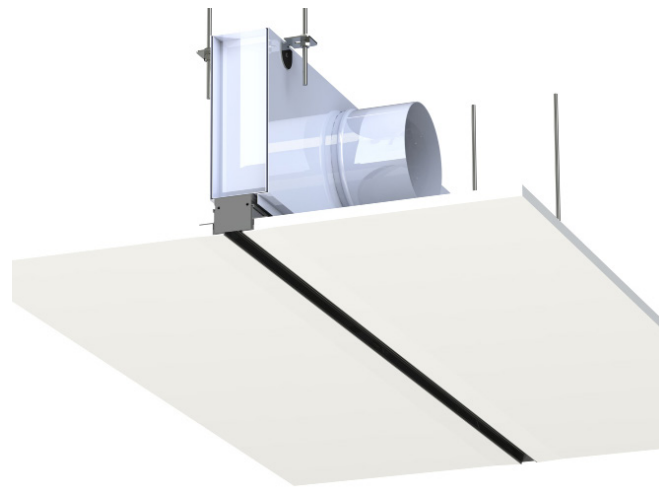


## DF-LIT-E-4.0



### Hidden linear diffuser

#### Product description

The **KOOLAIR DF-LIT-E-4.0** is a slot diffuser for air supply and return, with slots (15, 20, 33, 40, 50 mm). Complete with movable blade for horizontal and vertical supply. It is designed to be installed in suspended drywall ceilings or suspended panels, and is distinguished as it is an invisible linear diffuser with a pleasing aesthetic appearance. The absence of visible profiles means it is aesthetically pleasing, as it is practically imperceptible. We offer the option of manufacturing with different slot widths depending on the required supply or return air flow rate per linear metre. It is also suitable for flush installation. It is manufactured from extruded aluminium profiles, and comes with a standard **RAL-9005** finish. Other RAL or NCS finishes are available on request. Recommended installation height is between 2.4 and 4 m.

#### Mounting

**PFL-RL.** Uninsulated fixed plenum with lateral connection. (-RL.) With regulating damper accessible from below.

**PFL-A-RL.** Internally insulated fixed plenum with lateral connection (-A.). (-RL.) With regulating damper accessible from below.

**PFS-A/PFS.** Fixed plenum with top connection (-A.) insulated/uninsulated. (-RL.) With regulating damper accessible from below.

**RFS06.** Curtain type damper for installations; painted black with no plenum.

Note: Possibility of producing joining corners and forming continuous lines (Maximum length per section 2000 mm).

#### Other models

**DF-LIT-E-4.0-R.** Hidden linear slot diffuser (15, 20, 33, 40, 50 mm). Intended for return air with high flow capacity. Recommended with insulated plenum box to prevent the interior being visible. With no directional air blade and no perforated plate.

**DF-LIT-E-4.0-R-PR.** Hidden linear slot diffuser (15, 20, 33, 40, 50 mm). Intended for return air with high flow capacity and no directional air blade. With perforated sheet painted black on the inside of the unit. Intended for return air in false ceilings.

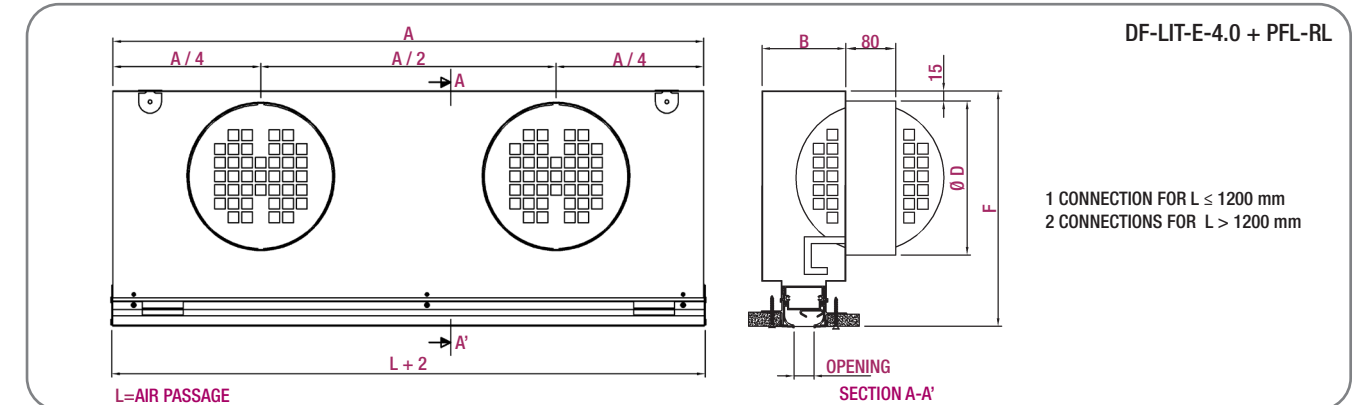
**DF-LIT-E-4.0-CURVED.** Curved hidden linear slot diffuser (15, 20, 33, 40, 50 mm), with a determined bend radius (minimum 1 m). If a plenum with a lateral connection is fitted, it should be indicated whether the connection should be on the convex or concave side.

**COIN-MITRED-DF-LIT-E-4.0.** Hidden linear slot diffuser (15, 20, 33, 40, 50 mm) with an adjustable angle (minimum 60°), prepared to form a continuous line with other active or decorative sections.



DF-LIT-E-4.0-CURVED

### General dimensions

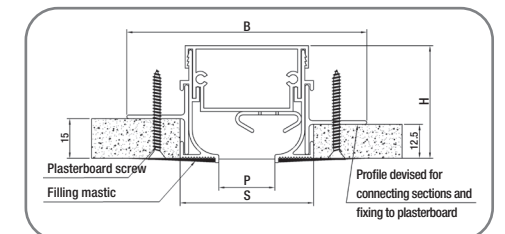


1 CONNECTION FOR  $L \leq 1200$  mm  
2 CONNECTIONS FOR  $L > 1200$  mm

Custom plenums available to suit reduced heights above false ceilings.

HOLE	NOMINAL	L	A	B	Ø D	F	No. INLETS
15	600	600	598	63	125	200	1
	1000	1000	998				
	1200	1200	1198				
	1500	1500	1498				
	1800	1800	1798				
2000	2000	1998	2				
20	600	600	598	68	160	235	1
	1000	1000	998				
	1200	1200	1198				
	1500	1500	1498				
	1800	1800	1798				
2000	2000	1998	2				
33	600	600	598	90	160	235	1
	1000	1000	998				
	1200	1200	1198				
	1500	1500	1498				
	1800	1800	1798				
2000	2000	1998	2				
40	600	600	598	110	200	275	1
	1000	1000	998				
	1200	1200	1198				
	1500	1500	1498				
	1800	1800	1798				
2000	2000	1998	2				
50	600	600	598	120	200	275	1
	1000	1000	998				
	1200	1200	1198				
	1500	1500	1498				
	1800	1800	1798				
2000	2000	1998	2				

Unit mm



P (mm)	S (mm)	B (mm)	H (mm)
15	43	81	39
20	48	86	39
33	68	107	39
40	88	126	47
50	98	136	47

Unit mm

### Selection table

Slots	Dimension	Supply DF-LIT-E-4.0					Return DF-LIT-E-4.0		Return DF-LIT-E-4.0-R			Return DF-LIT-E-4.0-R-PR		
		Q (m³/h)	L <sub>wa</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)	X (m)	V <sub>k</sub> (m/s)	L <sub>wa</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)	Q (m³/h)	L <sub>wa</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)	Q (m³/h)	L <sub>wa</sub> [dB(A)]	ΔP <sub>t</sub> (Pa)
15	1000	95	24	10	3,2	3,5	21	10	135	24	9	110	24	6
		130	32	19	4,4	4,8	30	20	185	32	18	160	32	12
		175	40	34	5,9	6,4	38	36	260	40	35	230	40	25
20	1000	145	24	11	3,7	3,5	28	15	150	24	13	155	24	6
		200	32	21	5,1	4,9	36	29	205	32	24	220	32	12
		270	40	38	6,9	6,6	44	54	280	40	45	330	40	26
33	1000	170	24	10	3,2	4,1	27	17	165	24	11	210	24	4
		230	32	19	4,4	5,5	35	30	230	32	22	300	32	9
		330	40	38	6,3	7,9	44	63	320	40	42	450	40	20
40	1000	200	24	9	3,6	3,1	26	20	260	24	10	295	24	7
		270	32	17	4,9	4,2	34	37	350	32	19	410	32	13
		370	40	32	6,7	5,8	42	69	460	40	33	600	40	27
50	1000	220	24	8	3,3	2,0	24	16	300	24	12	350	24	6
		300	32	15	4,5	2,7	32	29	410	32	23	510	32	12
		400	40	26	6,0	3,6	39	52	560	40	43	740	40	26

The selection tables show the technical data per linear metre of diffuser.

#### LEGEND

Q (m³/h): Air flow.

L<sub>wa</sub> [dB(A)]: Sound power level.

ΔP<sub>t</sub> (Pa): Total pressure loss.

V<sub>k</sub> (m/s): Effective velocity.

X (m): Throw for a maximum velocity of 0.25 m/s at the occupied zone ΔT = -10 °C (cold), installed at 2.8 m of height.