

DRLT



Hidden fixed blade swirl diffuser

Product description

KOOLAIR fixed-blade swirl diffuser, model **DRLT-LxH**, size $_x_$, to be incorporated in a $_x_$ mm micro-perforated ceiling tile. Suitable for use with a lateral connection plenum complete with regulating damper that can be accessed from the false ceiling. 1200 x 300 mm tiles can incorporate a diffuser up to $\varnothing 250$.

Available or adaptable to micro-perforated ceiling tiles suspended with a free area between 16% and 30% covering a large part of the range of existing standard micro-perforated ceilings on the market.

Diffuser and micro-perforated tile manufactured from sheet steel. Ceiling tile with a painted finish in RAL colour to be defined; diffuser in RAL-9005 (black) to prevent it from being seen and guarantee discretion. They achieve one of the design premises most sought after by architects and designers: to completely hide the components of the air conditioning installation. The air diffusion unit is integrated above the micro-perforated ceiling tiles (inside the false ceiling), giving total aesthetic uniformity to the space.

For correct operation in both heating and cooling an installation height between 2.4 and 3 m is recommended.

Other models

DRLT-Q. Swirl diffuser to be incorporated in existing 595x595 mm micro-perforated false ceiling tile.

DRLT-PR-Plate LxH. Swirl diffuser integrated in $_x_$ m micro-perforated tile. 1200x300 mm tiles can incorporate a diffuser up to $\varnothing 250$.

DRLT-PR-Q. Swirl diffuser integrated in an existing microperforated plate of dimensions 595x595 mm in a false ceiling.

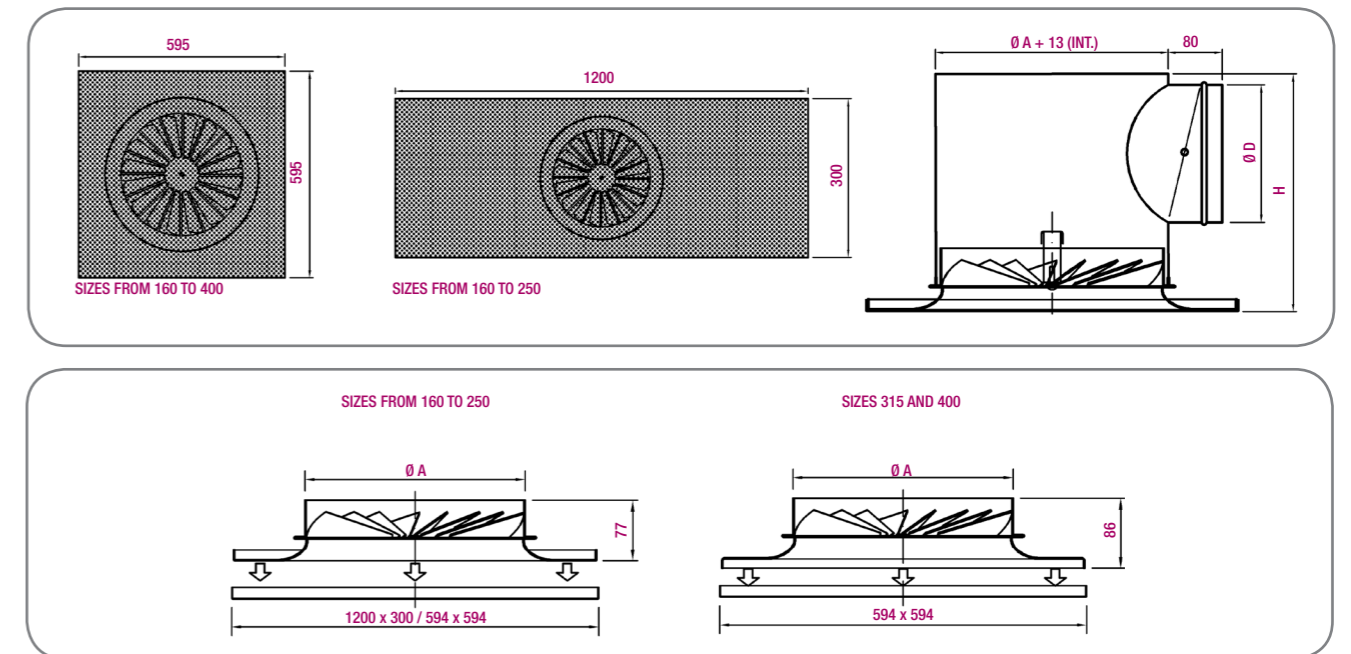
Mounting

PCDL-RE. Removable plenum box with side connection, internally non-insulated, made in galvanised steel sheet, with manual damper accessible from false ceiling.

PCDL-A-RE. Removable plenum box with side connection, internally insulated, made in galvanised steel sheet, with manual damper accessible from false ceiling.

Note: On request, top plenum available insulated/ uninsulated (PDS-A-RE/PDS-RE).

General dimensions



Custom plenums available to suit reduced heights above false ceilings.

Diffuser	$\varnothing A$	$\varnothing D$	H
160	158	124	221
200	198	159	256
250	248	199	296
315	313	249	355
400	398	249	355

Unit mm

Selection table

Diffuser	Q (m ³ /h)	L _{wa} [dB(A)]	ΔP_t (Pa)	X (m)	V _k (m/s)
160	85	24	10	0,4	1,4
	115	32	19	0,6	1,9
	160	40	36	0,8	2,6
200	120	24	10	0,5	1,6
	165	32	18	0,7	2,1
	225	40	33	1,0	2,9
250	160	24	9	0,7	1,7
	220	32	16	1,0	2,4
	300	40	31	1,4	3,2
315	275	24	5	1,0	2,6
	375	32	10	1,4	3,5
	510	40	19	1,9	4,7
400	320	24	6	1,2	2,3
	430	32	12	1,6	3,2
	590	40	22	2,2	4,3

LEGEND

Q (m³/h): Air flow.

L_{wa} [dB(A)]: Sound power level.

ΔP_t (Pa): Total pressure loss.

X (m): Throw for a maximum velocity of 0.25 m/s at the occupied zone

$\Delta T = -10$ °C (cold), installed at 2.8 m of height.

V_k (m/s): Effective velocity.

Technical data for micro-perforated tile with 16% free area.

Availability of other perforation designs. Consult the Technical Department.