

# 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.

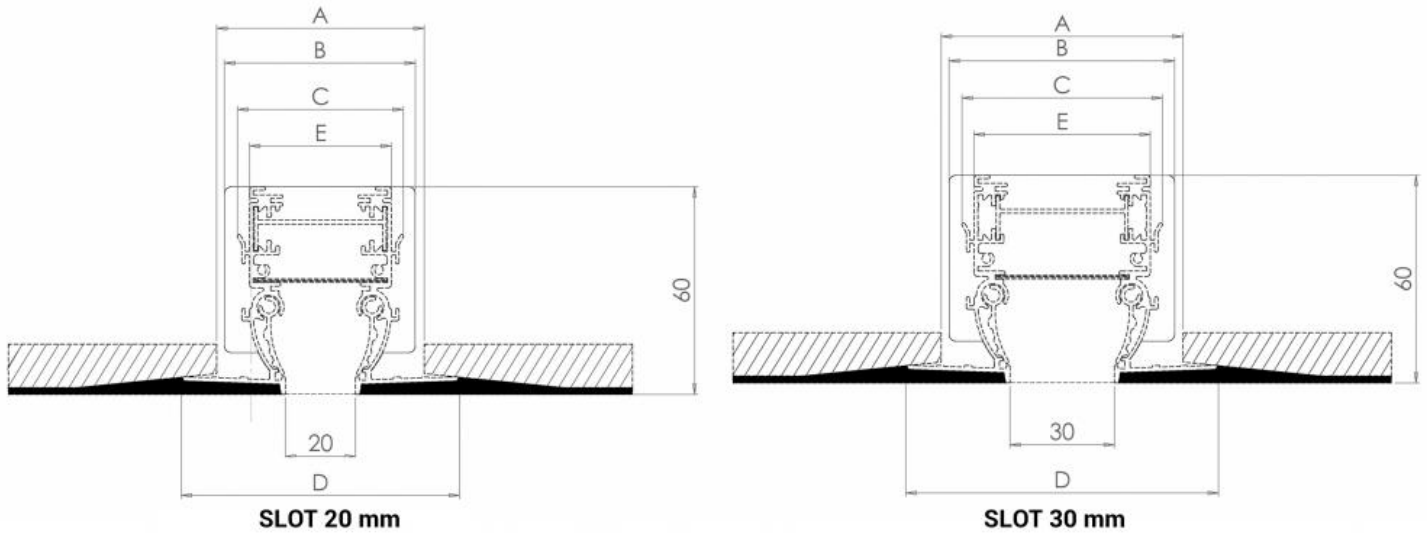
## Models

- 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.

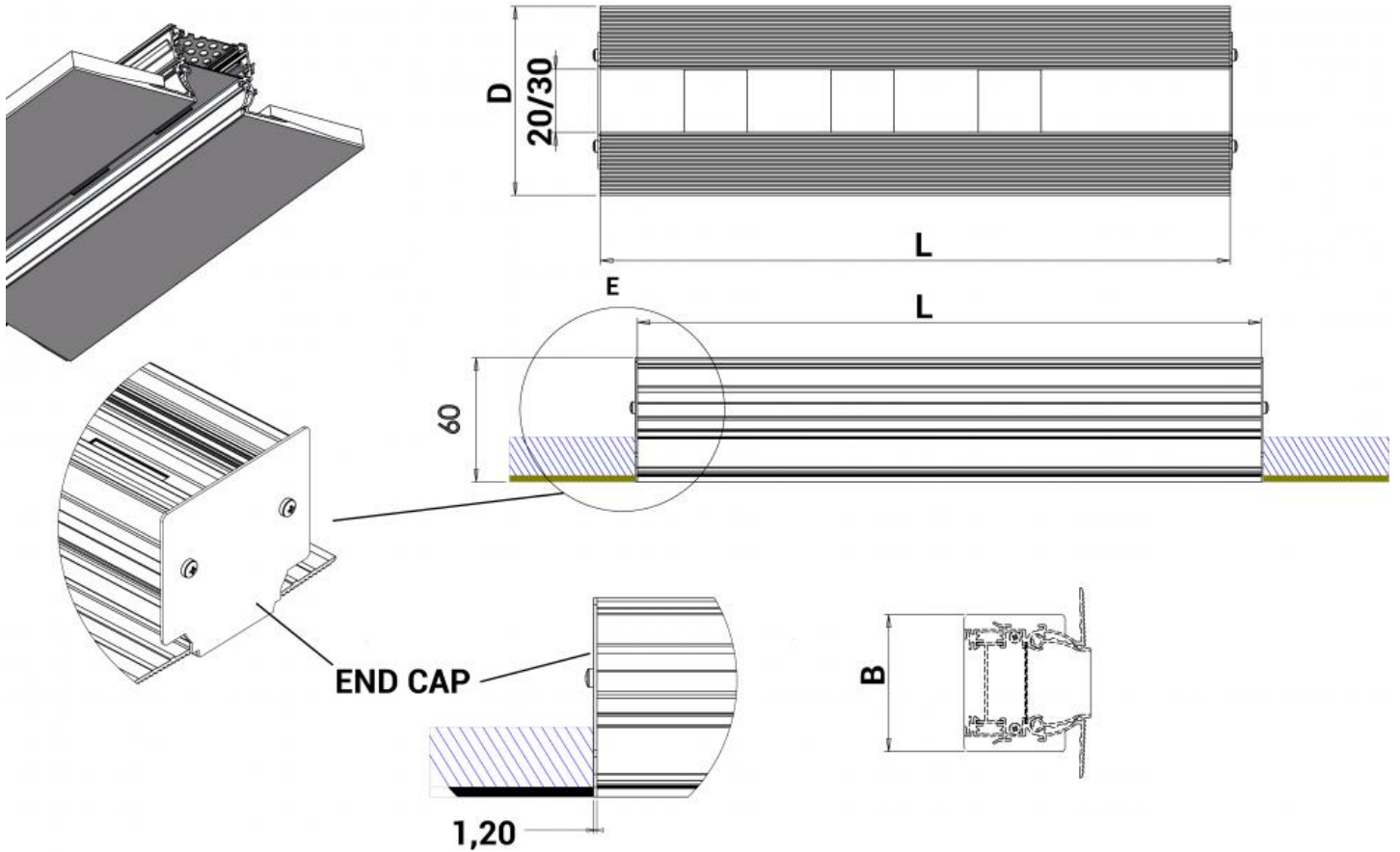
## Concealed linear diffuser dimensions



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°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

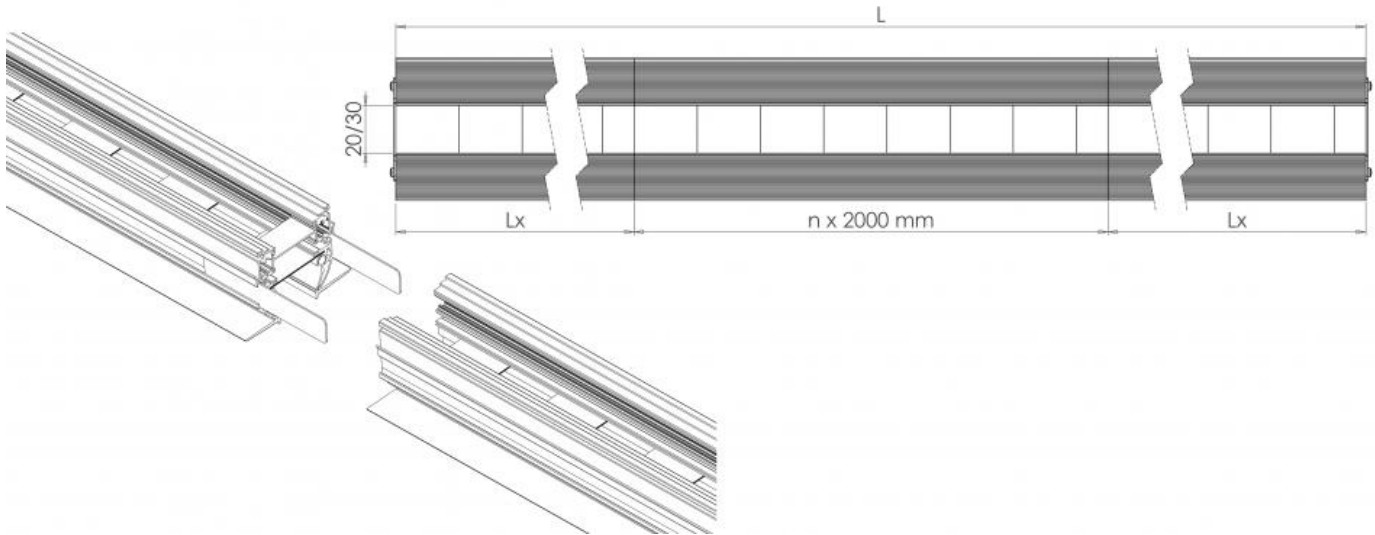
L(m): air throw in metres

dB(A): noise level

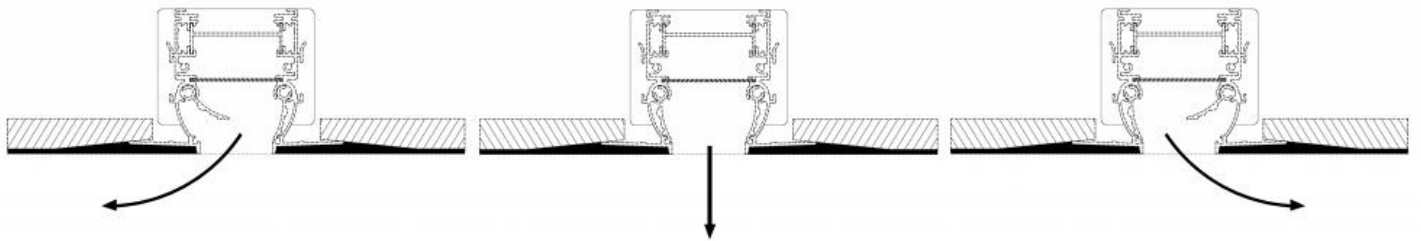
Slot	effective cross-section $m^2$	Air flow and throw						
		$m^3/h$	70	105	140	175	210	245
20 mm slot	0,0097	L(m)	1,8	2,7	3,6	4,5	5,4	6,3
		$m^3/h$	105	158	210	262	315	368
30 mm slot	0,0146	L(m)	1,6	2,5	3,4	4,2	5	5,8
		$m^3/h$	105	158	210	262	315	368
	Vk	m/s	2	3	4	5	6	7
	pressure drops	Pa	8	15	26	40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

### Continuity kit

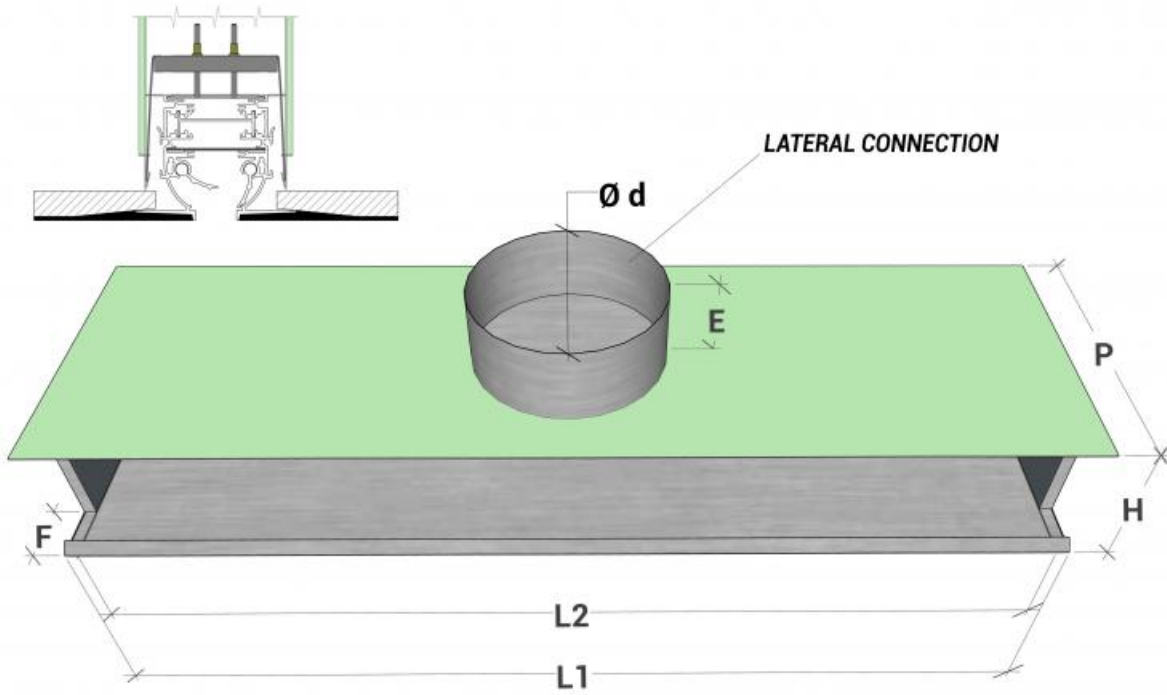
The continuity kit is an accessory required to create continuous lines of linear diffusers longer than 2 metres. It is made up of two junction plates that allow for the alignment and connection of two components of the line.



**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	50,40 ∨	52,79 ∨	59,26 ∨	65,68 ∨	a.r. ∨	a.r. ∨
	1000	56,63 ∨	59,42 ∨	65,82 ∨	73,24 ∨	a.r. ∨	a.r. ∨
	1200	67,25 ∨	71,83 ∨	80,07 ∨	87,79 ∨	a.r. ∨	a.r. ∨
	1500	76,55 ∨	82,15 ∨	89,86 ∨	99,21 ∨	a.r. ∨	a.r. ∨
	2000	97,48 ∨	101,01 ∨	115,04 ∨	126,11 ∨	a.r. ∨	a.r. ∨

#### 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	51,40 ∨	57,19 ∨	60,45 ∨	67,00 ∨	a.r. ∨	a.r. ∨
	1000	57,75 ∨	63,77 ∨	67,13 ∨	74,70 ∨	a.r. ∨	a.r. ∨
	1200	73,98 ∨	81,07 ∨	88,07 ∨	96,58 ∨	a.r. ∨	a.r. ∨
	1500	84,21 ∨	91,61 ∨	98,84 ∨	109,12 ∨	a.r. ∨	a.r. ∨
	2000	99,42 ∨	109,79 ∨	117,33 ∨	128,62 ∨	a.r. ∨	a.r. ∨

#### 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	50,40 ∨	52,79 ∨	59,26 ∨	65,68 ∨	a.r. ∨	a.r. ∨
	1000	56,63 ∨	59,42 ∨	65,82 ∨	73,24 ∨	a.r. ∨	a.r. ∨
	1200	67,25 ∨	71,83 ∨	80,07 ∨	87,79 ∨	a.r. ∨	a.r. ∨
	1500	76,55 ∨	82,15 ∨	89,86 ∨	99,21 ∨	a.r. ∨	a.r. ∨
	2000	97,48 ∨	101,01 ∨	115,04 ∨	126,11 ∨	a.r. ∨	a.r. ∨

#### 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	51,40 ∨	57,19 ∨	60,45 ∨	67,00 ∨	a.r. ∨	a.r. ∨
	1000	57,75 ∨	63,77 ∨	67,13 ∨	74,70 ∨	a.r. ∨	a.r. ∨
	1200	73,98 ∨	81,07 ∨	88,07 ∨	96,58 ∨	a.r. ∨	a.r. ∨
	1500	84,21 ∨	91,61 ∨	98,84 ∨	109,12 ∨	a.r. ∨	a.r. ∨
	2000	99,42 ∨	109,79 ∨	117,33 ∨	128,62 ∨	a.r. ∨	a.r. ∨

#### Price list

Fixing brackets and Kit for continuous line		euro
fixing bracket for EDLS-FA EDLS-FB EDLSB-FA EDLSB-FB		11,89 ∨
continuity kit		2,23 ∨