

HIDDEN LINEAR DIFFUSER



Serie EDLS

Linear diffuser for hidden installation with slot 20 mm or 30 mm, with aerodynamic profile in aluminium and adjustable deflectors for optimal air throw.

Available also with equalizer and sliding damper.

FEATURES:

Material: Aluminium

Finishing frame and deflectors in aluminium RAL9005 or RAL9016

Slot: 20 mm or 30 mm

Mounting: with plenum box mounting bridge. Finishing with anti-crack tape and plaster wall finishing.

Dimensions available in single piece:

- Min. length 300 mm;
- Max. length 2000 mm.

USE:

Diffuser suitable for both supply and return air in large environments. Thanks to its modularity it allows great design freedom. The diffuser can be used for both heating and air conditioning.

MODELS:

- EDLS10-FA hidden linear diffuser slot 20mm with RAL9005 profile and without deflectors.
- EDLS20-FA hidden linear diffuser slot 20mm with RAL9005 profile and RAL9005 deflectors.
- EDLS30-FA hidden linear diffuser slot 20mm with RAL9005 profile with sliding damper and without deflectors.
- EDLS40-FA hidden linear diffuser slot 20mm with RAL9005 profile with sliding damper and with RAL9005 deflectors

- EDLS10-FB hidden linear diffuser slot 30mm with RAL9005 profile and without deflectors.
- EDLS20-FB hidden linear diffuser slot 30mm with RAL9005 profile and RAL9005 deflectors.
- EDLS30-FB hidden linear diffuser slot 30mm with RAL9005 profile with sliding damper and without deflectors.
- EDLS40-FB hidden linear diffuser slot 30mm with RAL9005 profile with sliding damper and with RAL9005 deflectors

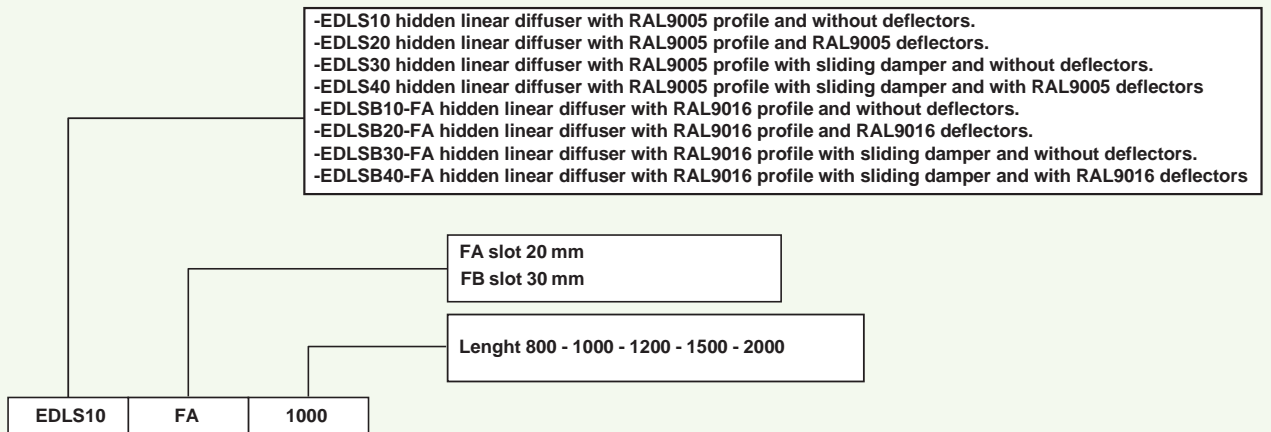
- EDLSB10-FA hidden linear diffuser slot 20mm with RAL9016 profile and without deflectors.
- EDLSB20-FA hidden linear diffuser slot 20mm with RAL9016 profile and RAL9016 deflectors.
- EDLSB30-FA hidden linear diffuser slot 20mm with RAL9016 profile with sliding damper and without deflectors.
- EDLSB40-FA hidden linear diffuser slot 20mm with RAL9016 profile with sliding damper and with RAL9016 deflectors

- EDLSB10-FB hidden linear diffuser slot 30mm with RAL9016 profile and without deflectors.
- EDLSB20-FB hidden linear diffuser slot 30mm with RAL9016 profile and RAL9016 deflectors.
- EDLSB30-FB hidden linear diffuser slot 30mm with RAL9016 profile with sliding damper and without deflectors.
- EDLSB40-FB hidden linear diffuser slot 30mm with RAL9016 profile with sliding damper and with RAL9016 deflectors

ACCESSORIES

- Galvanised plenum box
- Insulated plenum box
- Continues line kit

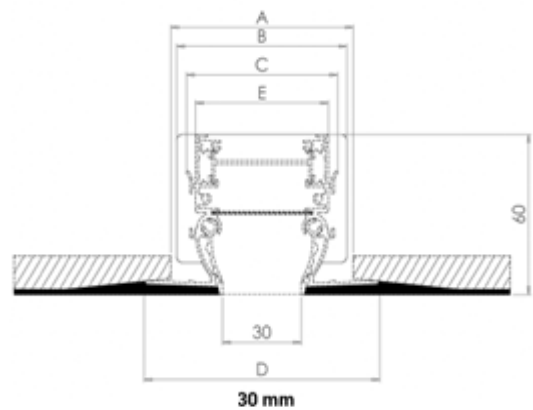
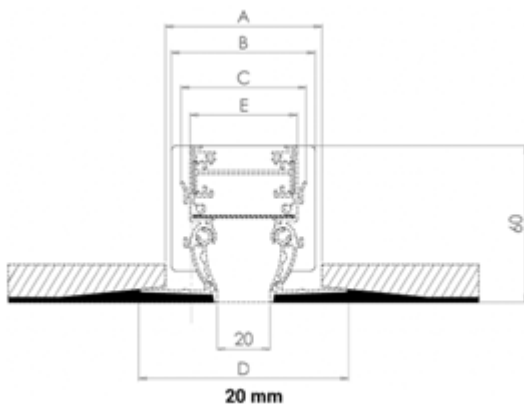
CODES:



DIFFUSER DIMENSIONS:

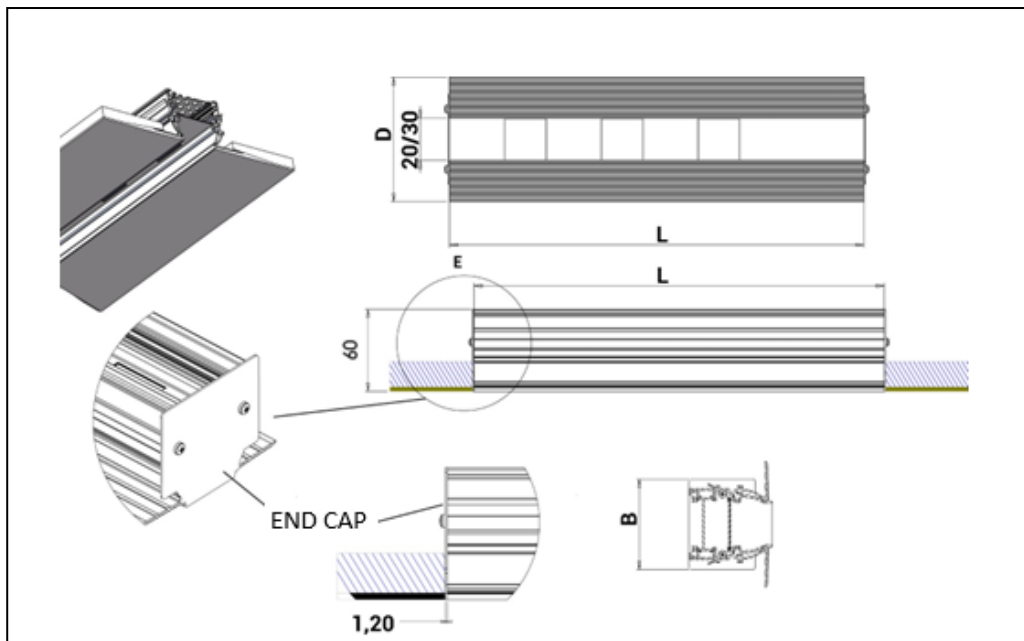
- Hidden Linear Diffuser Slot 20mm

- Hidden Linear Diffuser Slot 30mm



slot	L	A	B	C	E	D	n. of mounting bridges
20 mm	800	60	55	48	41	80	2
	1000						2
	1200						2
	1500						2
	2000						2
30 mm	800	70	65	58	51	90	2
	1000						2
	1200						2
	1500						2
	2000						2

DIMENSION DETAILS



PERFORMANCES:

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 m³/h indicated in the table may be higher.

Vk: Effective Air Speed (m/s)

m³/h: Air volume

Pa: Pressure Drop

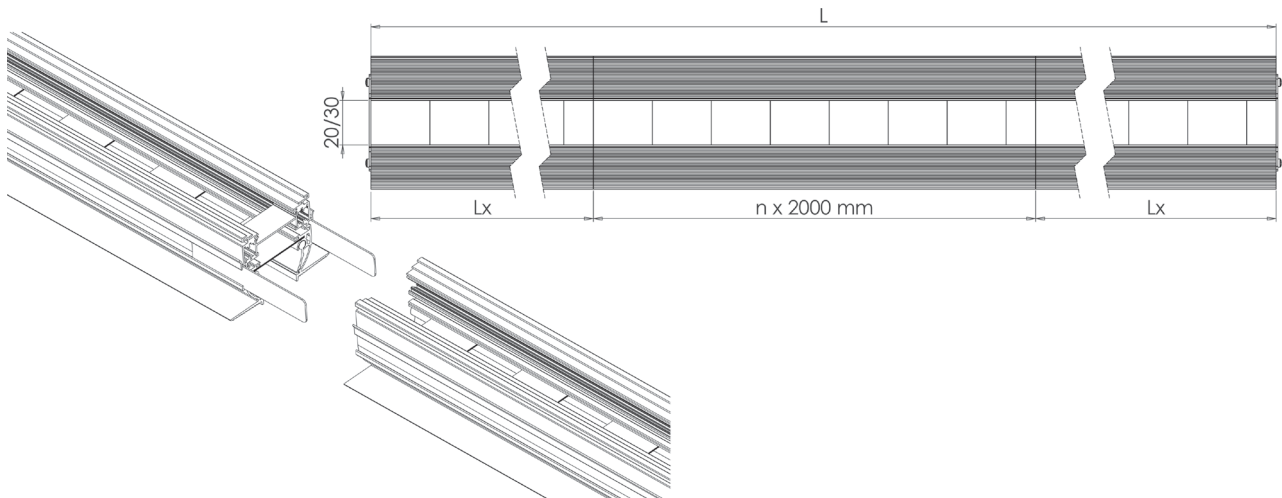
(m): Throw in m

dB(A): Noise Level

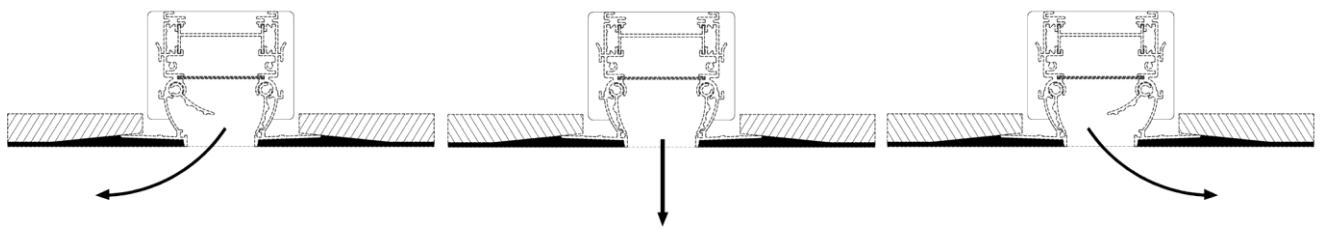
slot	effective section m ²	air volume and throw						
		m ³ /h	70	105	140	175	210	245
20mm	0,0097	L(m)	1.8	2.7	3.6	4.5	5.4	6.3
		m ³ /h	105	158	210	262	315	368
30mm	0,0146	L(m)	1,6	2,5	3,4	4,2	5	5,8
		m ³ /h	105	158	210	262	315	368
Vk	m/s	2	3	4	5	6	7	
Pressure Drop	Pa	8	15	26	40	55	70	
Noise Level	dB(A)	<20	22	32	37	44	48	

CONTINUES LINE KIT:

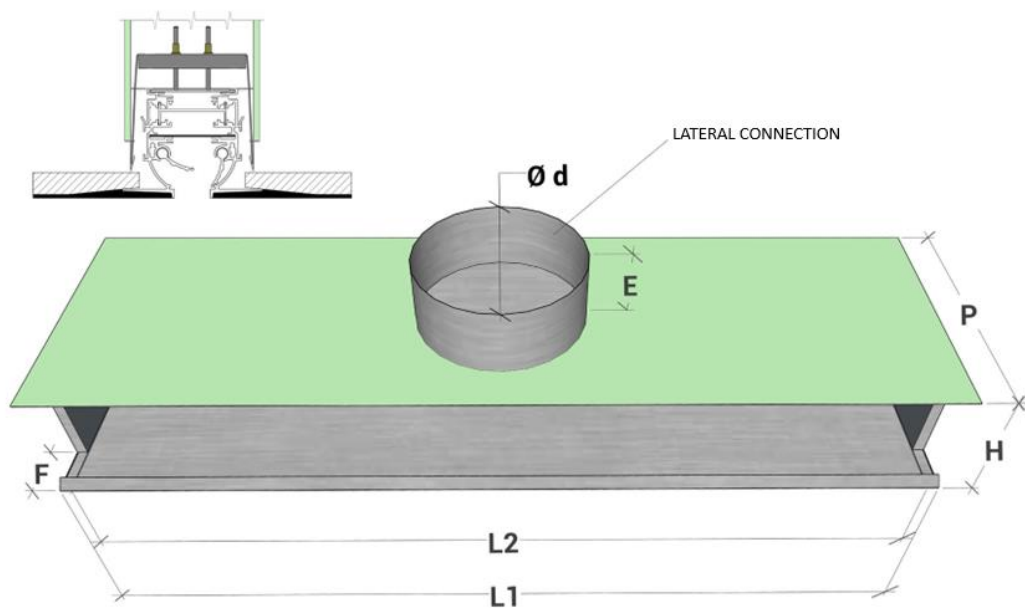
Continues Line kit is a necessary accessory to create continuous lines of linear diffusers longer than 2 metres. It consists of two junction plates that allow the alignment and connection of two components of the line.



AIR THROW:

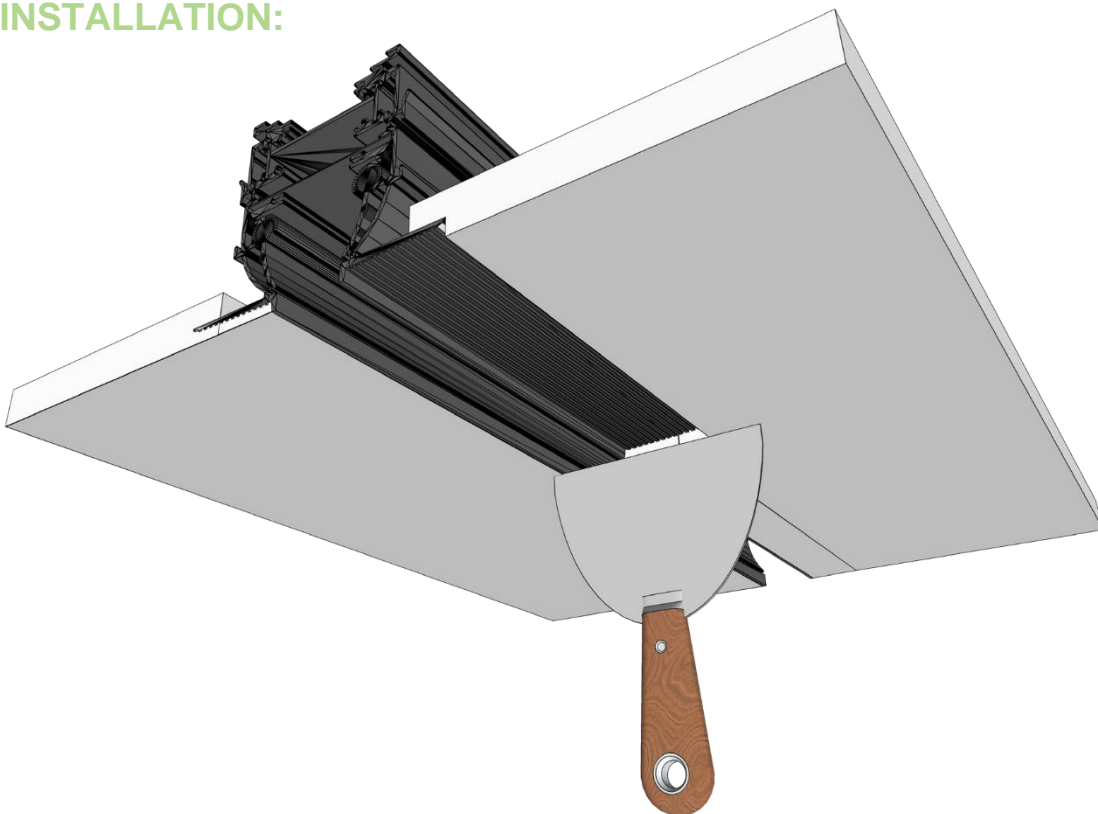


PLENUM BOX DIMENSION AND INSTALLATION WITH MOUNTING BRIDGE:



slot	L	Plenum Box dimensions							
		L1	L2	N. of Conn.	Ø d	P	H	E	F
20 mm	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	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					

INSTALLATION:



Make a hole in the plasterboard with dimensions H x L and fix the plenum above the plasterboard. Along the length of the hole made, smooth the plasterboard so that - when the hidden linear diffuser is inserted - it is in line with the rest of the plasterboard. Insert the linear diffuser with the appropriate fixing bridges and anchor it to the plenum previously placed above the plasterboard. When the linear diffuser is perfectly attached and in its definitive position, perform an initial smoothing with plaster, apply the smoothing mesh along the entire length of the linear diffuser and finish with the application of the finishing plaster.