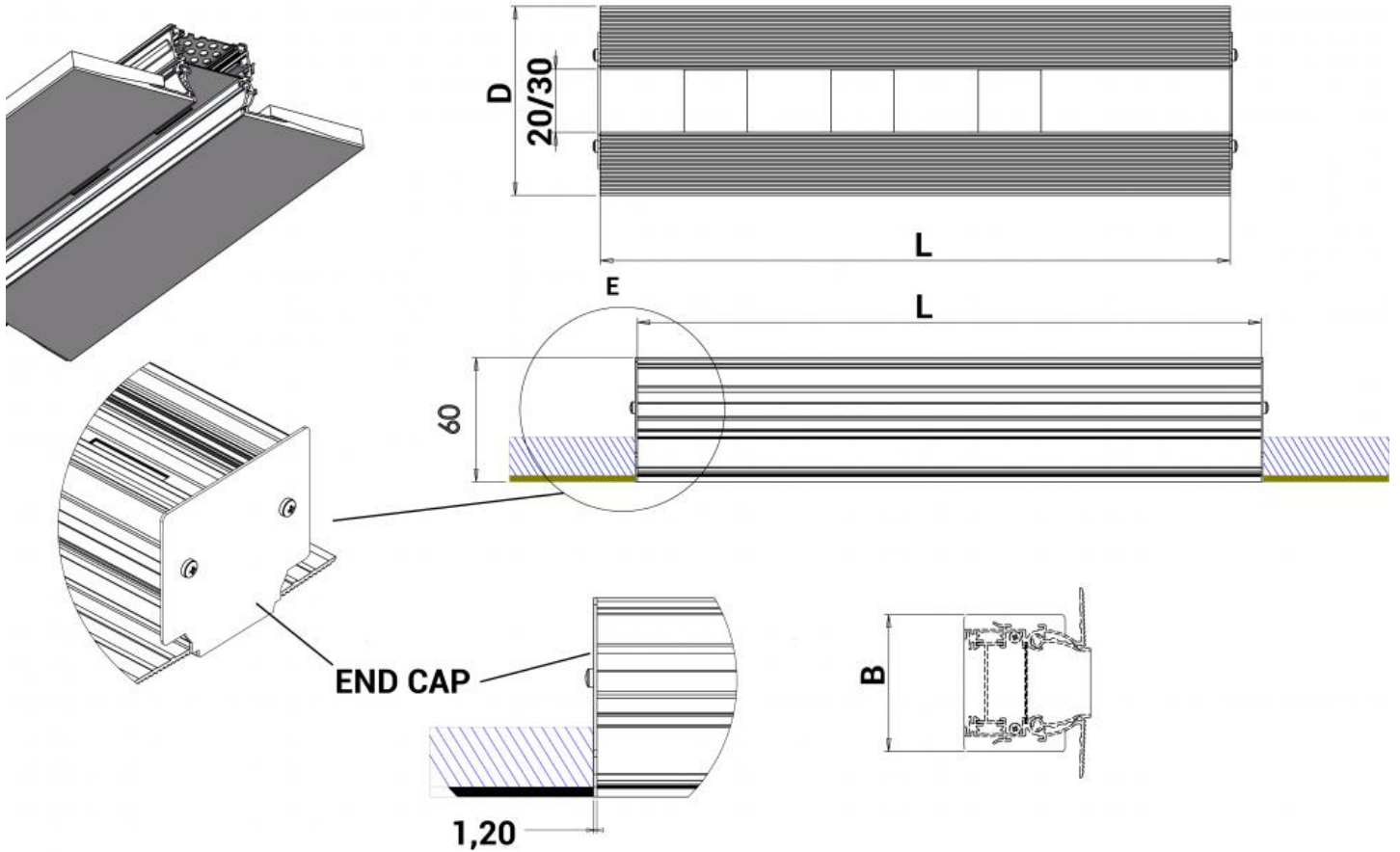
Concealed linear diffuser dimensions



All dimensions are expressed in mm

| Slot | L | A | B | C | E | D | number of fixing brackets |
|------------|------|----|----|----|----|----|---------------------------|
| 20 mm slot | 800 | 60 | 55 | 48 | 41 | 80 | 2 |
| | 1000 | | | | | | 2 |
| | 1200 | | | | | | 2 |
| | 1500 | | | | | | 2 |
| | 2000 | | | | | | 2 |
| 30 mm slot | 800 | 70 | 65 | 58 | 51 | 90 | 2 |
| | 1000 | | | | | | 2 |
| | 1200 | | | | | | 2 |
| | 1500 | | | | | | 2 |
| | 2000 | | | | | | 2 |

Diffuser dimensional details



Operating data

Data referring to 1m long diffusers, with a terminal throw velocity $V_t=0.25$ m/s and with a temperature differential of $10/12^\circ\text{C}$, in ceiling installations and with lateral air throw.

Data referring to diffusers without damper or with open sliding damper.

Data referring to diffusers with deflectors in the working position with a 50% reduction of the air passage surface.

The position of the deflectors reduces the effective cross-section. When the deflectors are fully open or when the diffuser is used for air exhaust, the flow rates expressed in m^3/h indicated in the table may be higher.

Vk: effective speed (m/s)

m^3/h : air flow rate

Pa: pressure drops in Pascal

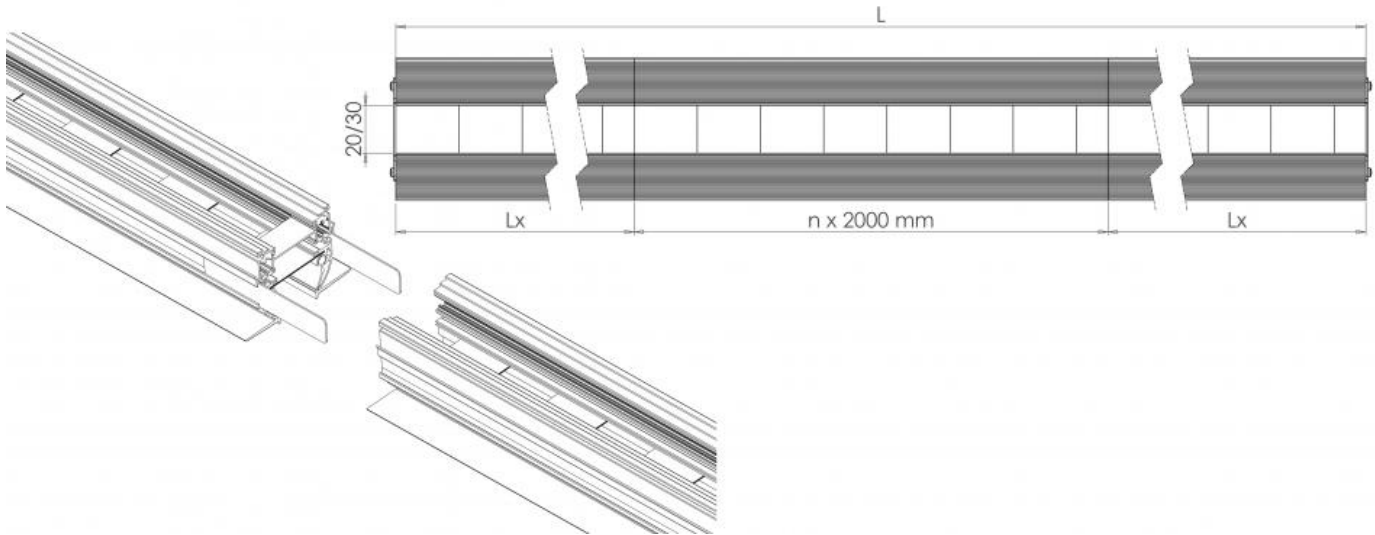
L(m): air throw in metres

dB(A): noise level

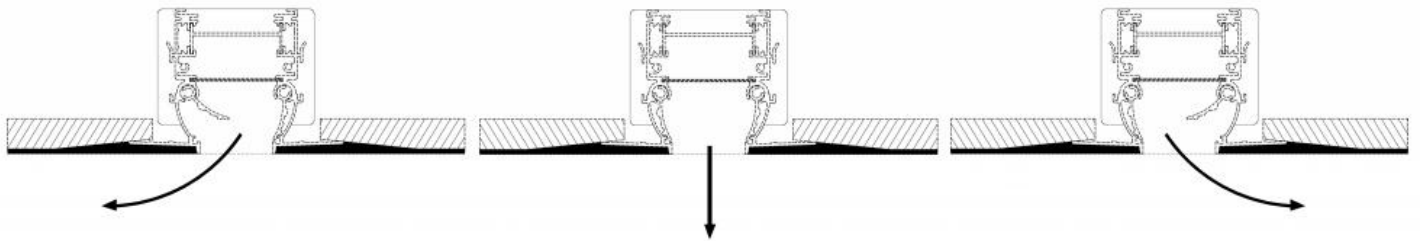
| Slot | effective cross-section m^2 | Air flow and throw | | | | | | |
|------------|--------------------------------------|-----------------------|-----|-----|-----|-----|-----|-----|
| | | m^3/h | 70 | 105 | 140 | 175 | 210 | 245 |
| 20 mm slot | 0,0097 | L(m) | 1,8 | 2,7 | 3,6 | 4,5 | 5,4 | 6,3 |
| | | m^3/h | 105 | 158 | 210 | 262 | 315 | 368 |
| 30 mm slot | 0,0146 | L(m) | 1,6 | 2,5 | 3,4 | 4,2 | 5 | 5,8 |
| | | m^3/h | 105 | 158 | 210 | 262 | 315 | 368 |
| | Vk | m/s | 2 | 3 | 4 | 5 | 6 | 7 |
| | pressure drops | Pa | 8 | 15 | 26 | 40 | 55 | 70 |
| | noise level | dB(A) | <20 | 22 | 32 | 37 | 44 | 48 |

Continuity kit

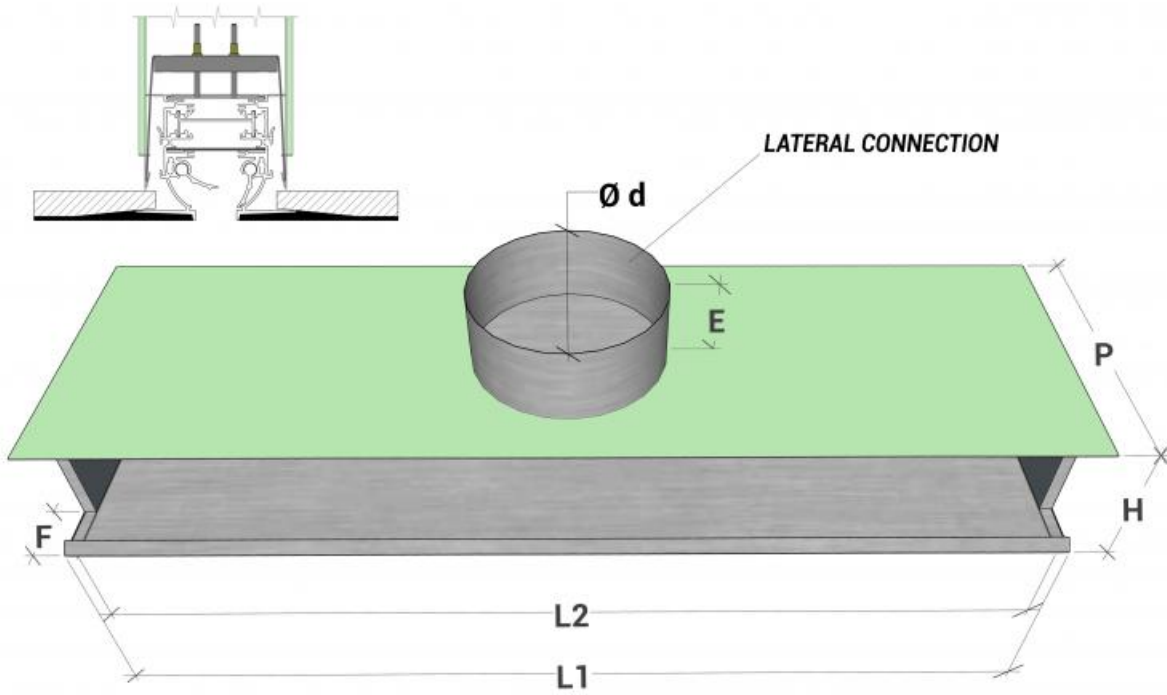
The continuity kit is an accessory required to create continuous lines of linear diffusers longer than 2 metres. It is made up of two junction plates that allow for the alignment and connection of two components of the line.



Air throw characteristics



Plenum dimensions and fixing bracket system



| Slot | L | Plenum dimensions | | | | | | | |
|------------|------|-------------------|------|--------------------|-----|-----|----|----|----|
| | | L1 | L2 | No. of connections | Ø d | P | H | E | F |
| 20 mm slot | 800 | 800 | 770 | 1 | 145 | 240 | 60 | 80 | 56 |
| | 1000 | 1000 | 970 | 1 | | | | | |
| | 1200 | 1200 | 1170 | 2 | | | | | |
| | 1500 | 1500 | 1470 | 2 | | | | | |
| | 2000 | 2000 | 1970 | 2 | | | | | |
| 30 mm slot | 800 | 800 | 770 | 1 | 145 | 240 | 70 | 80 | 56 |
| | 1000 | 1000 | 970 | 1 | | | | | |
| | 1200 | 1200 | 1170 | 2 | | | | | |
| | 1500 | 1500 | 1470 | 2 | | | | | |
| | 2000 | 2000 | 1970 | 2 | | | | | |

Price list for EDLS-FA black RAL9005 with 20 mm slot

| EDLS-FA | length | EDLS10-FA | EDLS20-FA | EDLS30-FA | EDLS40-FA | PLENUM | INSULATED PLENUM |
|------------|--------|-----------|-----------|-----------|-----------|--------|------------------|
| | | euro | euro | euro | euro | euro | euro |
| 20 mm slot | 800 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1200 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1500 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 2000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |

Price list for EDLS-FB black RAL9005 with 30 mm slot

| EDLS-FB | length | EDLS10-FB | EDLS20-FB | EDLS30-FB | EDLS40-FB | PLENUM | INSULATED PLENUM |
|------------|--------|-----------|-----------|-----------|-----------|--------|------------------|
| | | euro | euro | euro | euro | euro | euro |
| 30 mm slot | 800 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1200 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1500 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 2000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |

Price list for EDLSB-FA painted white RAL9016 with 20 mm slot

| EDLSB-FA | length | EDLSB10-FA | EDLSB20-FA | EDLSB30-FA | EDLSB40-FA | PLENUM | INSULATED PLENUM |
|------------|--------|------------|------------|------------|------------|--------|------------------|
| | | euro | euro | euro | euro | euro | euro |
| 20 mm slot | 800 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1200 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1500 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 2000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |

Price list for EDLSB-FB painted white RAL9016 with 30 mm slot

| EDLSB-FB | length | EDLSB10-FB | EDLSB20-FB | EDLSB30-FB | EDLSB40-FB | PLENUM | INSULATED PLENUM |
|------------|--------|------------|------------|------------|------------|--------|------------------|
| | | euro | euro | euro | euro | euro | euro |
| 30 mm slot | 800 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1200 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 1500 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |
| | 2000 | ▼ | ▼ | ▼ | ▼ | ▼ | ▼ |

Price list

| Fixing brackets and Kit for continuous line | | euro |
|--|--|------|
| fixing bracket for EDLS-FA EDLS-FB EDLSB-FA EDLSB-FB | | ▼ |
| continuity kit | | ▼ |