



actif

DCG adjustable cones diffusers

Lievore,
Altherr
& Molina

The adjustable cones diffusers of **DCG** series diffusers are designed for air supply in HVAC systems

- Suitable for installations in premises with different heights from 2.6 meters and with a temperature differential of up to 12°C.
- Adjustable cones to adjust the angle of the air impulsion.
- Installation in false ceilings, or ductwork or suspended from the ceiling.

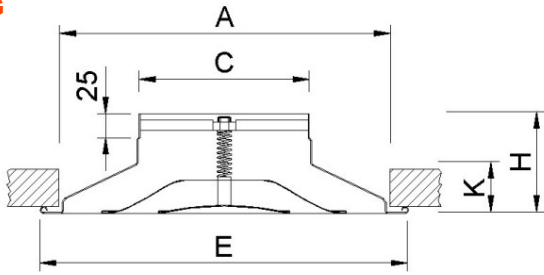
Product advantages:

- Avoid air stratification.
- Circular execution for better integration in continuous ceilings.
- MOD version for greater integration and faster assembly in technical ceilings
- Manual or autonomous adjustment by thermostatic spring.
- Classic diffuser redesigned by **Lievore, Altherr & Molina** to favor its architectural integration.



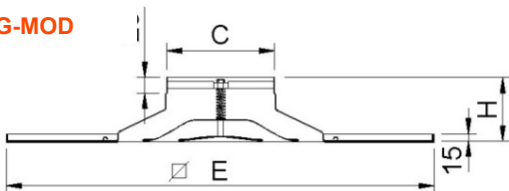
- Offices
- Hotels
- Shopping centers

DCG



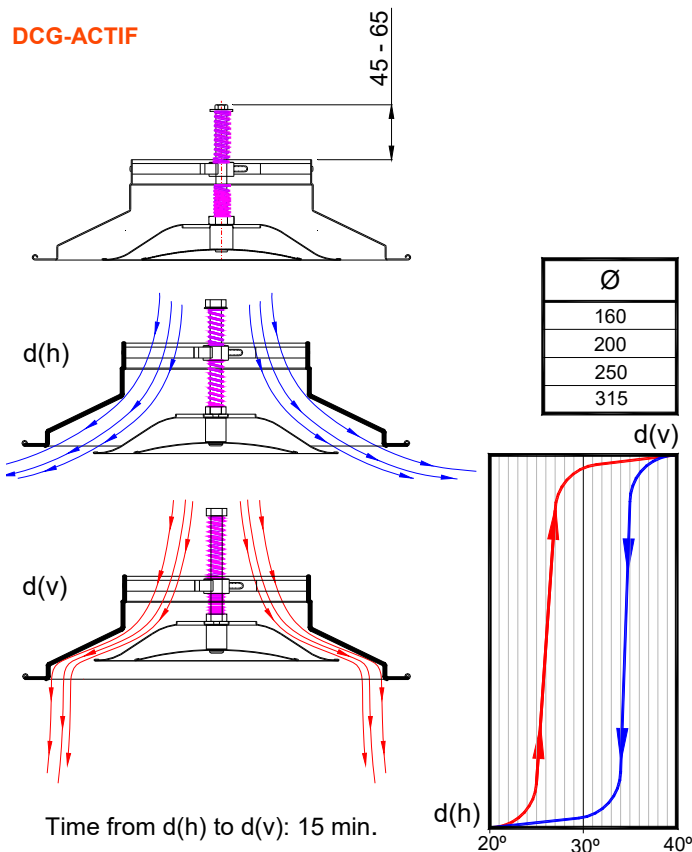
	E	A	H	K	C
160	325	303	101	44	157
200	416	385	115	58	197
250	500	464	114	57	247
315	592	564	137	80	313
355	665	630	140	83	353
400	666	630	131	74	398
450	840	793	173	106	447
500	840	793	163	97	497

DCG-MOD



		MOD-600		MOD-625		MOD-675		
	H	C	B	E	B	E	B	E
160	101	157	12	595	12	620	15	670
200	115	197	12	595	12	620	15	670
250	114	247	12	595	12	620	15	670
315	137	313	12	595	12	620	15	670

DCG-ACTIF



CLASSIFICATION

DCG Manually adjustable cones diffuser.

DCG-ACTIF Adjustable cones diffuser autonomously by means of a thermodynamic spring. Designed to be used in premises with varying heights in excess of 4 m and a temperature differential of up to 12°C.

The diffusion of the air can be varied by adjusting the inner cones, changing from vertical projection to horizontal projection in accordance with the supply air temperature.

DCG-MOD Diffuser specially designed to replace a false ceiling tile.

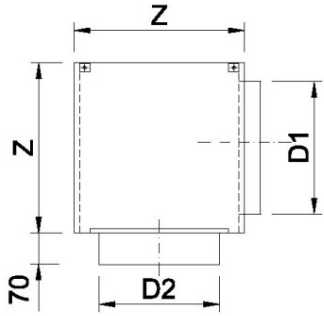
.../T15/ Panel with angled borders to replace an angled ceiling tile profile 15 mm.

.../T24/ Panel with angled borders to replace an angled ceiling tile profile 24 mm.

MATERIAL

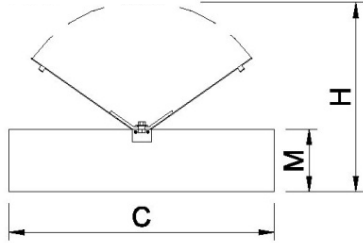
Diffuser constructed from aluminium and central screw from zinc coated steel.

PLDG



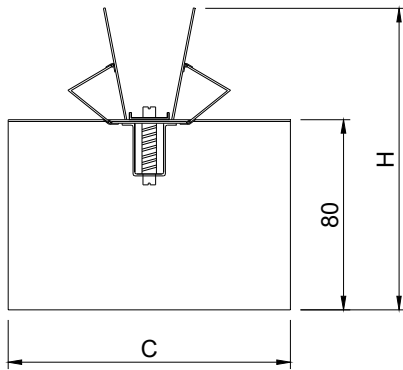
	D2	Z	D1
160	160	220	158
200	200	260	198
250	250	310	248
315	317	375	313
355	357	415	353
400	402	460	398
450	450	510	448
500	499	560	498

R3G

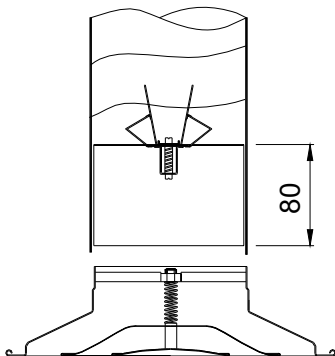


	M	H	C
160	55	119	157
200	55	139	197
250	55	164	247
315	55	198	313
355	55	218	353
400	55	241	398
450	65	274	447
500	65	299	497

R2G



	H	C
160	145	157
200	165	197
250	190	247
315	224	313
355	244	353
400	266	398



ACCESSORIES

PLDG Plenum box with a lateral circular connection. It includes supports to hang from the ceiling.

.../S/ Upper circular neck connector.

...-R Damper in the spigot.

.../AIS/ Plenum box with thermal insulation inside.

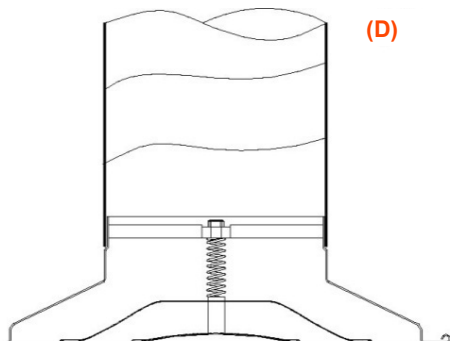
Foam density 25 kg / m³ ISO 845. Thermal conductivity 10° C_0,040 W / m°K EN 12667.

Classified reaction to fire B-s1, d0 EN 13501-1

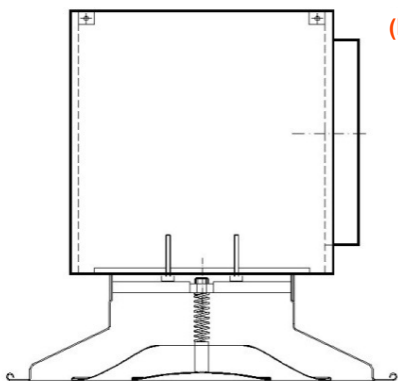
PMG Crossbar suitable for mounting in false ceiling with rectangular duct.

R3G Flap damper manually operated. Constructed in galvanised steel.

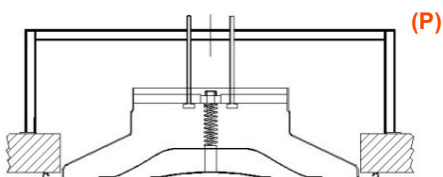
R2G Flap damper operated by means of a screwdriver. Constructed in galvanised steel.



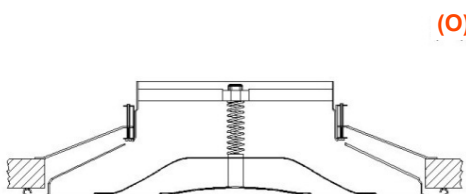
(D)



(P)



(P)



(O)

FIXING SYSTEMS

1) Connection into a circular metallic duct by means of rivets.

(P) Connection into the plenum box or crossbar by means of two central screws.
Incompatible with DCG-ACTIF and R3G or R2G dampers.

(O) Fixing with hidden screws. Suitable for mounting in false ceiling with flexible duct.
Available for DCG up to 400 diameter.
Incompatible with DCG-ACTIF and R3G or R2G dampers.

FINISHES

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

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

R9006 Painted aluminum color RAL 9006 (20-30% gloss)

RAL... Painted in other RAL colours

SPECIFICATION TEXT

Supply and mounting of circular diffuser with adjustable cones **DCG+PLDG R9010S** dim. 160 constructed from aluminium paint in white RAL 9010 (60-70% gloss). With lateral circular connection plenum box made from galvanized steel. Manufacturer **MADEL**.

DCG series

RECOMMENDED VELOCITY.

DCG	Vmin m/s	Vmax m/s
160	3	5,7
200	3	5,8
250	3	4,5
315	3	5,7
350	3	6,2
400	3	6
450	3	4,5
500	3	4,5

NECK AREA m2.

DCG	A k m2	Qmin m3/h	Qmax m3/h
160	0.02	215	410
200	0.0314	340	660
250	0.049	530	795
315	0.0779	835	1615
350	0.0962	1035	2175
400	0.125	1350	2730
450	0.159	1560	2655
500	0.196	1890	3160

CORRECTION FACTOR FOR DPt AND Lwa1.

DCG-R3G d(h) = +11mm

		100%	50%
160	DPt (Kp)	x1,2	x4,7
	Lwa1 (Kf)	+1,4	+16

DCG-R3G d(v) = -5mm

		100%	50%
160	DPt (Kp)	x1,2	x4,7
	Lwa1 (Kf)	+1,4	+16

$$DPt1 = Kp \times DPt$$

$$Lwa = Lwa1 + Kf$$

CORRECTION FACTOR FOR DPt AND Lwa1.

DCG-R3G d(h) = +10mm

		100%	50%
200	DPt (Kp)	x1,1	x3,6
	Lwa1 (Kf)	+1,3	+16

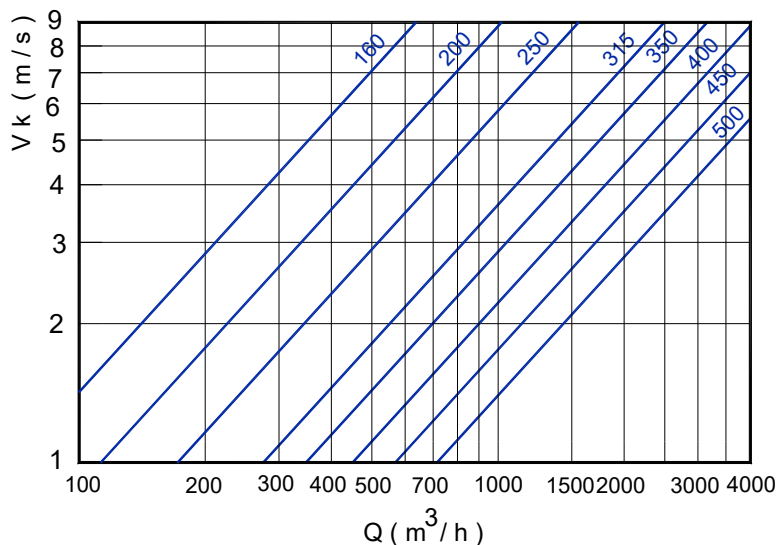
DCG-R3G d(v) = -15mm

		100%	50%
200	DPt (Kp)	x1,1	x3,6
	Lwa1 (Kf)	+0,8	+15

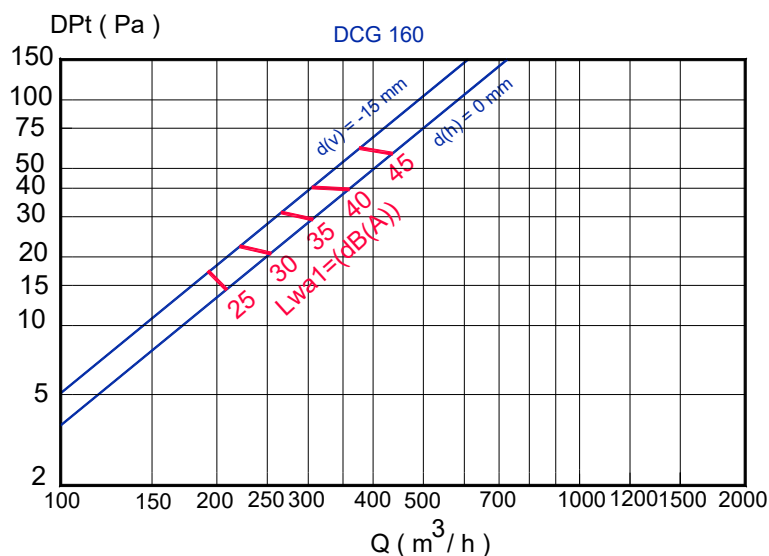
$$DPt1 = Kp \times DPt$$

$$Lwa = Lwa1 + Kf$$

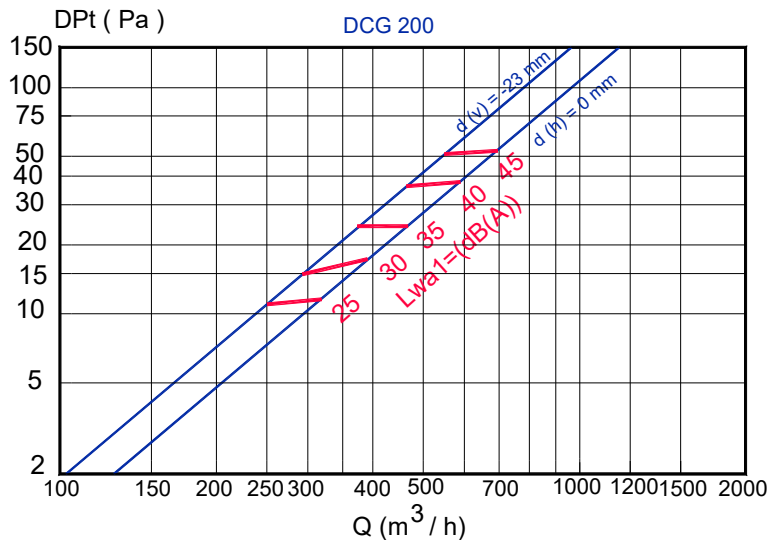
NECK VELOCITY.



PRESSURE LOSS AND SOUND POWER LEVEL.



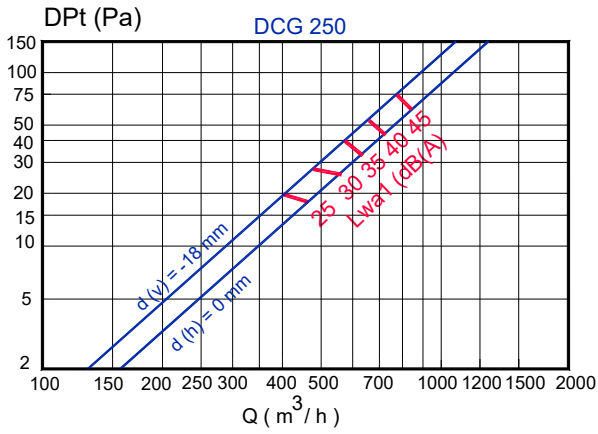
PRESSURE LOSS AND SOUND POWER LEVEL.



Note: In MadelMedia Octava band centre frequency in Hz.

DCG series

PRESSURE LOSS AND SOUND POWER LEVEL.



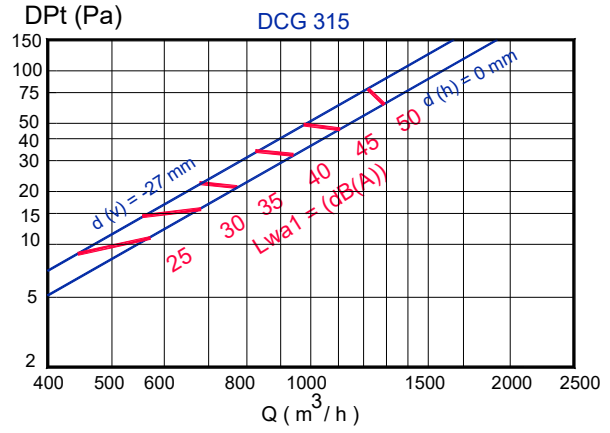
DCG-R3G d(h) = +7mm

250	DPt (Kp)	100%	50%
		x1,1	x3,7
250	Lwa1 (Kf)	+3,4	+19

DCG-R3G d(v) = -17mm

250	DPt (Kp)	100%	50%
		x1,1	x3,7
250	Lwa1 (Kf)	+3,8	+20

PRESSURE LOSS AND SOUND POWER LEVEL.



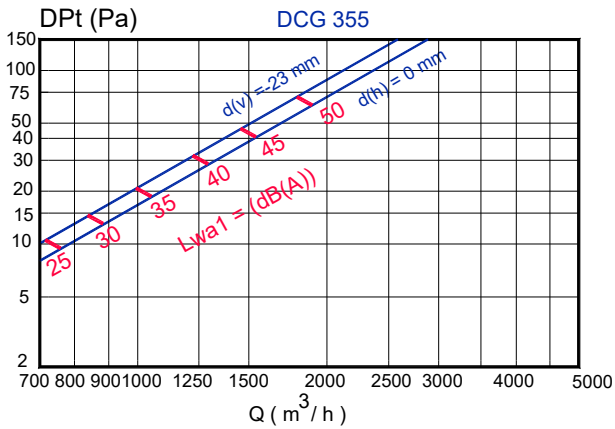
DCG-R3G d(h) = +5mm

315	DPt (Kp)	100%	50%
		x1,5	x6,5
315	Lwa1 (Kf)	+1,3	+16

DCG-R3G d(v) = -22mm

315	DPt (Kp)	100%	50%
		x1,5	x6,5
315	Lwa1 (Kf)	+0,6	+15

PRESSURE LOSS AND SOUND POWER LEVEL.



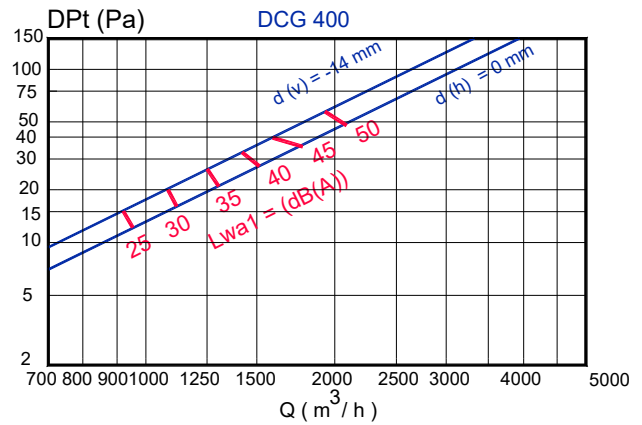
DCG-R3G d(h) = +5mm

355	DPt (Kp)	100%	50%
		x1,2	x8
355	Lwa1 (Kf)	+2,2	+11

DCG-R3G d(v) = -23mm

355	DPt (Kp)	100%	50%
		x1,2	x8
355	Lwa1 (Kf)	+1,6	+10

PRESSURE LOSS AND SOUND POWER LEVEL.



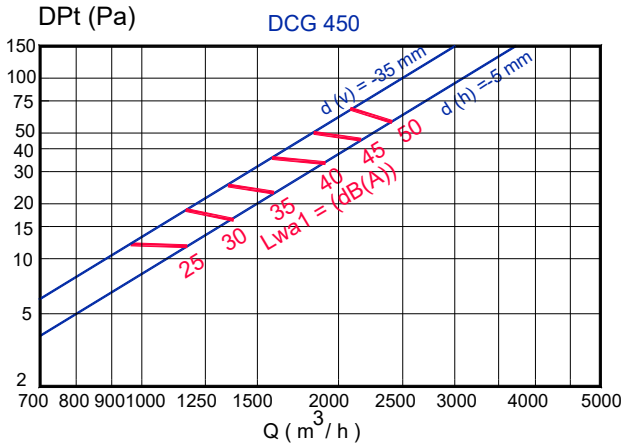
DCG-R3G d(h) = +7mm

400	DPt (Kp)	100%	50%
		x1,1	x3,4
400	Lwa1 (Kf)	+2,2	+17

DCG-R3G d(v) = -20mm

400	DPt (Kp)	100%	50%
		x1,1	x3,4
400	Lwa1 (Kf)	+1,6	+16

PRESSURE LOSS AND SOUND POWER LEVEL.



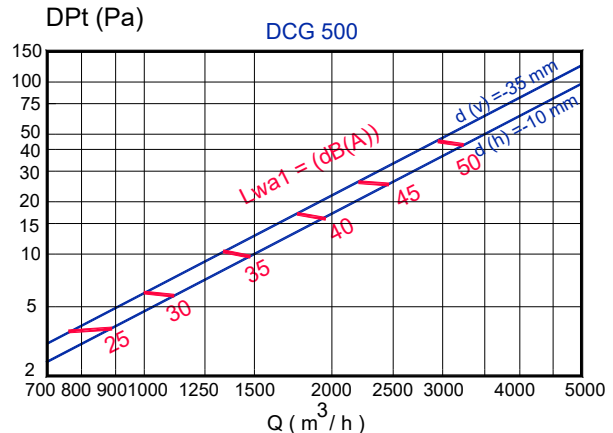
DCG-R3G d(h) = -5mm

450	DPt (Kp)	100%	50%
		x1,2	x7,1
450	Lwa1 (Kf)	+3,2	+17

DCG-R3G d(v) = -30mm

450	DPt (Kp)	100%	50%
		x1,2	x7,1
450	Lwa1 (Kf)	+3,5	+17

PRESSURE LOSS AND SOUND POWER LEVEL.



DCG-R3G d(h) = -10mm

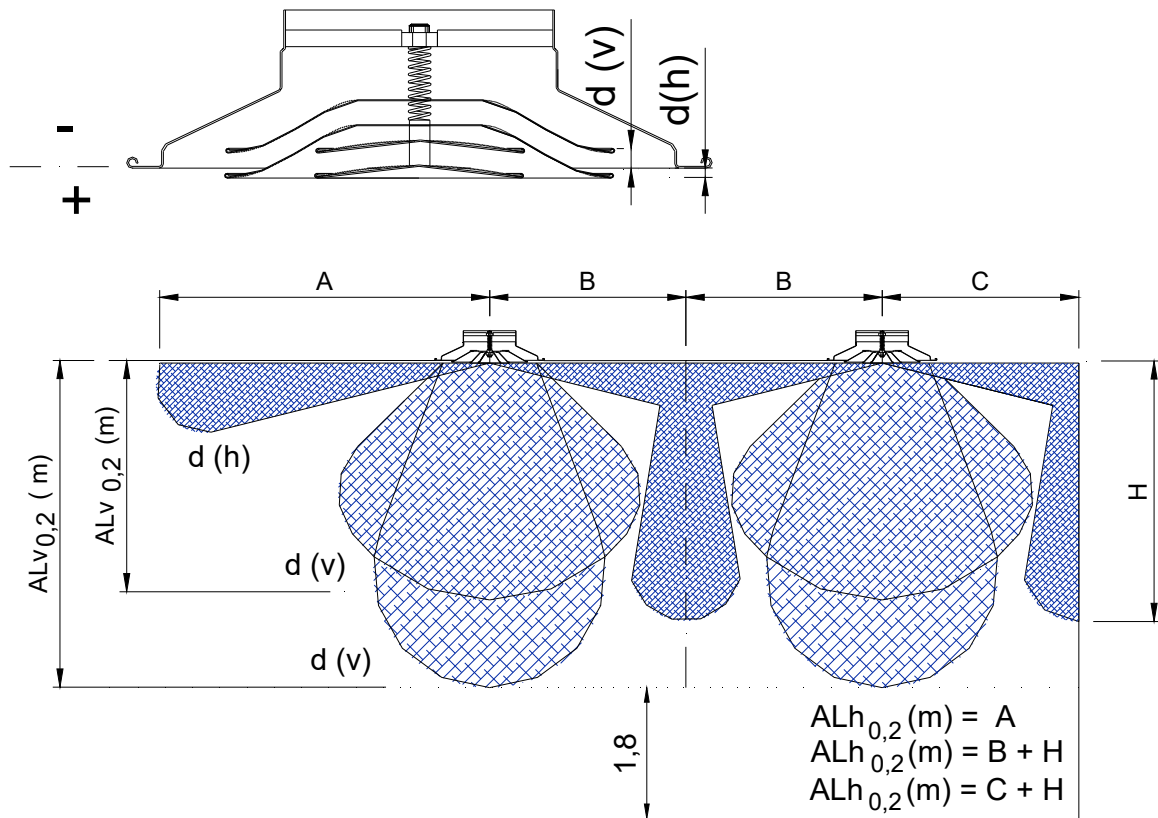
500	DPt (Kp)	100%	50%
		x1,2	x5,8
500	Lwa1 (Kf)	+2,2	+18

DCG-R3G d(v) = -35mm

500	DPt (Kp)	100%	50%
		x1,2	x5,8
500	Lwa1 (Kf)	+1,5	+18

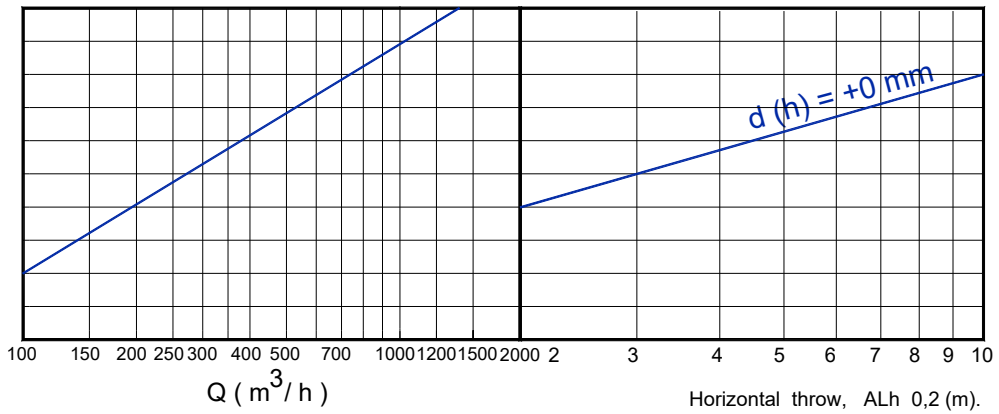
Note: In MadelMedia Octava band centre frequency in Hz.

DCG series



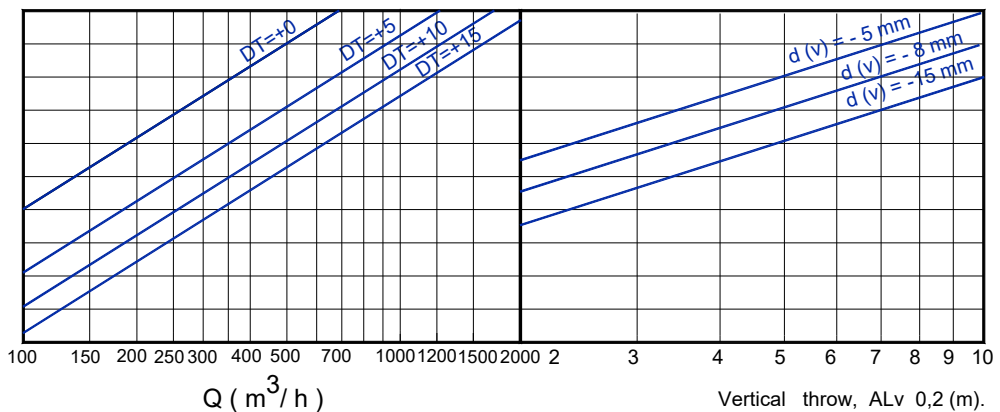
ISOTHERM THROW.

DCG 160



MAXIMUM VERTICAL DEPTH IN HEATING.

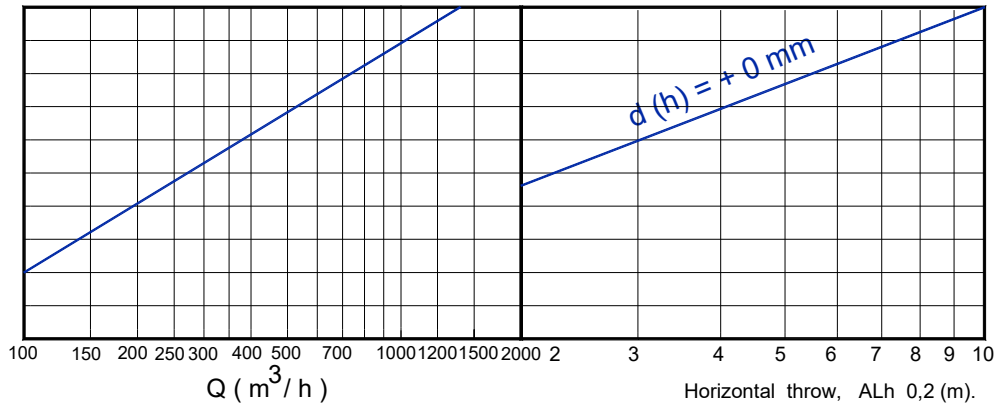
DCG 160



DCG series

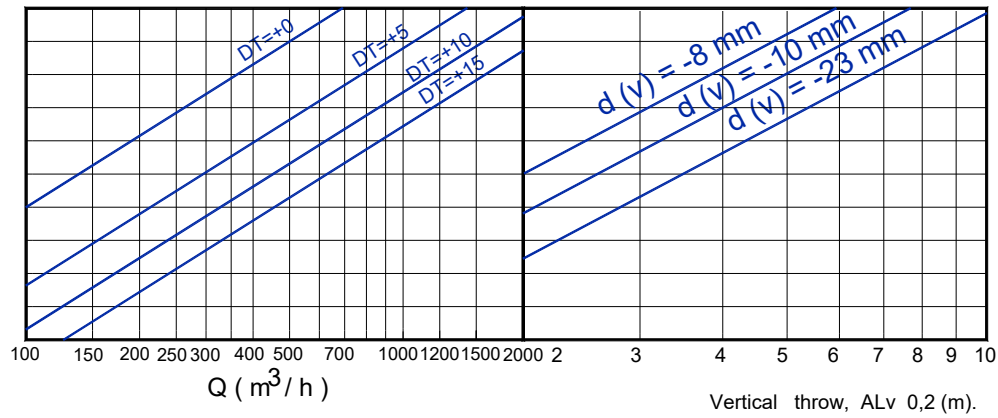
ISOTHERM TRHOW.

DCG 200



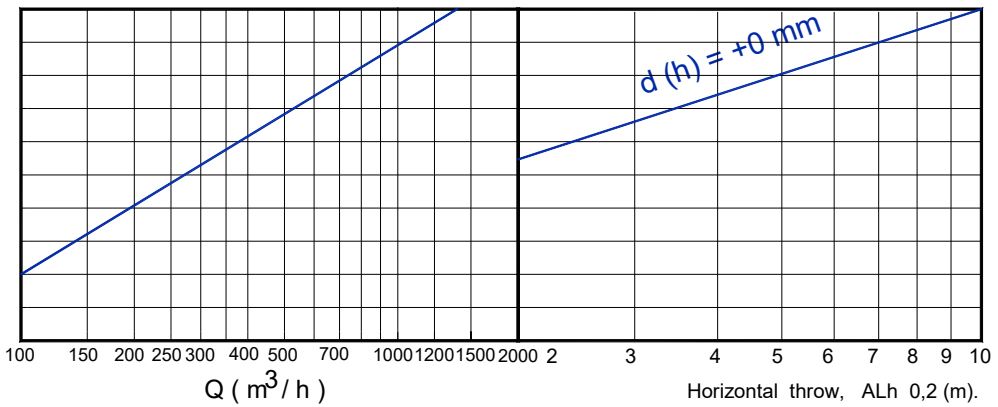
MAXIMUM VERTICAL DEPTH IN HEATING.

DCG 200



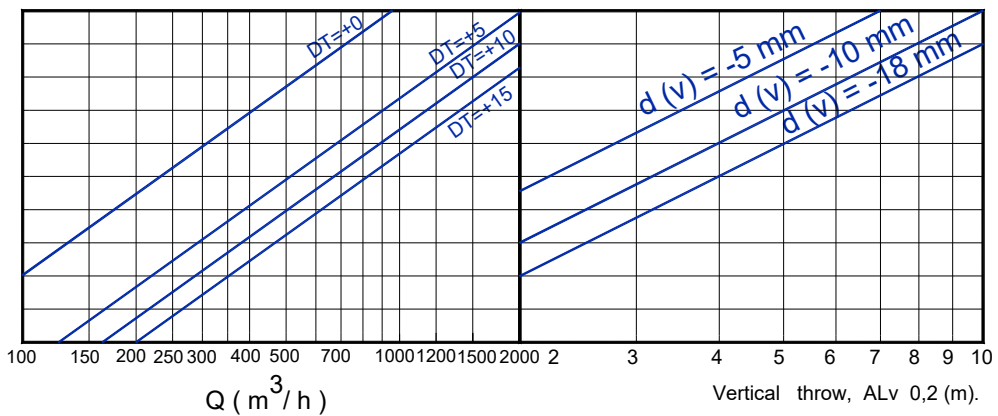
ISOTHERM TRHOW.

DCG 250



MAXIMUM VERTICAL DEPTH IN HEATING.

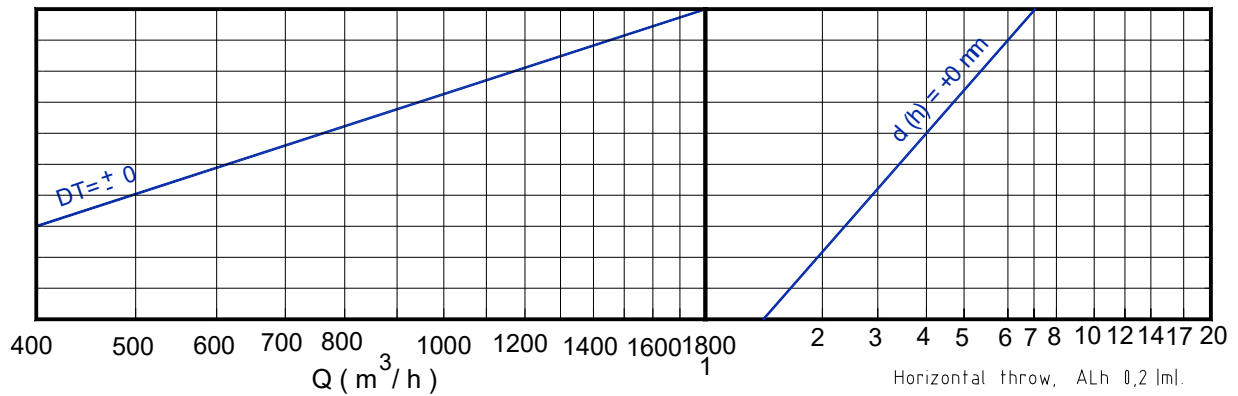
DCG 250



DCG series

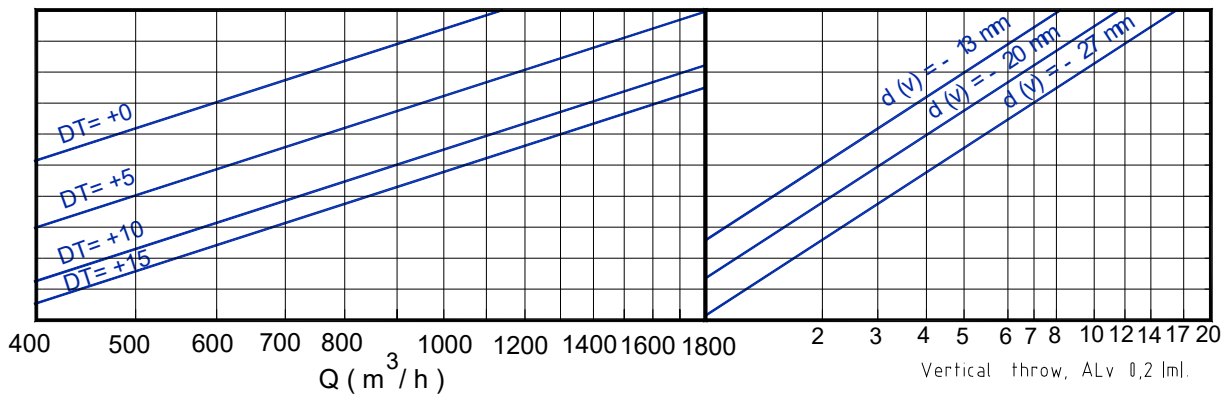
ISOTHERM THROW

DCG 315



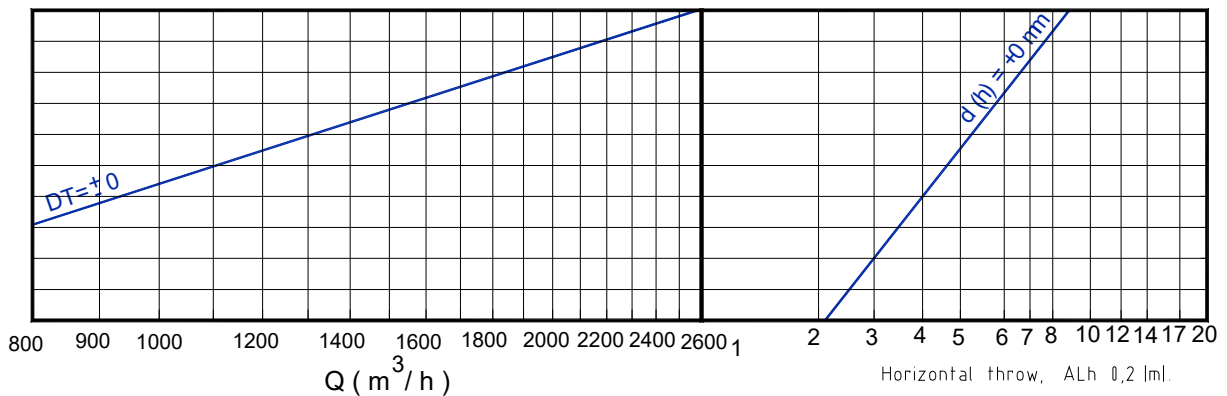
MAXIMUM VERTICAL DEPTH IN HEATING

DCG 315



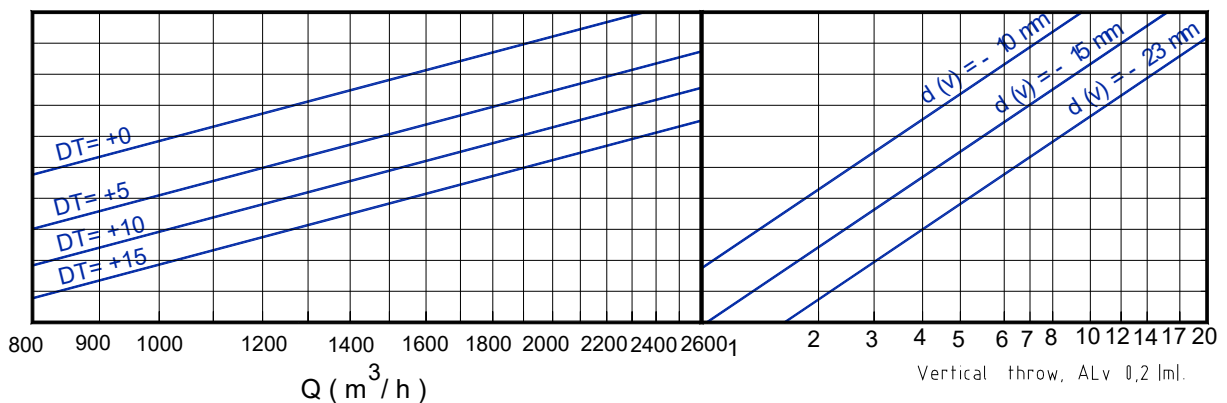
ISOTHERM THROW

DCG 355



MAXIMUM VERTICAL DEPTH IN HEATING

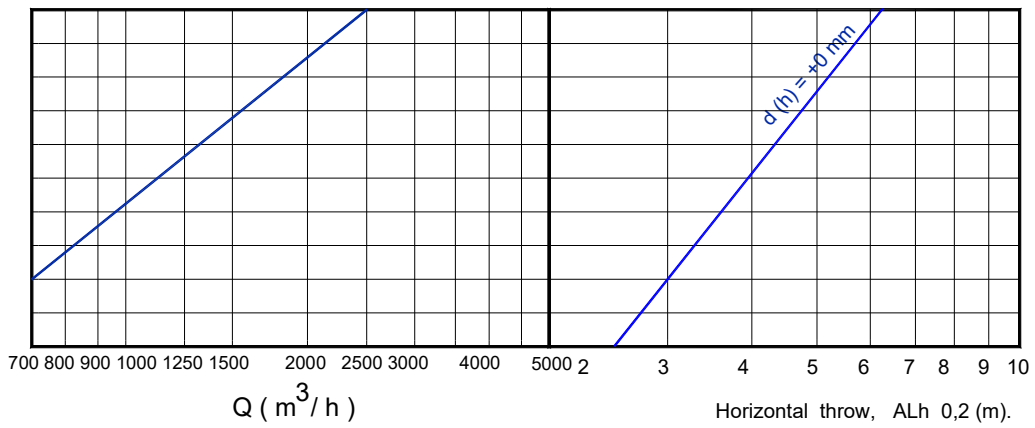
DCG 355



DCG series

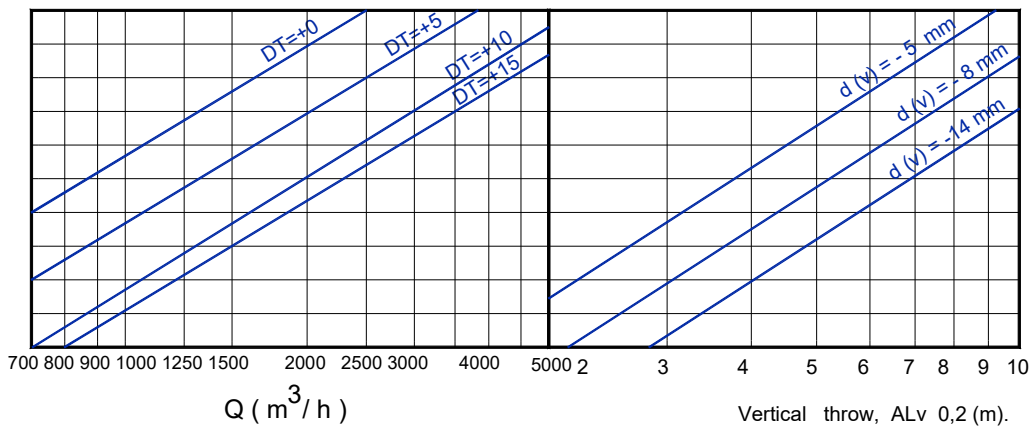
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DCG 400



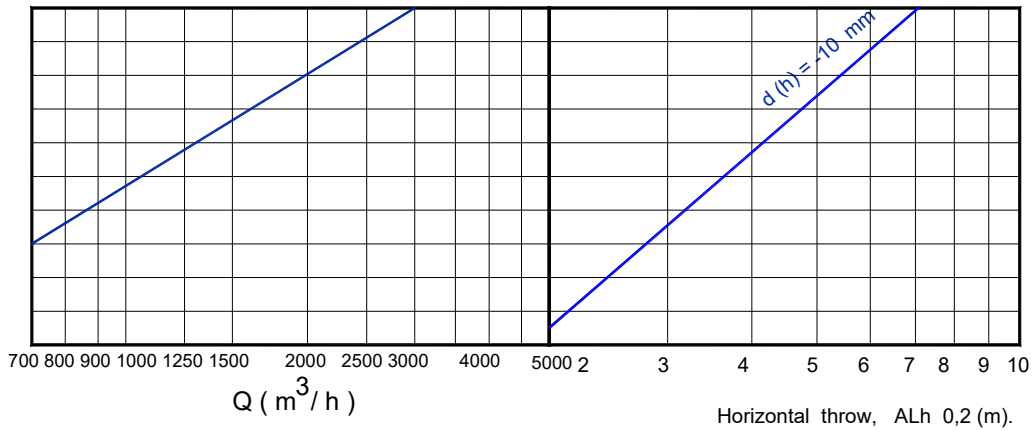
MAXIMUM VERTICAL DEPTH IN HEATING.

DCG 400



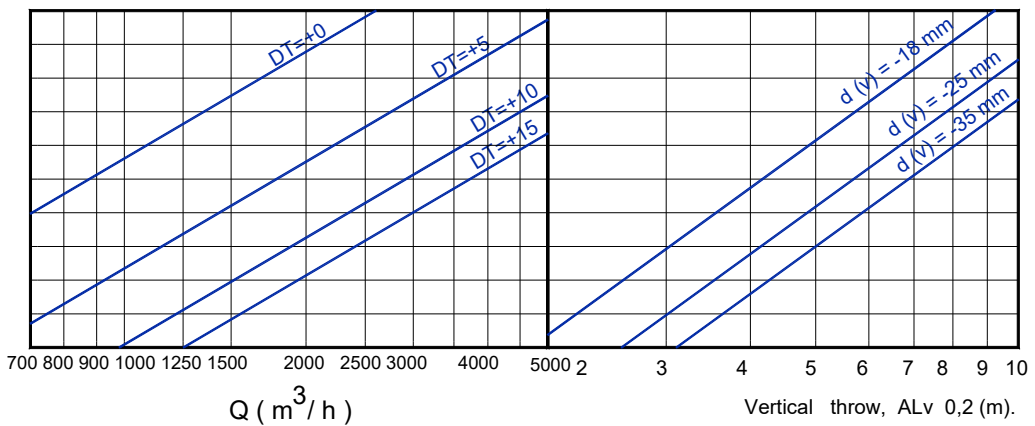
ISOTHERM TRHOW.

DCG 450



MAXIMUM VERTICAL DEPTH IN HEATING.

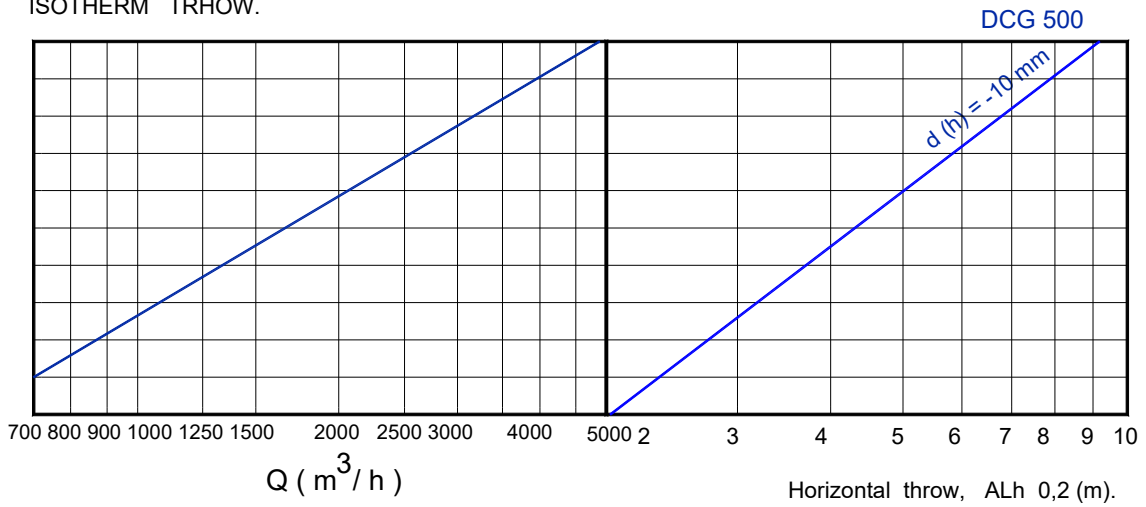
DCG 450





DCG series

ISOTHERM TRHOW.



MAXIMUM VERTICAL DEPTH IN HEATING.

