

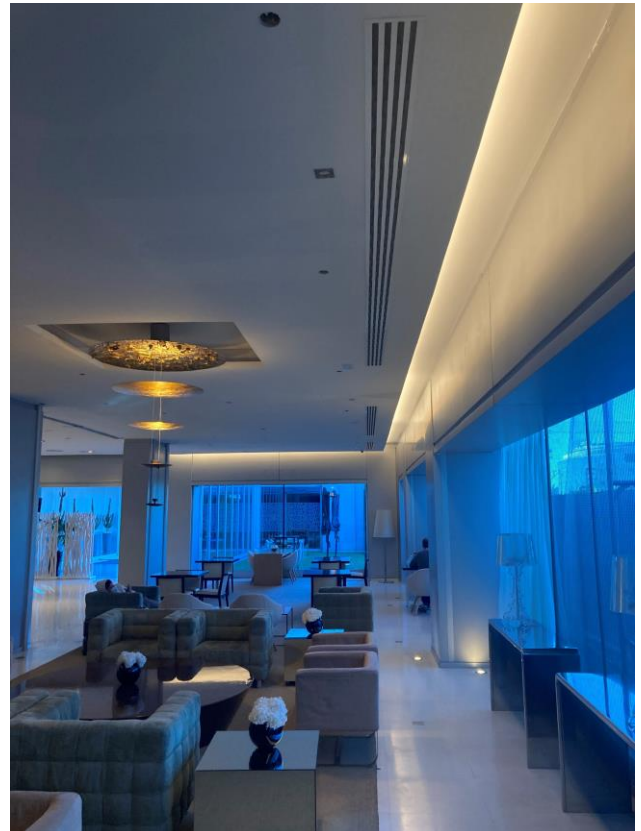
LSD High induction linear diffusers

The high induction linear diffusers of the **LSD** series have been designed to combine aesthetics with technical performance in HVAC systems.

- Adjustable vanes to modify the air direction without changing the air flow.
- False ceiling or suspended from the ceiling mounting.
- Optimum performance in CAV or VAV systems.
- Designed for installations between 2.6 and 4 m high, with a temperature differential of up to 12 C°.
- Suitable for both, air supply and return.

Product advantages:

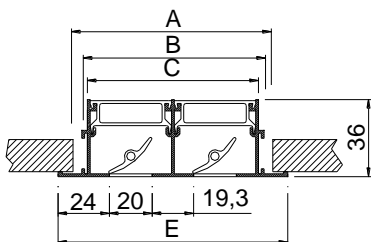
- High induction rate.
- Allows the formation of continuous diffuser lines, with active and inactive zones, without breaking the aesthetic uniformity of the whole.
- MOD version for greater integration and quick assembly in modular ceiling.



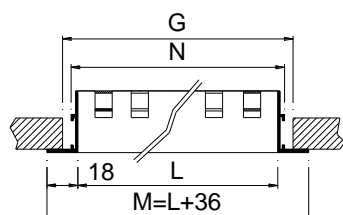
- Offices
- Hotels
- Residential



LSD-AR

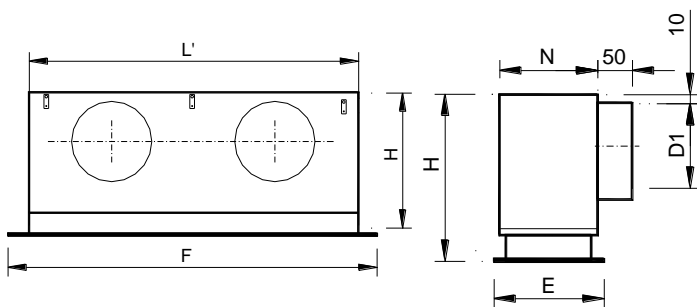


| slots | E | A | B | C |
|-------|-----|-----|-----|-----|
| 1 | 68 | 55 | 47 | 40 |
| 2 | 107 | 95 | 86 | 80 |
| 3 | 147 | 134 | 125 | 119 |
| 4 | 186 | 173 | 165 | 159 |



| L | M | N | G |
|------|------|------|------|
| 500 | 536 | 507 | 516 |
| 1000 | 1036 | 1007 | 1016 |
| 1200 | 1236 | 1207 | 1216 |
| 1500 | 1536 | 1507 | 1516 |
| 2000 | 2036 | 2007 | 2016 |

LSD-MOD



| MOD | slots | F | E | L' | H | D1 | N |
|----------|-------|------|-----|------|-----|-------|-----|
| 1200x300 | 1 | 1195 | 295 | 1145 | 256 | 1/158 | 69 |
| 1200x300 | 2 | 1195 | 295 | 1145 | 256 | 1/158 | 108 |
| 1200x300 | 3 | 1195 | 295 | 1145 | 296 | 2/198 | 147 |
| 1200x300 | 4 | 1195 | 295 | 1145 | 296 | 2/198 | 186 |
| 1350x300 | 1 | 1345 | 295 | 1295 | 256 | 1/158 | 69 |
| 1350x300 | 2 | 1345 | 295 | 1295 | 256 | 1/158 | 108 |
| 1350x300 | 3 | 1345 | 295 | 1295 | 296 | 2/198 | 147 |
| 1350x300 | 4 | 1345 | 295 | 1295 | 296 | 2/198 | 186 |

CLASSIFICATION

LSD-AR Diffuser with end borders included. Suitable for lengths ≤ 2 m.

...-ARI Diffuser with an end border on the left side, required to form lines >2 m.

...-ARD Diffuser with an end border on the right side, required to form lines >2 m.

...-INT Diffuser without end borders, required to form lines > 4 m.

(In case of needing sections of equal length, it must be indicated)

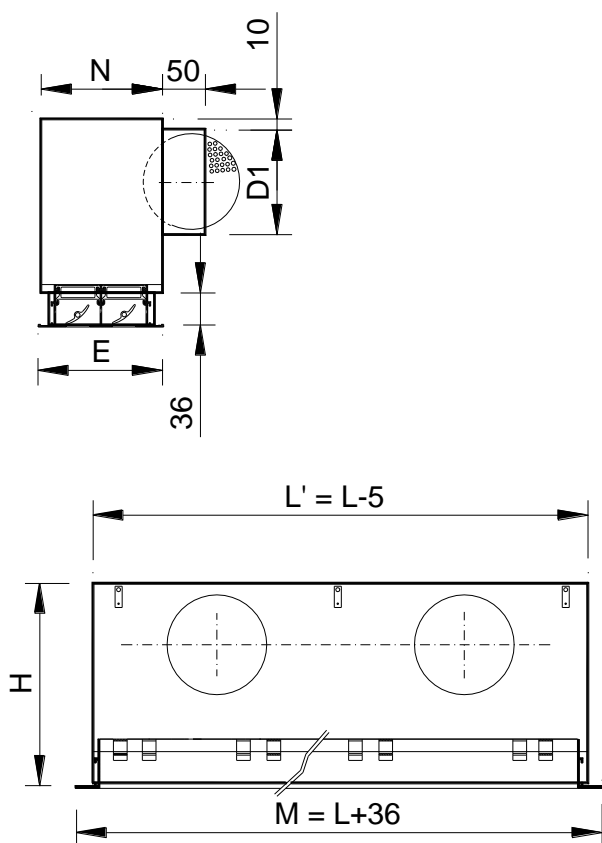
LSD-MOD Modular diffuser. Specially designed to replace a false ceiling tile.

MATERIAL

Diffuser constructed from aluminium and deflection vanes from PVC in black colour.



LSD-AR + PLSD...-R



ACCESSORIES

PLSD Plenum box with lateral circular connection. It includes supports to hang from the ceiling. Made in galvanised steel.

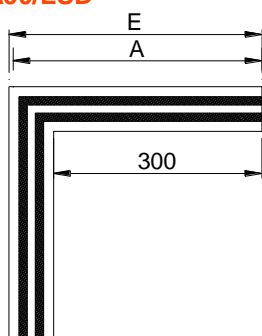
...-R Air flow damper in the spigot.

.../AIS/ Plenum box with thermal insulation inside. Foam density 25 kg / m³ ISO 845. Thermal conductivity 10° C_0,040 W / m°K EN 12667. Classified reaction to fire B-s1, d0 EN 13501-1.

A90/LSD Inactive diffuser without end borders, forming a 90° angle.

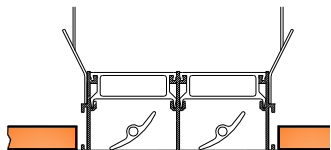
| slots | L ≤ 0,5 | | L ≤ 1 | | L ≤ 1,2 | | L ≤ 1,5 | | L ≤ 2 | | N | E |
|-------|---------|-------|-------|-------|---------|-------|---------|-------|-------|-------|-----|-----|
| | H | D1 | H | D1 | H | D1 | H | D1 | H | D1 | | |
| 1 | 256 | 1/158 | 256 | 1/158 | 256 | 1/158 | 256 | 1/158 | 256 | 2/158 | 69 | 68 |
| 2 | 256 | 1/158 | 256 | 1/158 | 256 | 1/158 | 256 | 2/158 | 256 | 2/158 | 108 | 107 |
| 3 | 296 | 1/198 | 296 | 1/198 | 296 | 2/198 | 296 | 2/198 | 296 | 2/198 | 147 | 147 |
| 4 | 296 | 1/198 | 296 | 1/198 | 296 | 2/198 | 296 | 2/198 | 296 | 2/198 | 186 | 186 |

A90/LSD





(D)



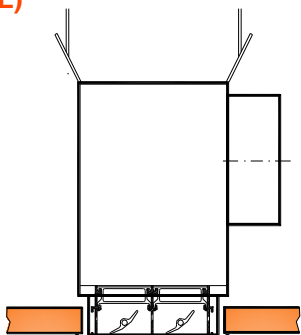
FIXING SYSTEMS

(D) Diffuser with brackets for ceiling suspension using threaded rods.

(PL) Screws to attach the diffuser to the plenum box and suspension of the assembly to the ceiling.

(PM) Crossbars to install the diffuser without plenum box in a false ceiling. Fixing by screws.

(PL)



FINISHES

AA Matt silver anodised.

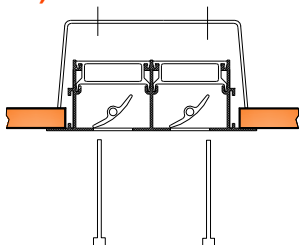
R9016S Painted white RAL 9016 (60-70% gloss)

R9010S Painted white RAL 9010 (60-70% gloss)

RAL... Painted other RAL.

.../AB/ Vanes in white colour.

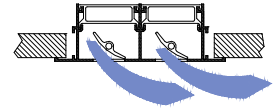
(PM)



SPECIFICATION TEXT

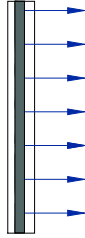
Supply and mounting of high induction linear slot diffuser with sectored adjustable vanes, series **LSD-AR+PLSD-R AA 1x558** constructed from aluminium and anodised in matt silver. With lateral circular connection plenum box and air flow damper in the spigot. Manufacturer **MADEL**.

LSD SERIES



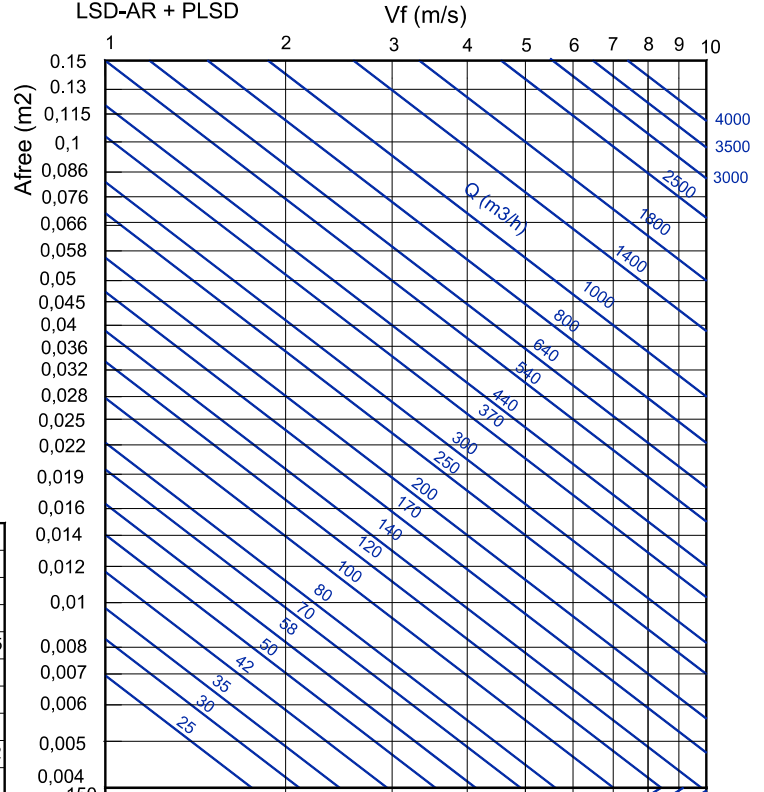
RECOMMENDED VELOCITY.

| SLOTS | Vmin (m/s) | Vmax (m/s) |
|-------|------------|------------|
| 1 | 2.5 | 4.5 |
| 2 | 2.5 | 4.5 |
| 3 | 2.5 | 4 |
| 4 | 2.5 | 4 |



FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW WITH CEILING EFFECT: 1 DIRECTION.

LSD-AR + PLSD



FREE FACE AREA (m²).

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|--------|--------|--------|--------|
| 1 | 0.0043 | 0.0087 | 0.013 | 0.0174 |
| 2 | 0.0087 | 0.0174 | 0.0261 | 0.0348 |
| 3 | 0.013 | 0.0261 | 0.0391 | 0.0522 |
| 4 | 0.0172 | 0.0348 | 0.052 | 0.0696 |

CORRECTION FACTOR FOR DPt AND Lwa1.

LSD-AR + PLDS-R

| | | 0.5 m | | | 1 m | | | 1.5 m | | | 2 m | | |
|---|------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| | | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% |
| 1 | Dpt | 0.95 | 2.35 | 3.15 | 1 | 1.4 | 2.2 | 1 | 1.4 | 2.2 | 1.1 | 2.5 | 3.3 |
| | Lwa1 | -6 | -3 | -3,6 | 0 | 0,8 | 0,4 | +1,2 | +1,9 | +1,4 | -2 | - | -1,6 |
| 2 | Dpt | 0.98 | 2.48 | 3.25 | 1 | 1.5 | 2.3 | 1 | 1.5 | 2.3 | 1.2 | 2.7 | 3.5 |
| | Lwa1 | -4 | -3,6 | -3,1 | 0 | +0,6 | +0,6 | +2,3 | +3,2 | +3,1 | 0 | +1 | +1,2 |
| 3 | Dpt | 0.96 | 2.26 | 3.36 | 1 | 1.3 | 2.4 | 1 | 1.3 | 2.4 | 1.3 | 2.4 | 3.5 |
| | Lwa1 | -7 | -6 | -6 | 0 | +0,9 | +0,5 | -2,7 | -2,6 | -2,7 | -1,4 | -1,1 | -1,1 |
| 4 | Dpt | 0.95 | 2.35 | 3.05 | 1 | 1.4 | 2.1 | 1 | 1.4 | 2.1 | 1.1 | 2.5 | 3.2 |
| | Lwa1 | -3,4 | -1,4 | -2,5 | 0 | +1,5 | +1,2 | -1,8 | -1,1 | -1,2 | -1,7 | -1 | -1,1 |

$$DPt1 = Kp \times DPt$$

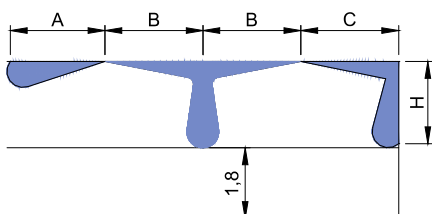
$$Lwa1 = Lwa + Kf$$

CORRECTION FACTOR FOR

THROW KL

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|-------|-----|-------|------|
| 1 | 0.71 | 1 | 1.07 | 1.14 |
| 2 | 0.73 | 1 | 1.09 | 1.15 |
| 3 | 0.74 | 1 | 1.11 | 1.2 |
| 4 | 0.75 | 1 | 1.25 | 1.25 |

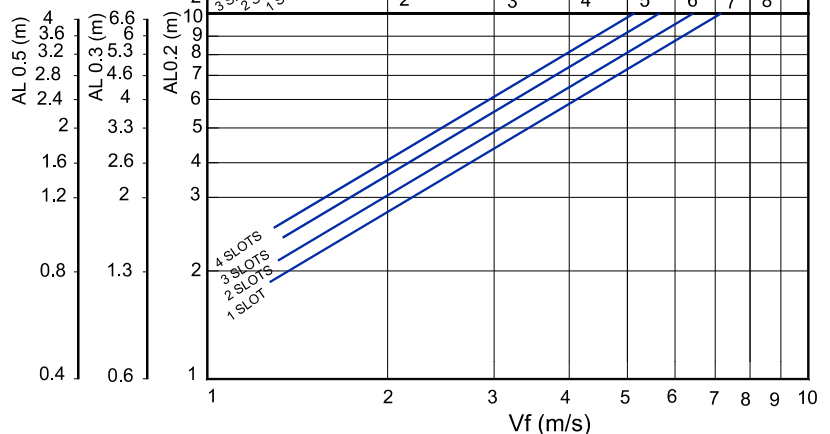
$$AL'_{0,2} = Kl \times AL_{0,2}$$



$$AL_{0,2} = A$$

$$AL_{0,2} = B+H$$

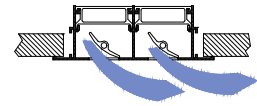
$$AL_{0,2} = C+H$$



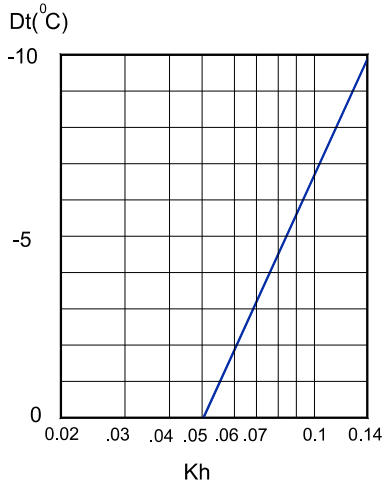
Note: In MadelMedia Octava band centre frequency in Hz.



LSD SERIES

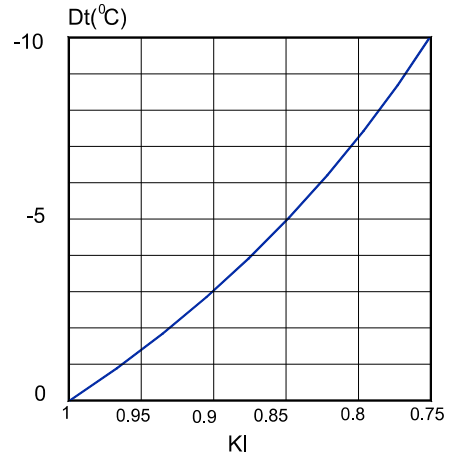


CORRECTION FACTOR FOR VERTICAL DIFFUSION (bv) FOR DT (-).

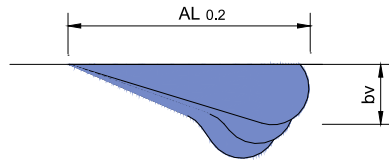


Kh = Correction factor for the vertical diffusion.

CORRECTION FACTOR FOR THROW (L0.2) DT (-).



KI = Correction factor for the throw.

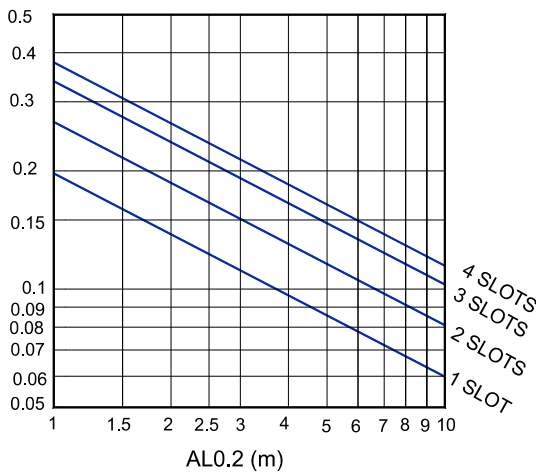


$$bv = Kh \times Al_{0.2}$$

$$AL'_{0.2} (Dt < 0) = KI \times AL_{0.2}$$

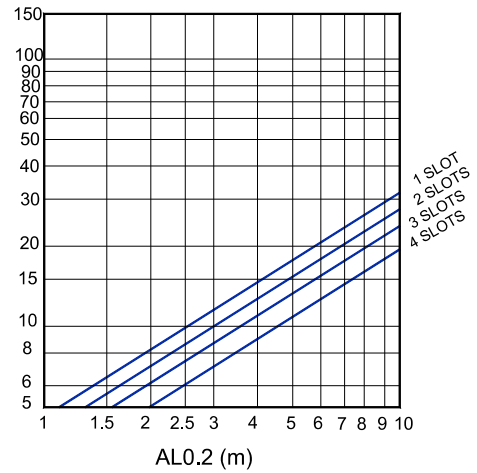
TEMPERATURE RATIO.

$$\frac{Dtl}{Dtz} = \frac{t_{room} - t_x}{t_{room} - t_{supply}}$$

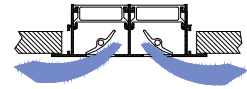


INDUCTION RATIO.

$$i = \frac{Q_r}{Q_0} = \frac{Q_{total\ at\ x}}{Q\ of\ supply}$$

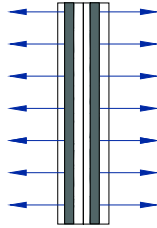


LSD SERIES



RECOMMENDED VELOCITY.

| SLOTS | Vmin (m/s) | Vmax (m/s) |
|-------|------------|------------|
| 2 | 2.5 | 4.5 |
| 4 | 2.5 | 4 |



FREE FACE AREA (m2).

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|--------|--------|--------|--------|
| 1 | 0.0043 | 0.0087 | 0.013 | 0.0174 |
| 2 | 0.0087 | 0.0174 | 0.0261 | 0.0348 |
| 3 | 0.013 | 0.0261 | 0.0391 | 0.0522 |
| 4 | 0.0172 | 0.0348 | 0.052 | 0.0696 |

CORRECTION FACTOR FOR DPT AND Lwa1.

| | | 0.5 m | | | 1 m | | | 1.5 m | | | 2 m | | |
|---|------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| | | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% |
| 2 | Dpt | 0.98 | 2.48 | 3.25 | 1 | 1.5 | 2.3 | 1 | 1.5 | 2.3 | 1.2 | 2.7 | 3.5 |
| | Lwa1 | -3.9 | -3.5 | -3 | 0 | +0.6 | +0.6 | +2.3 | +3.2 | +3.1 | -0.3 | +0.9 | +1.1 |
| 4 | Dpt | 0.95 | 2.35 | 3.05 | 1 | 1.4 | 2.1 | 1 | 1.4 | 2.1 | 1.1 | 2.5 | 3.2 |
| | Lwa1 | -3.6 | -1.5 | -2.5 | 0 | +1.5 | +1.1 | -1.5 | -1.3 | -1.4 | -1.8 | -1.2 | -1.3 |

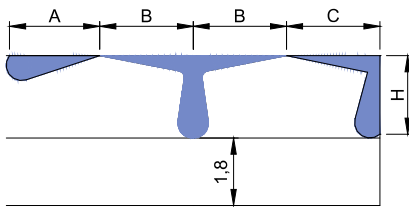
$$DPT1 = Kp \times DPT$$

$$Lwa1 = Lwa + Kf$$

CORRECTION FACTOR FOR THROW KL

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|-------|-----|-------|------|
| 2 | 0.6 | 1 | 1.17 | 1.3 |
| 4 | 0.767 | 1 | 1.2 | 1.17 |

$$AL_{0.2} = Kl \times AL_{0.2}$$

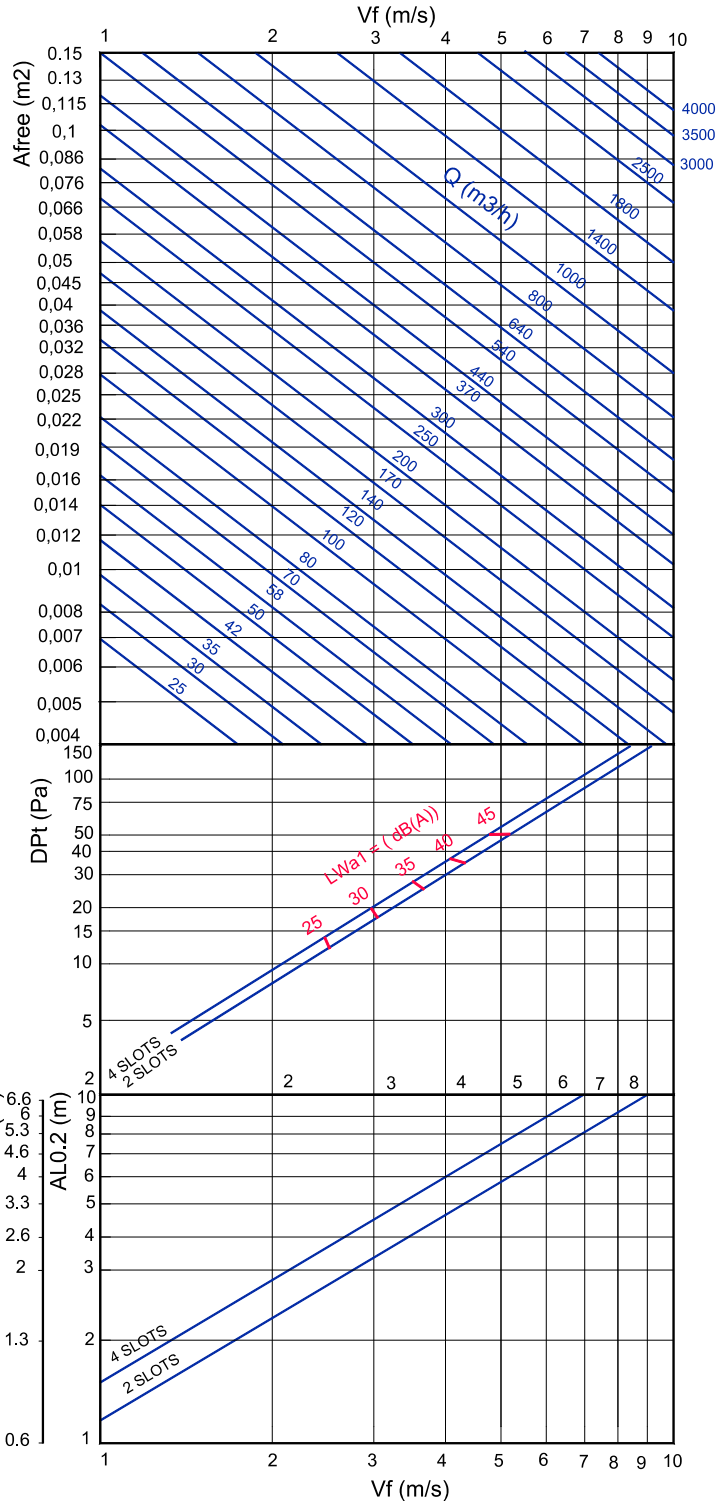


$$AL_{0.2} = A$$

$$AL_{0.2} = B+H$$

$$AL_{0.2} = C+H$$

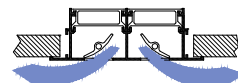
FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW WITH CEILING EFFECT: 2 DIRECTIONS.



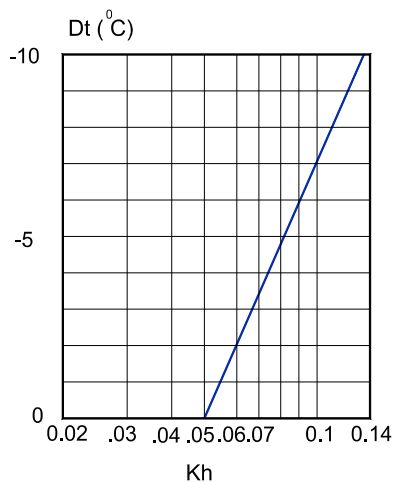
Note: In MadelMedia Octava band centre frequency in Hz.



LSD SERIES

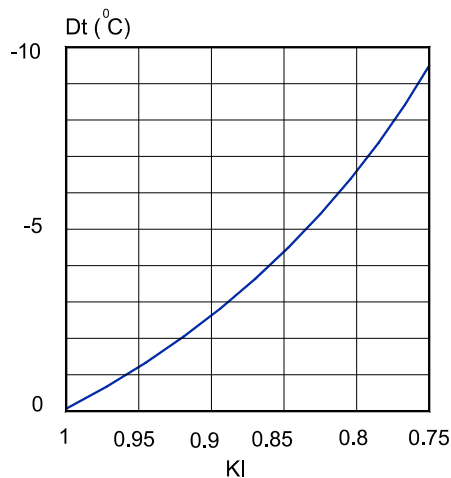


CORRECTION FACTOR FOR VERTICAL DIFFUSION (bv) FOR DT (-).

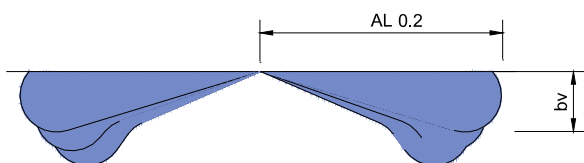


Kh = Correction factor for the vertical diffusion.

CORRECTION FACTOR FOR THROW (L0.2) DT (-).



KI = Correction factor for the throw.

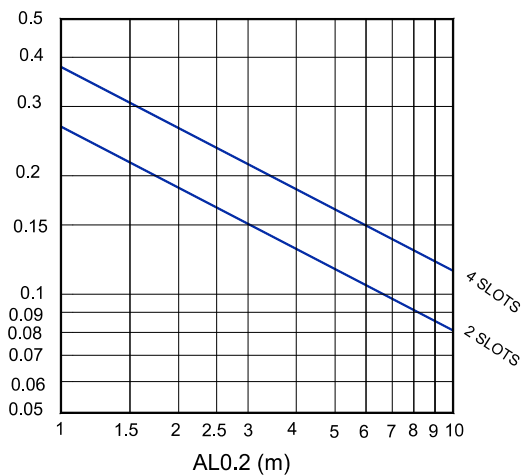


$$bv = Kh \times AL_{0.2}$$

$$AL'_{0.2} (Dt < 0) = KI \times AL_{0.2}$$

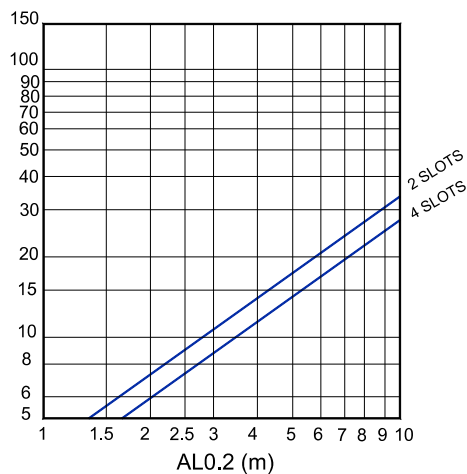
TEMPERATURE RATIO.

$$\frac{Dtl}{Dtz} = \frac{t_{room} - t_x}{t_{room} - t_{supply}}$$

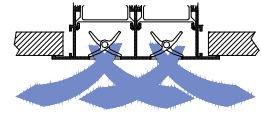


INDUCTION RATIO.

$$i = \frac{Q_r}{Q_0} = \frac{Q_{total\ at\ x}}{Q\ of\ supply}$$

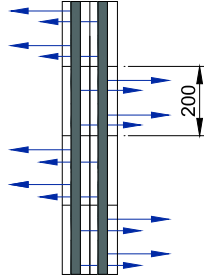


LSD SERIES



RECOMMENDED VELOCITY.

| SLOTS | Vmin (m/s) | Vmax (m/s) |
|-------|------------|------------|
| 1 | 2.5 | 4.5 |
| 2 | 2.5 | 4.5 |
| 3 | 2.5 | 4 |
| 4 | 2.5 | 4 |



FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL, THROW WITH CEILING EFFECT: 2 DIRECTIONS.

FREE FACE AREA (m²).

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|--------|--------|--------|--------|
| 1 | 0.0043 | 0.0087 | 0.013 | 0.0174 |
| 2 | 0.0087 | 0.0174 | 0.0261 | 0.0348 |
| 3 | 0.013 | 0.0261 | 0.0391 | 0.0522 |
| 4 | 0.0172 | 0.0348 | 0.052 | 0.0696 |

CORRECTION FACTOR FOR Dpt AND Lwa1.

| | | 0.5 m | | | 1 m | | | 1.5 m | | | 2 m | | |
|---|------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| | | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% |
| 1 | Dpt | 0.95 | 2.35 | 3.15 | 1 | 1.4 | 2.2 | 1 | 1.4 | 2.2 | 1.1 | 2.5 | 3.3 |
| | Lwa1 | -6 | -3 | -3.7 | 0 | +0.8 | +0.4 | +1 | +1.7 | +1.2 | -2.1 | -0.4 | -1.9 |
| 2 | Dpt | 0.98 | 2.48 | 3.25 | 1 | 1.5 | 2.3 | 1 | 1.5 | 2.3 | 1.2 | 2.7 | 3.5 |
| | Lwa1 | -3.7 | -3.4 | -2.9 | 0 | +0.6 | +0.6 | +2.4 | +3.3 | +3.2 | -0.5 | +0.8 | +0.9 |
| 3 | Dpt | 0.96 | 2.26 | 3.36 | 1 | 1.3 | 2.4 | 1 | 1.3 | 2.4 | 1.3 | 2.4 | 3.5 |
| | Lwa1 | -6.9 | -6.3 | -5.9 | 0 | +0.9 | +0.5 | -3 | -2.9 | -3 | -1.8 | -1.5 | -1.6 |
| 4 | Dpt | 0.95 | 2.35 | 3.05 | 1 | 1.4 | 2.1 | -3 | -2.9 | -3 | 1.1 | 2.5 | 3.2 |
| | Lwa1 | -3.4 | -1.6 | -2.4 | 0 | +1.6 | +1.2 | -2 | -1.4 | -1.5 | -2 | -1.3 | -1.5 |

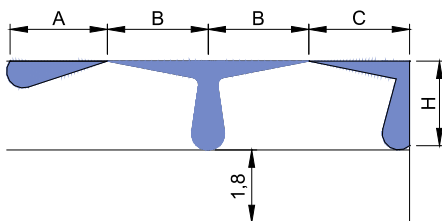
$$Dpt1 = Kp \times Dpt$$

$$Lwa1 = Lwa + Kf$$

THROW KL

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|-------|-----|-------|------|
| 1 | 0.82 | 1 | 1.2 | 1.43 |
| 2 | 0.73 | 1 | 1.27 | 1.34 |
| 3 | 0.8 | 1 | 1.17 | 1.22 |
| 4 | 0.9 | 1 | 1.14 | 1.19 |

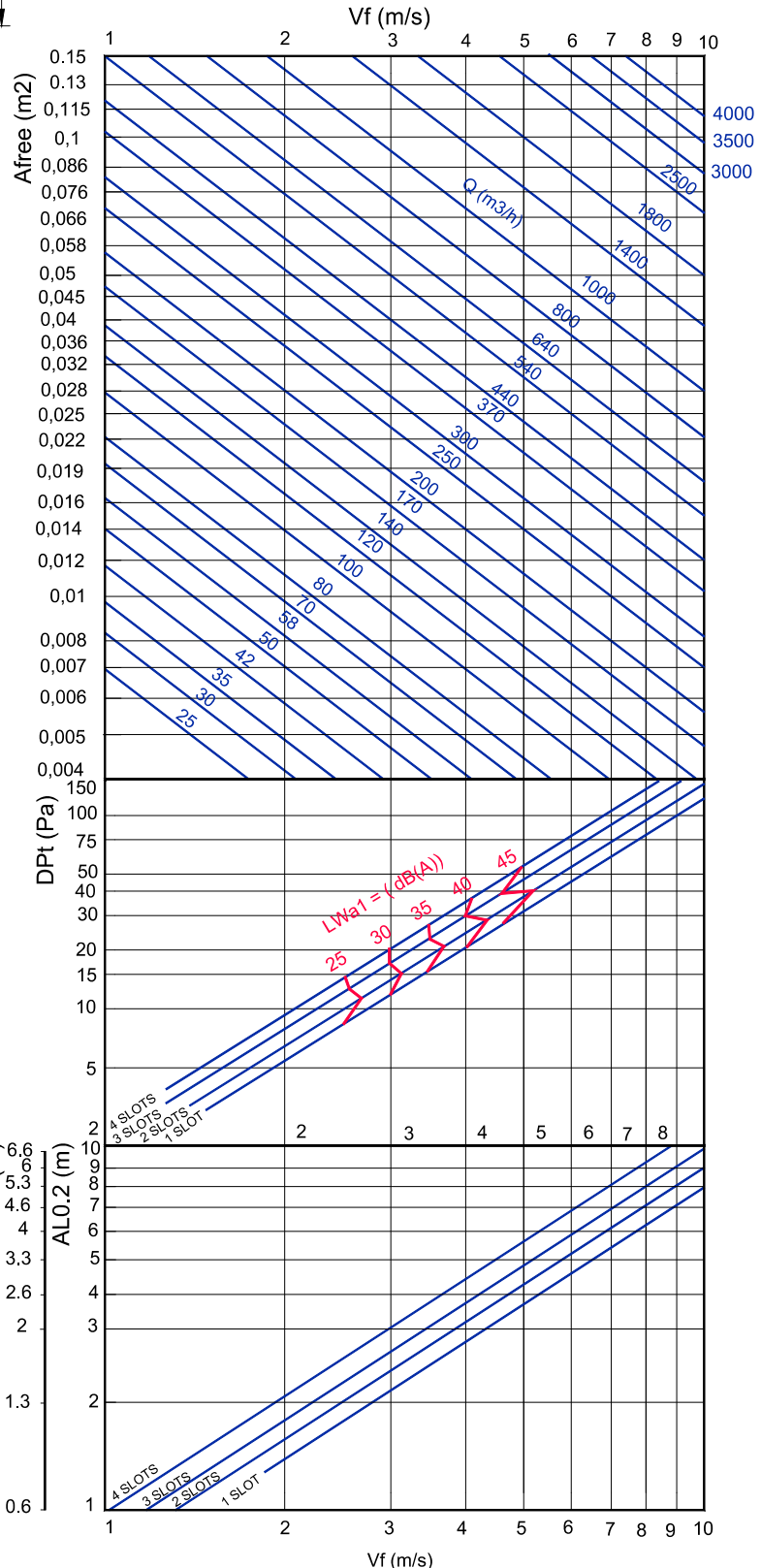
$$AL'_{0.2} = KI \times AL_{0.2}$$



$$AL_{0.2} = A$$

$$AL_{0.2} = B + H$$

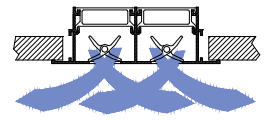
$$AL_{0.2} = C + H$$



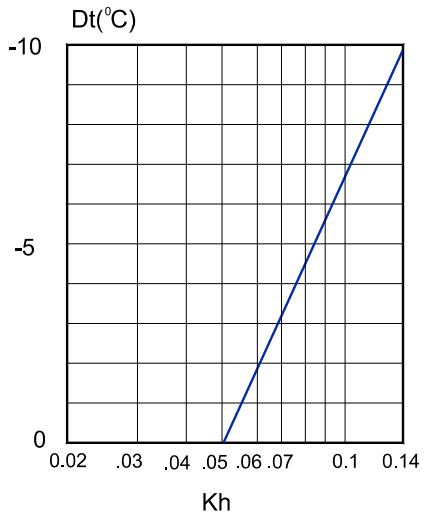
Note: In MadelMedia Octava band centre frequency in Hz.



LSD SERIES

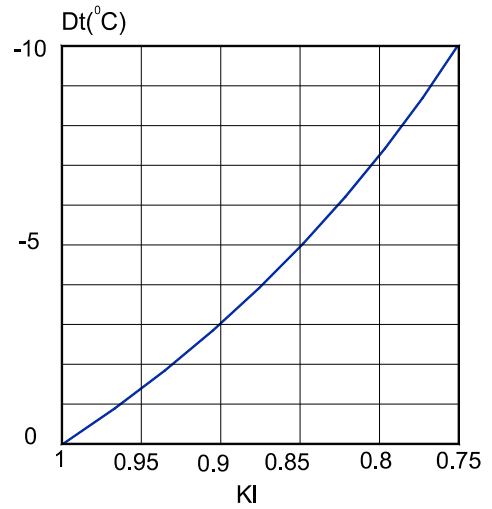


CORRECTION FACTOR FOR VERTICAL DIFFUSION (bv) FOR DT (-).

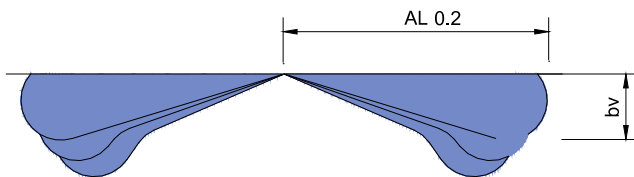


Kh = Correction factor for the vertical diffusion.

CORRECTION FACTOR FOR THROW (L0.2) DT (-).



KI = Correction factor for the throw.



$$bv = Kh \times Al_{0.2}$$

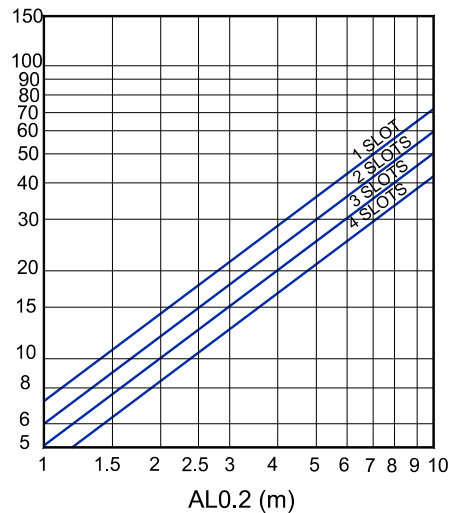
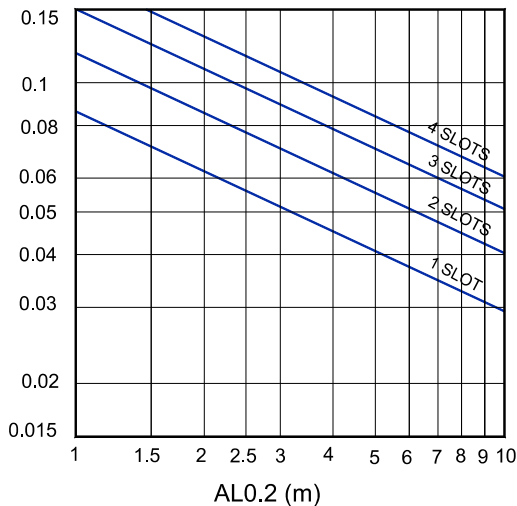
$$AL'_{0.2} (Dt < 0) = KI \times AL_{0.2}$$

TEMPERATURE RATIO.

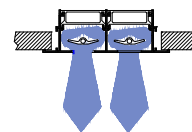
$$\frac{Dtl}{Dtz} = \frac{t_{room} - t_x}{t_{room} - t_{supply}}$$

INDUCTION RATIO.

$$i = \frac{Q_r}{Q_0} = \frac{Q_{total\ at\ x}}{Q\ of\ supply}$$



LSD SERIES



RECOMMENDED VELOCITY.

| SLOTS | V _{min} (m/s) | V _{max} (m/s) |
|-------|------------------------|------------------------|
| 1 | 2.5 | 4.5 |
| 2 | 2.5 | 4.5 |
| 3 | 2.5 | 4 |
| 4 | 2.5 | 4 |

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL:
VERTICAL SUPPLY.

FREE FACE AREA (m²).

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|--------|--------|--------|--------|
| 1 | 0.0043 | 0.0087 | 0.013 | 0.0174 |
| 2 | 0.0087 | 0.0174 | 0.0261 | 0.0348 |
| 3 | 0.013 | 0.0261 | 0.0391 | 0.0522 |
| 4 | 0.0172 | 0.0348 | 0.052 | 0.0696 |

CORRECTION FACTOR FOR D_{Pt} AND L_{wa1}.

| | | 0.5 m | | | 1 m | | | 1.5 m | | | 2 m | | |
|---|------------------|-------|------|------|------|------|------|-------|------|------|------|------|------|
| | | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% |
| 1 | D _{pt} | 0.95 | 2.35 | 3.15 | 1 | 1.4 | 2.2 | 1 | 1.4 | 2.2 | 1.1 | 2.5 | 3.3 |
| | L _{wa1} | -6,1 | -3,1 | -3,6 | 0 | +0,8 | +0,4 | +0,9 | +1,6 | +1 | -2,1 | -0,5 | -1,9 |
| 2 | D _{pt} | 0.98 | 2.48 | 3.25 | 1 | 1.5 | 2.3 | 1 | 1.5 | 2.3 | 1.2 | 2.7 | 3.5 |
| | L _{wa1} | -3,8 | -3,4 | -2,9 | 0 | +0,6 | +0,6 | +2,4 | +3,3 | +3,2 | -0,3 | +0,9 | +1,1 |
| 3 | D _{pt} | 0.96 | 2.26 | 3.36 | 1 | 1.3 | 2.4 | 1 | 1.3 | 2.4 | 1.3 | 2.4 | 3.5 |
| | L _{wa1} | -7 | -6,3 | -6 | 0 | +0,9 | +0,5 | -2,8 | -2,8 | -2,9 | -1,5 | -1,2 | -1,3 |
| 4 | D _{pt} | 0.95 | 2.35 | 3.05 | 1 | 1.4 | 2.1 | 1 | 1.4 | 2.1 | 1.1 | 2.5 | 3.2 |
| | L _{wa1} | -3,4 | -1,5 | -2,5 | 0 | +1,6 | +1,2 | -1,9 | -1,3 | -1,4 | -1,9 | -1,2 | -1,3 |

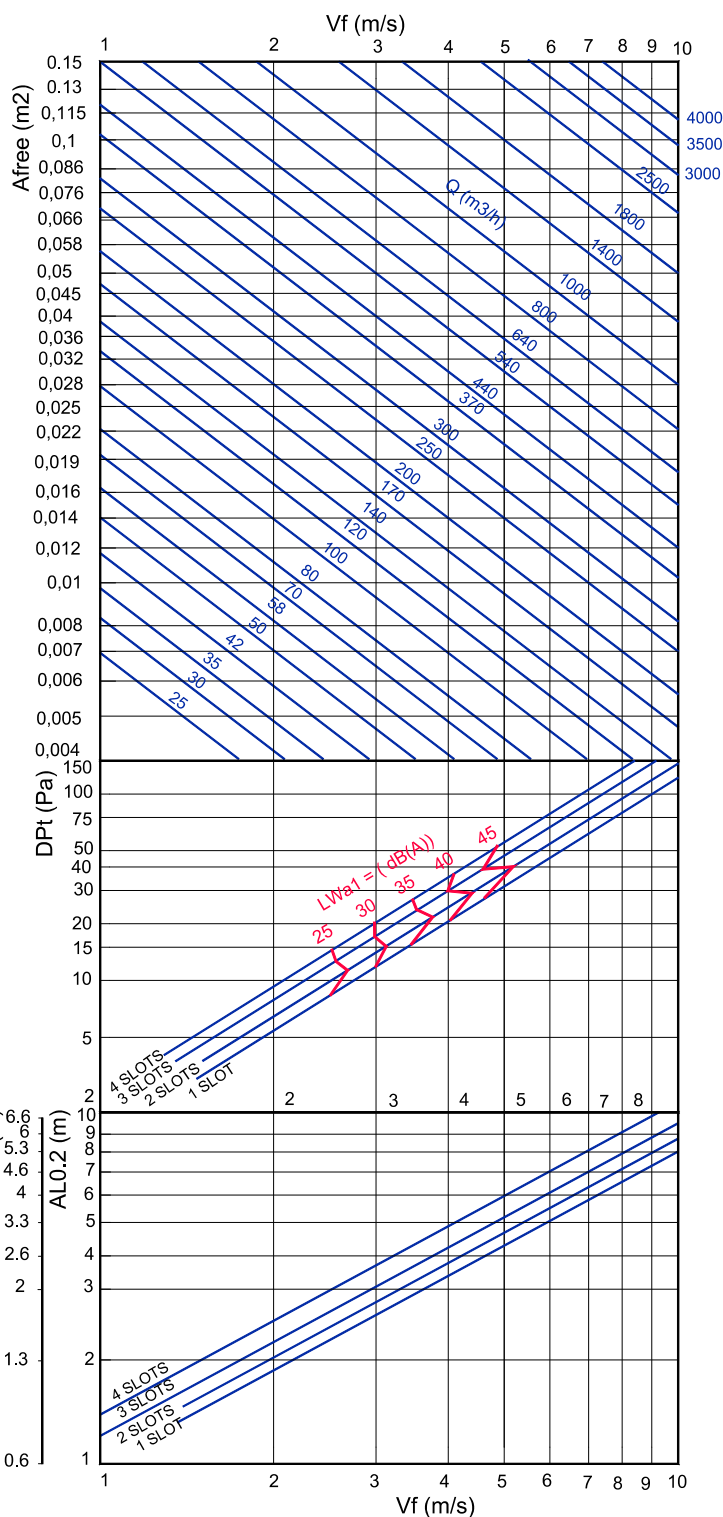
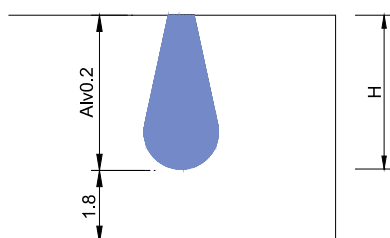
$$D_{Pt1} = K_p \times D_{Pt}$$

$$L_{wa1} = L_{wa} + K_f$$

CORRECTION FACTOR FOR
THROW KL

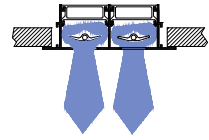
| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|-------|-----|-------|------|
| 1 | 0.7 | 1 | 1.1 | 1.2 |
| 2 | 0.72 | 1 | 1.15 | 1.25 |
| 3 | 0.72 | 1 | 1.12 | 1.2 |
| 4 | 0.74 | 1 | 1.25 | 1.25 |

$$AL_{v'0.2} = K_l \times AL_{v0.2}$$



Note: In MadelMedia Octava band centre frequency in Hz.

LSD SERIES



CORRECTION FACTOR FOR VERTICAL THROW (AI0,2) DT(+).

| | DT(+5) | DT(+10) |
|---------|--------|---------|
| 1 SLOT | 0.75 | 0.64 |
| 2 SLOTS | 0.76 | 0.65 |
| 3 SLOTS | 0.77 | 0.66 |
| 4 SLOTS | 0.8 | 0.64 |

DT = T supply - T room.

EXAMPLE:

LSD 2SLOTS x 2m

Afree = 0.0348 m².

Vf = 3.1 m/s.

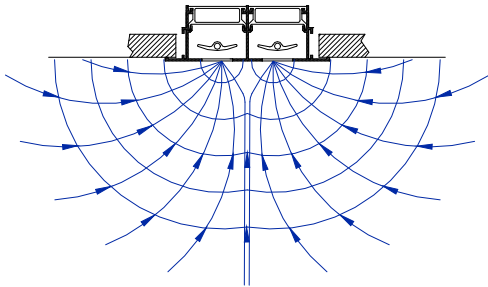
ALv 0,2 = 2.9 m.

ALv'02 = 1.1 x 2.9 = 3.19 m.

DT(+5) = 0.76 x 3.19 = 2.42 m.

DT (+10) = 0.65 x 3.19 = 2.07m.

Alv 0,2 (DT +) = Kv x AI 02



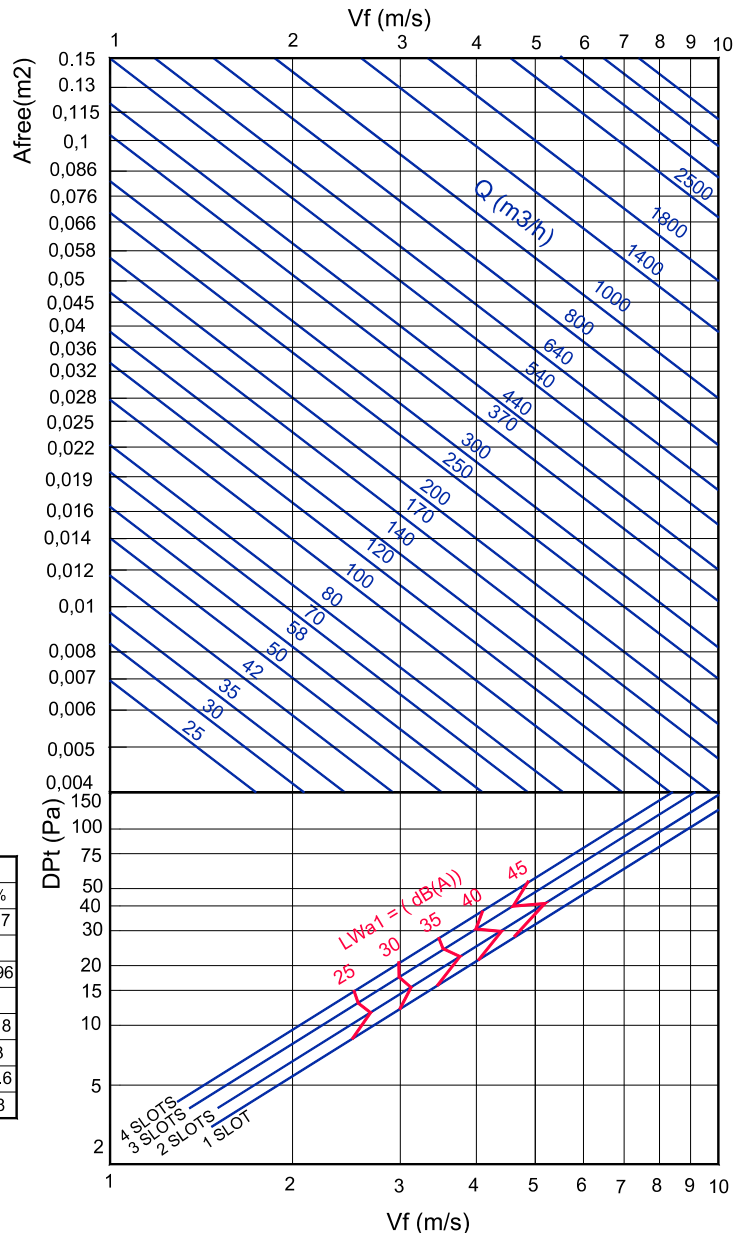
RECOMMENDED VELOCITY.

| SLOTS | Vmin (m/s) | Vmax (m/s) |
|-------|------------|------------|
| 1 | 2 | 3.5 |
| 2 | 2 | 3.5 |
| 3 | 2 | 3 |
| 4 | 2 | 3 |

FREE FACE AREA (m²).

| | 0.5 m | 1 m | 1.5 m | 2 m |
|---|--------|--------|--------|--------|
| 1 | 0.0043 | 0.0087 | 0.013 | 0.0174 |
| 2 | 0.0087 | 0.0174 | 0.0261 | 0.0348 |
| 3 | 0.013 | 0.0261 | 0.0391 | 0.0522 |
| 4 | 0.0172 | 0.0348 | 0.052 | 0.0696 |

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



CORRECTION FACTOR FOR Dpt AND Lwa1.

| | | 0.5 m | | | 1 m | | | 1.5 m | | | 2 m | | |
|---|------|-------|------|------|------|-----|-----|-------|-----|-----|------|------|------|
| | | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% | 100% | 50% | 0% |
| 1 | Dpt | 0.88 | 2.28 | 3 | 1 | 1.4 | 2.2 | 1.3 | 2.7 | 3.5 | 1.5 | 2.9 | 3.7 |
| | Lwa1 | - | 3 | 5 | - | 4 | 7 | - | 3 | 5 | - | 3 | 7 |
| 2 | Dpt | 0.85 | 2.35 | 3.15 | 1 | 1.5 | 2.3 | 1.4 | 2.9 | 3.7 | 1.66 | 3.16 | 3.96 |
| | Lwa1 | - | 3 | 5 | - | 4 | 7 | - | 4 | 7 | - | 3 | 8 |
| 3 | Dpt | 0.8 | 2.1 | 3.2 | 1 | 1.3 | 2.4 | 1.2 | 2.5 | 3.6 | 1.4 | 2.7 | 3.8 |
| | Lwa1 | - | 4 | 5 | - | 5 | 8 | - | 5 | 8 | - | 4 | 8 |
| 4 | Dpt | 0.7 | 2.1 | 2.8 | 1 | 1.4 | 2.1 | 1.3 | 2.7 | 3.4 | 1.5 | 2.9 | 3.6 |
| | Lwa1 | - | 4 | 5 | - | 4 | 8 | - | 5 | 8 | - | 4 | 8 |

$$Dpt1 = Kp \times Dpt$$

$$Lwa1 = Lwa + Kf$$