BMC circular duct grilles

The **BMC** series grilles are designed for air supply in HVAC system.

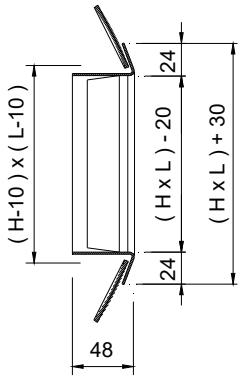
- Single and double deflection grilles.
- Direct mounting on the circular duct.
- Individually adjustable blades to adjust the throw and the air pattern.

Product advantages:

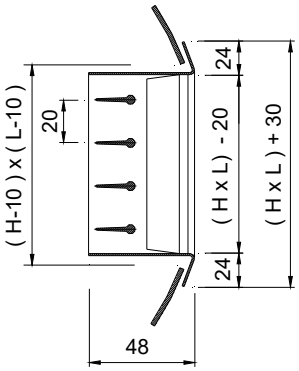
- Ideal for visible installations since the grille adapts to the curvature of the duct.
- Perimeter joint to seal with the duct to prevent air leaks.

- ❑ Offices
- ❑ Commercial premises
- ❑ Lofts

BMC

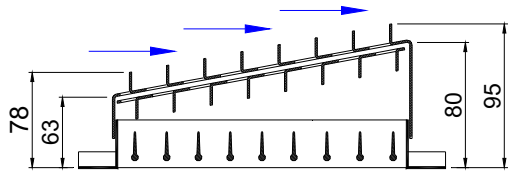


CMC

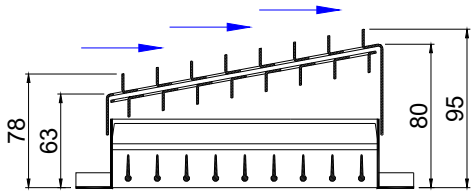


Dia conducto Dia Duct	H
200 - 400	75
300 - 900	125
600 -1600	225

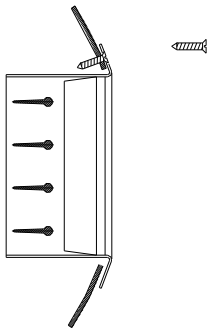
BMC+SD



CMC+SD



(T)



CLASSIFICATION

BMC Single deflection grille.
CMC Double deflection grille.

MATERIAL

Grilles constructed in galvanised steel. All the grilles are provided with a seal on the back of the frame in order that the perimeter in contact is airtight.

ACCESSORIES

SD Damper (angled slide cover) for the air flow. Operated by sliding plates with superimposed windows. Constructed from galvanized steel.

FIXING SYSTEMS

(T) Visible screws.

FINISHES

R9016S Painted white RAL 9016 semi-matt (60-70% gloss)
R9010S Painted white RAL 9010 semi-matt (60-70% gloss)
R9006M Painted aluminium colour RAL 9006 matt (20-30% gloss)
RAL... Painted in other RAL colours.

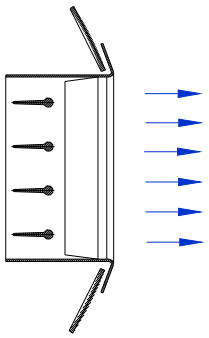
SPECIFICATION TEXT

Supply and mounting of double deflection grille for circular ducts with individually adjustable blades and 1st line parallels to the shortest side series **CMC+SD (T) R9006M** dim. LxH, constructed from galvanised steel paint in aluminium colour RAL 9006 Matt with sliding damper from galvanized steel and fixing by visible screws.
Manufacturer **MADEL**.

BMC

FREE FACE AREA m2.

H \ L	400	500	600
75	0,016	0,020	0,025
125	0,031	0,039	0,047
225	0,060	0,076	0,087



RECOMMENDED VELOCITY.

Vmin m/s	Vmax m/s
2	4

Determination of air flow.
Measuring the Vf in different points of the grille, we find the Vfmed.

Q (l/s) = Vfmed (m/s) * Afree (m2) * 1000
Q (m3/h) = Vfmed (m/s) * Afree (m2) * 3600

CORRECTION FACTOR FOR Lwa1.

Afree m2	0,01	0,02	0,05
Lwa1(kf)	-9	-6	-3

Weighted noise level related to Afree = 0,1m2.

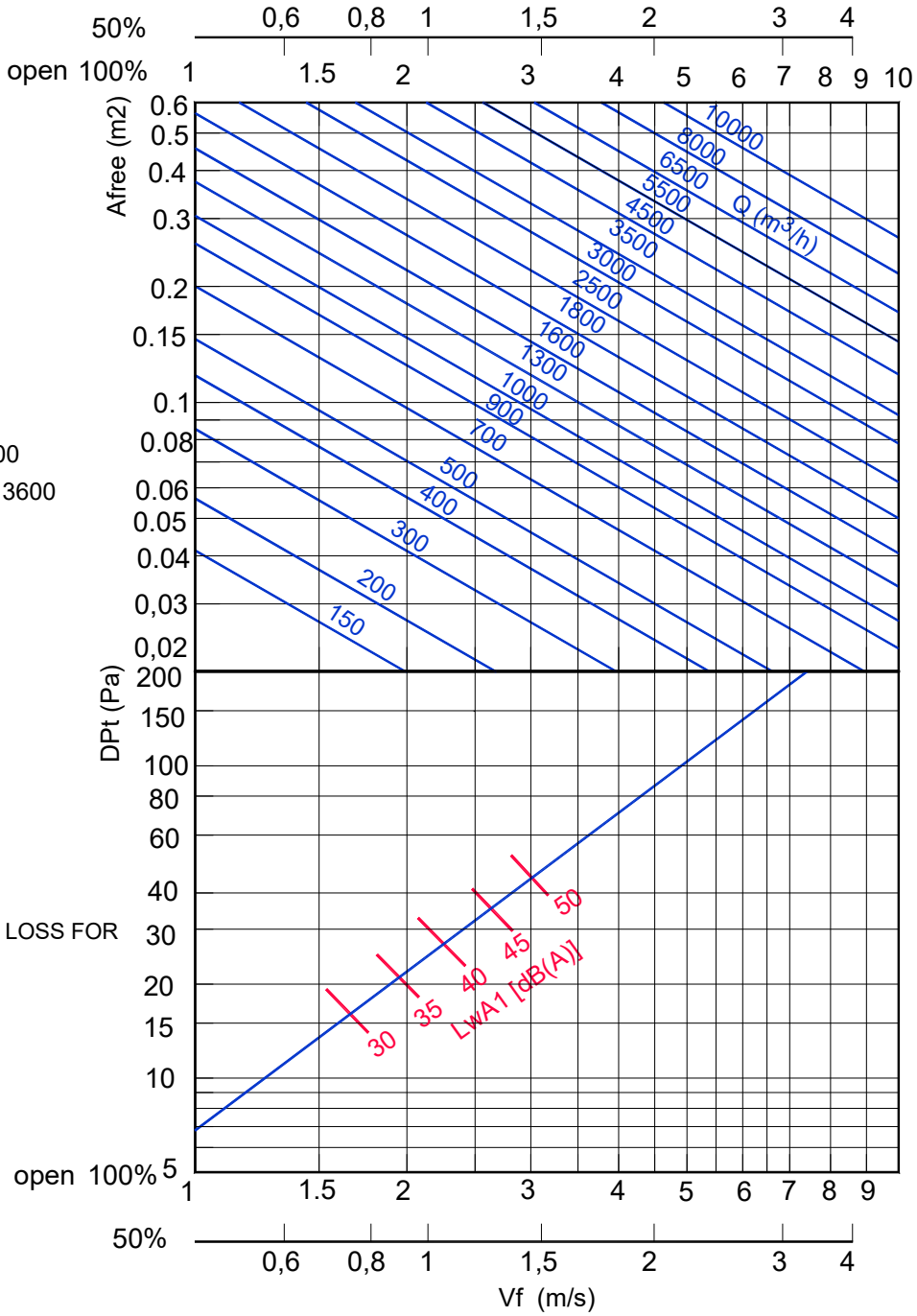
Lwa = Lwa1 + Kf

CORRECTION FACTOR OF PRESSURE LOSS FOR DIFFERENT BLADES POSITIONS.

	0°	22°	45°
Kp	1	1,28	1,4

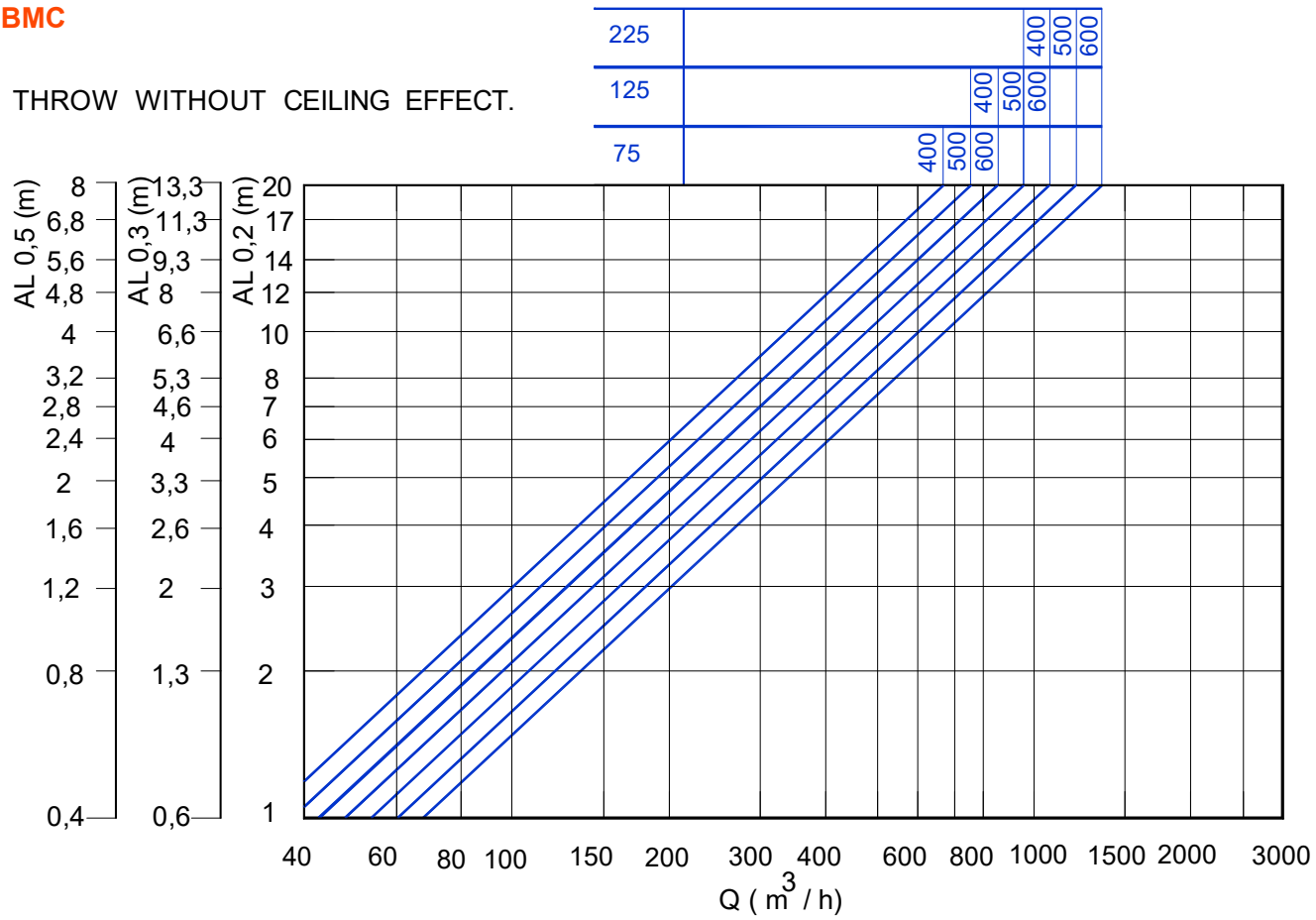
DPt' = Dpt x Kp

FREE VELOCITY, PRESSURE LOSS AND SOUND POWER LEVEL.



BMC

THROW WITHOUT CEILING EFFECT.



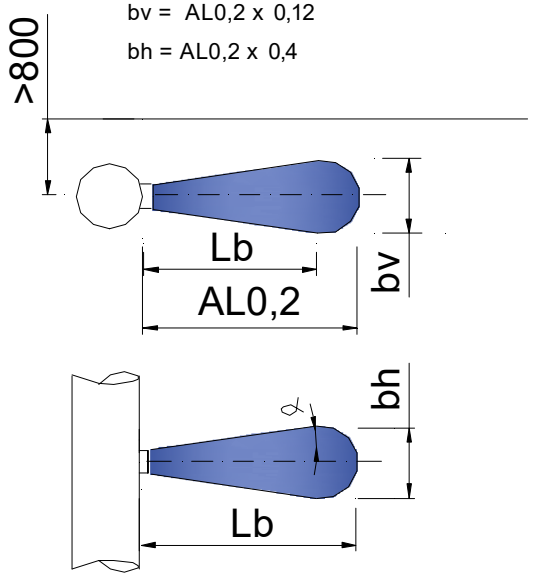
POSITION OF BLADES 0 °
WITHOUT CEILING EFFECT.

AL0,2

Lb = AL0,2 x 0,53

bv = AL0,2 x 0,12

bh = AL0,2 x 0,4



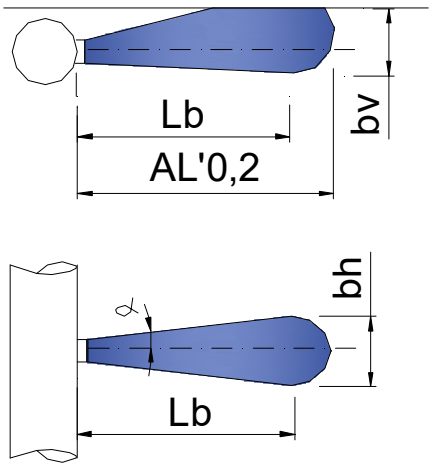
POSITION OF BLADES 0 °
WITH CEILING EFFECT.

AL'0,2 = AL0,2 x 1,33

Lb = AL0,2 x 0,7

bv = Al0,2 x 0,106

bh = Al0,2 x 0,53



CORRECTION FACTOR FOR POSITION OF BLADES.

AL0,2(22°) = Al0,2 x 0,8

Lb(22°) = AL0,2 x 0,53

bv(22°) = Al0,2 x 0,096

bh (22°) = Al0,2 x 0,48

AL0,2(45°) = Al0,2 x 0,5

Lb(45°) = AL0,2 x 0,33

bv(45°) = Al0,2 x 0,06

bh(45°) = Al0,2 x 0,6

CORRECTION FACTOR FOR POSITION OF BLADES.

AL0,2(22°) = Al0,2 x 1,064

Lb(22°) = Al0,2 x 0,7

bv(22°) = Al0,2 x 0,08

bh(22°) = Al0,2 x 0,64

Lb(45°)= Al0,2 x 0,66

Lb(45°)= Al0,2 x 0,44

bv(45°) = Al0,2 x 0,054

bh(45°) = Al0,2 x 0,798