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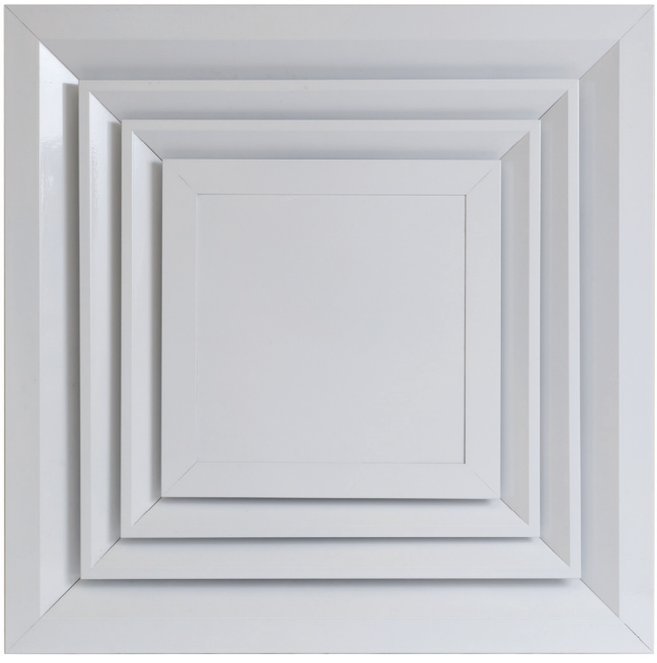
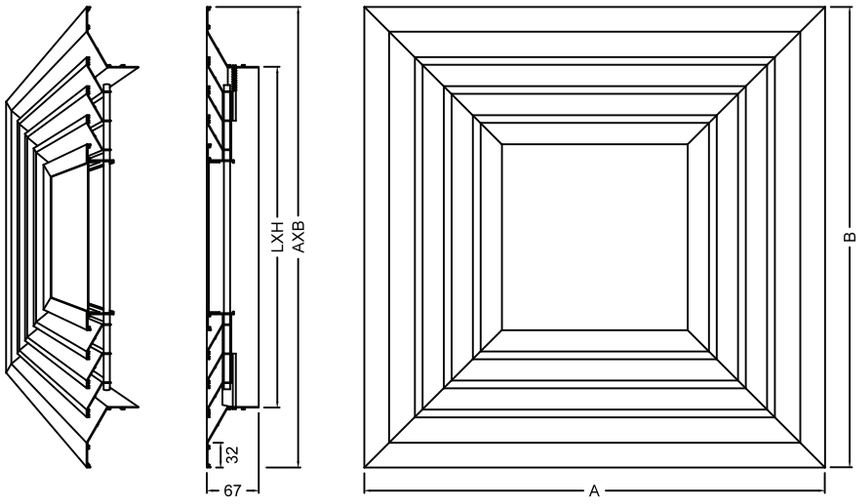
APTD
ARCHITECTURAL DIFFUSER





PRODUCT DESCRIPTION

This modular diffuser is designed for HVAC systems. Its metal sheet core can be replaced with a false ceiling plate in order to better fit the interior's architecture.

USAGE

Used both for air extraction (exhaust), as well as for discharge (supply) in HVAC systems.

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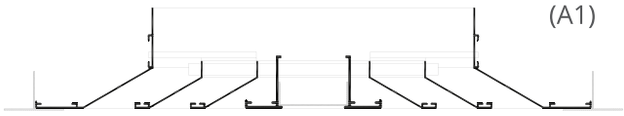
MATERIAL AND FINISH
Made of extruded aluminium profile. White RAL9016 (electrostatic powder coating) as standard.

MOUNTING
Can be mounted on the suspended ceiling's structure. (A1)

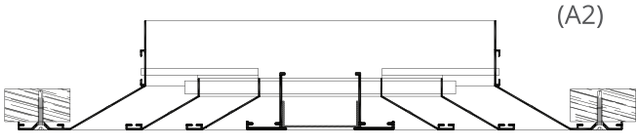
Secured with screws (visible). (A2)

No visible screws, mounted directly on the side walls of the connection plenum. (A3)
Mounted by removing of the central piece of the diffuser (lateral sliding, spring system).

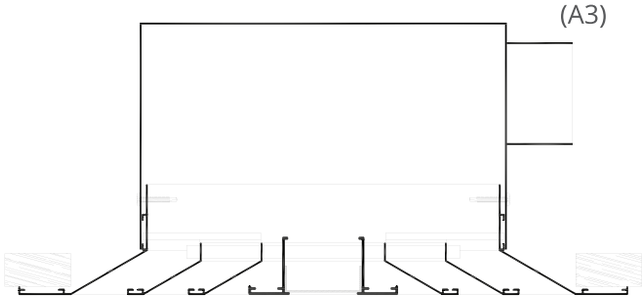
(A1)



(A2)



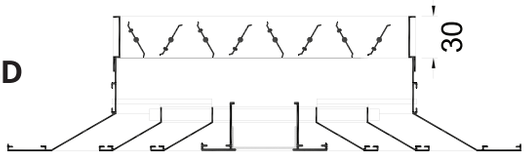
(A3)



OPTIONAL ACCESSORIES

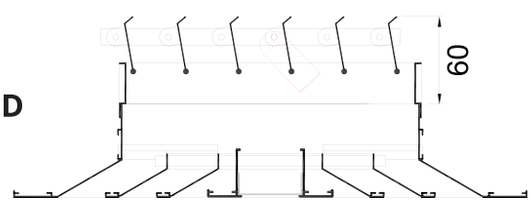
Opposing shutters register (OBD)

OBD



Parallel shutters register (PBD)

PBD



ORDERING

APTD 600 X 600 RALxxxx OBD CG +PL 1

Article code
Length L
Height H
ST - RAL9016 (standard)
RALxxxx - optional RAL painting
ALU - Natural aluminium colour
ST - No adjusting register
OBD - Opposing shutters register
PBD - Parallel shutters register
FG - No visible holes (A1, A3)
CG - Mounting holes (A2)
PL - Plenum (to be ordered separately)
Number of slots

GRILLE DIMENSIONS

FREE AREA OF THE APTD GRILLE - A_{ef} (m^2)

Fante	L (mm)	H (mm)	A_{ef} (m^2)	Q_{min} (m^3/h)	Q_{max} (m^3/h)
1	600	600	0.028	242	455
2	600	600	0.045	404	760
3	600	600	0.059	545	1020
4	600	600	0.069	658	1240

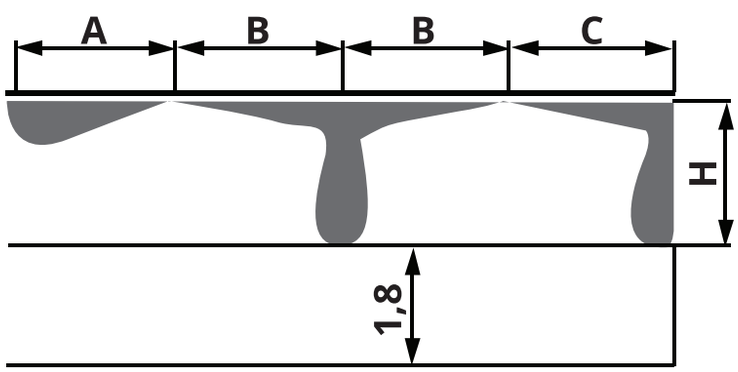
The recommended speed at the grille is between 2.5 and 4.5 m/s

Correction factor for Dpt and Lwa1:

Plenum		100% OPEN	50% OPEN	10% OPEN
1 X 600	Dpt (Kp)	1	1.82	4.55
	Lwa1 (Kf)	0	6	15
2 X 600	Dpt (Kp)	1	4.38	7.5
	Lwa1 (Kf)	0	6	15
3 X 600	Dpt (Kp)	1	4.17	8.33
	Lwa1 (Kf)	0	6	16
4 X 600	Dpt (Kp)	1	3	18
	Lwa1 (Kf)	0	7	16

DPt1 = Kp x DPt
Lwa = Lwa1 + Kf

AL 0.2 = A
AL 0.2 = B+H
AL 0.2 = C+H



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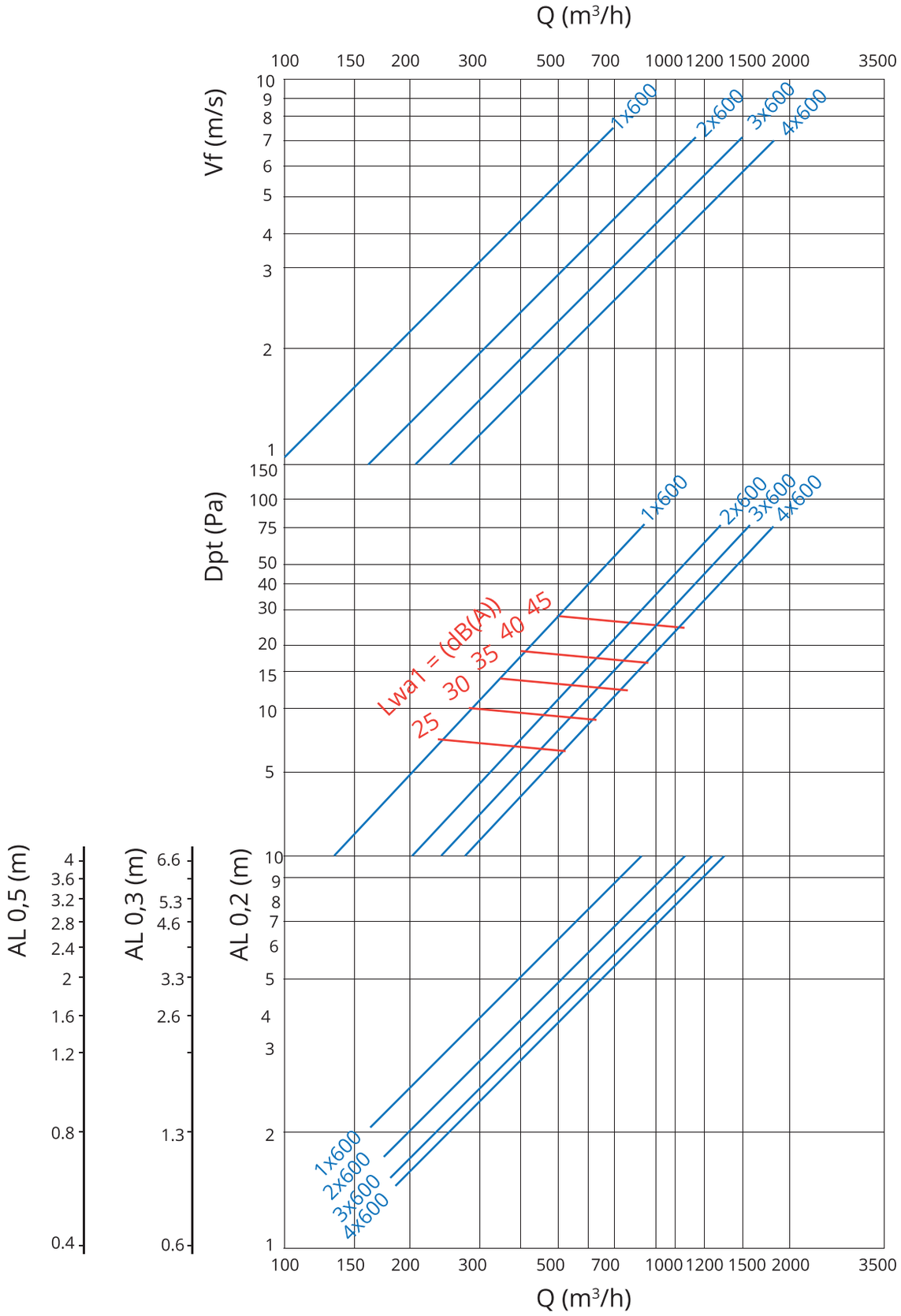

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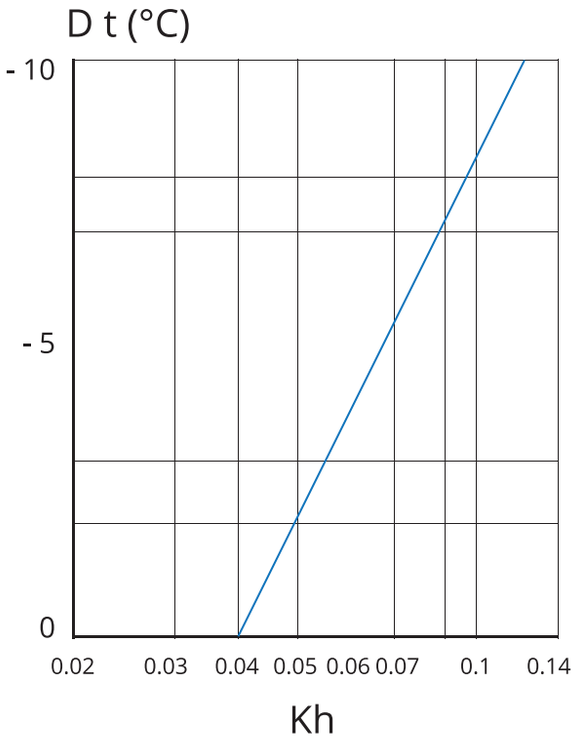
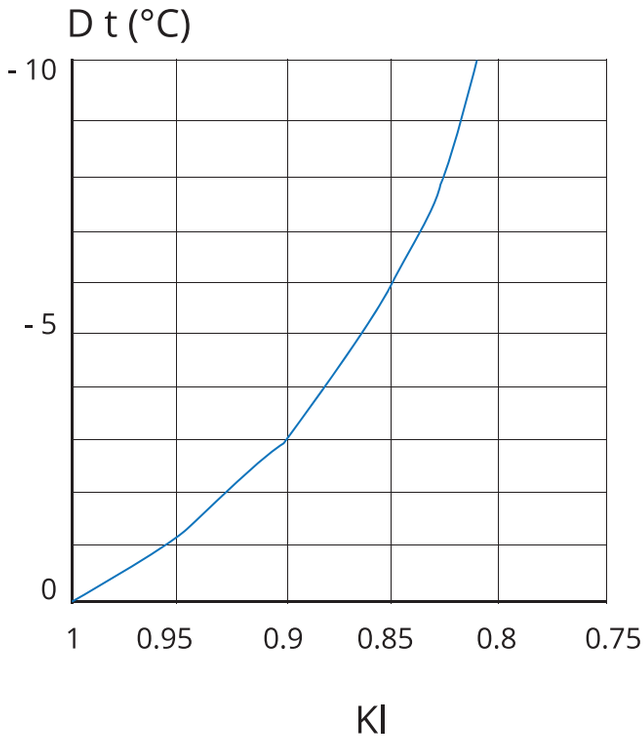
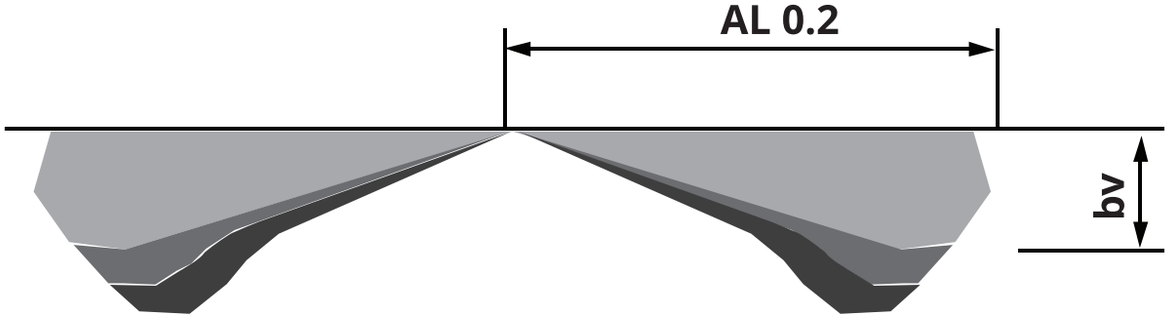
Correction factor
for vertical diffusion (bV) for DT (-) - Kh



Correction factor
for jet (L0.2) DT (-) - KI





Bv = Kh x Al 0.2
AL 0.2 (Dt < 0) = Kl x AL 0.2