

2/S11
v 3.3 (en)

VARIABLE SWIRL DIFFUSER

DVV



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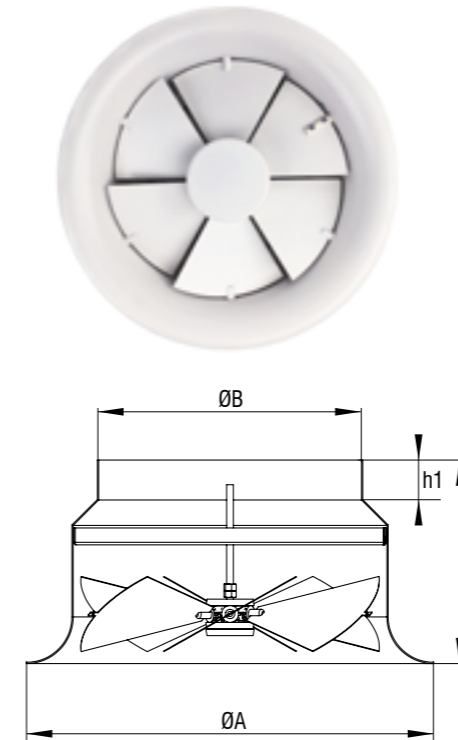
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DVV

- Ceiling diffuser for room heights from 4 to 10m.
- Made out of steel sheet, standard RAL 9010
- Adjustable blade angle
- Fixing with screws

Options

- Plenum box
- Manual drive
- Motor drive
- Thermostat drive
- RAL...



Dimensions

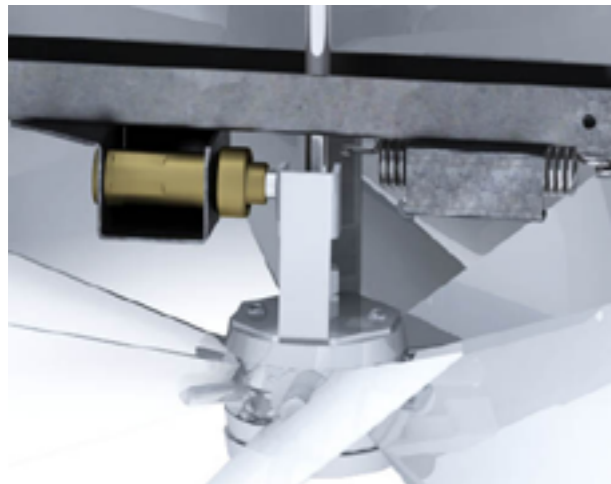
Size	A _{ei} [m ²]	øB [mm]	øA [mm]	h [mm]	h1 [mm]	øK [mm]	H [mm]	ød [mm]
250	0,048	248	417	230	40	384	290	198
315	0,077	313	491	250	40	484	340	248
400	0,125	398	615	265	50	590	405	313
500	0,195	498	796	320	50	590	405	313
630	0,310	628	935	370	40	650	540	448
800*	0,503	798	1142	451	40	950	590	498

*Size 800 at special request

Definition of symbols:

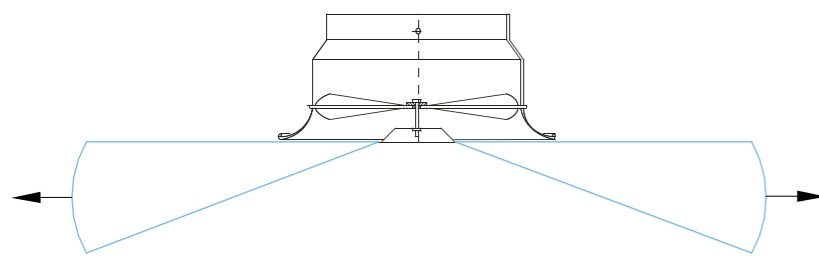
V [m ³ /h]	- Air flow	v _h [m/s]	- Average core velocity at distance h (m) from diffuser
V _{uk} [m ³ /h]	- Total air volume in motion	Δp [Pa]	- Total pressure drop
h [m]	- Distance from the ceiling to the occupied zone	t _p [°C]	- Air temperature in the room
H [m]	- Room height	t _z [°C]	- Supply air temperature
A, B [m]	- Distance between diffusers	t _m [°C]	- Core air temperature
x [m]	- Distance from wall	Δt _z [°C]	- (t _z - t _p)
L [m]	- Throw distance (x+h)	Δt _L [°C]	- (t _m - t _p)
A _{ei} [m ²]	- Effective discharge area	i	- Induction V _{uk} /V
v _{ei} [m/s]	- Effective jet velocity	L _{WA} [dB(A)]	- Sound power level
v _L [m/s]	- Average core velocity at distance L (m) from diffuser		

Thermostat drive

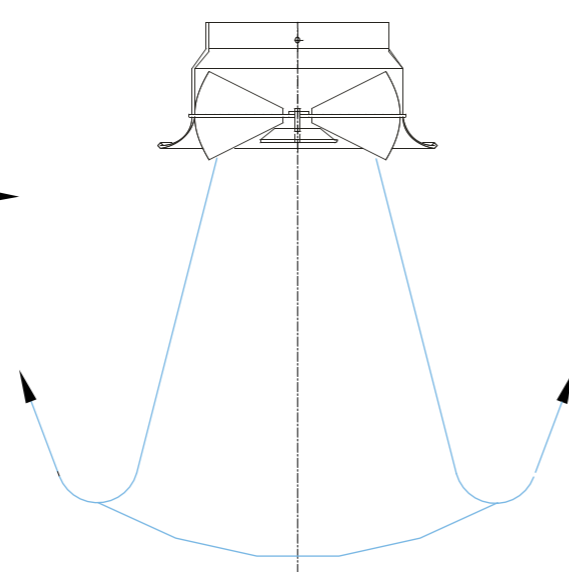


- adjusting throw distance, according to temperature of supply air.
- no additional power supply needed

Cooling mode



Heating mode

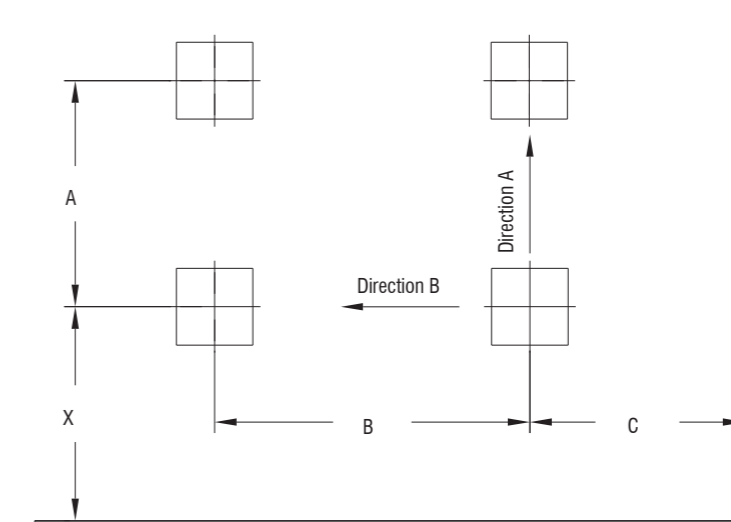
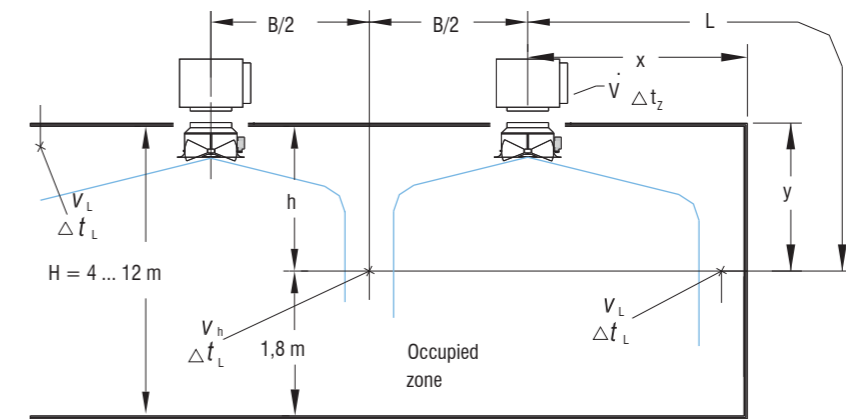


Ordering key:

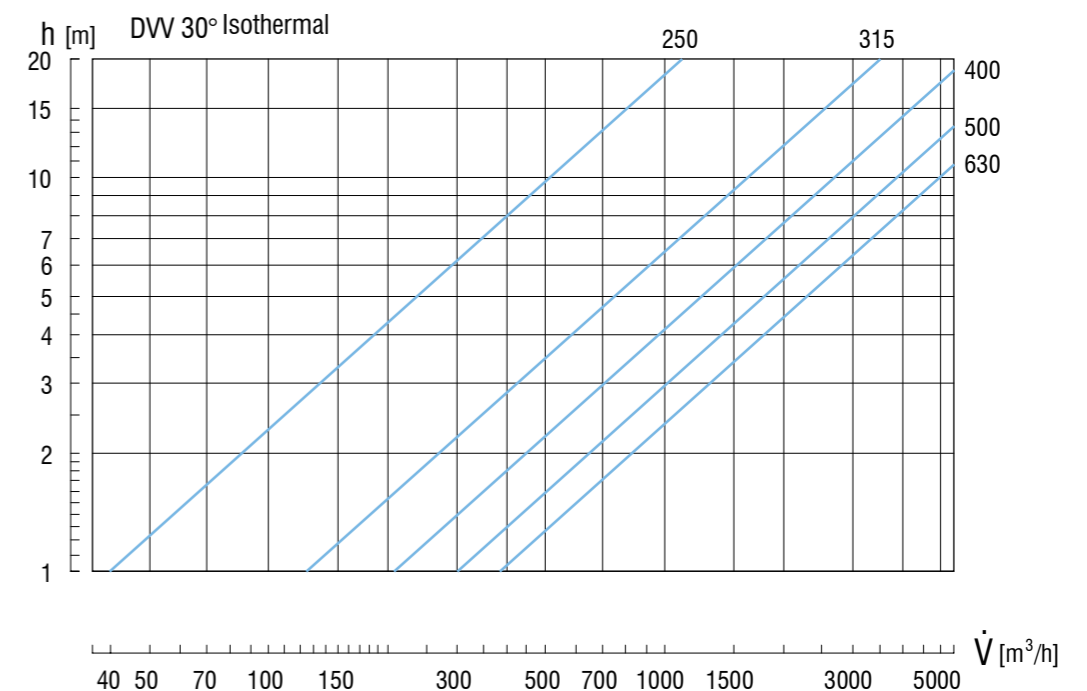
Type **DVV - 500 - M230 - OZ - H - PL - Ød**
 Size
R - manual drive
M230 - motor drive 230V
M24 - motor drive 24V
T - thermostat drive (no power supply)
OZ - two positions
K - continuous
 Horizontal connection
 Plate 595x595 (installation in suspended ceiling)
 Connection diameter

*Screws are not delivered
 **Ordering key for Plenum box on page 184
 ***Only plenum box UPK2

Discharge diagram

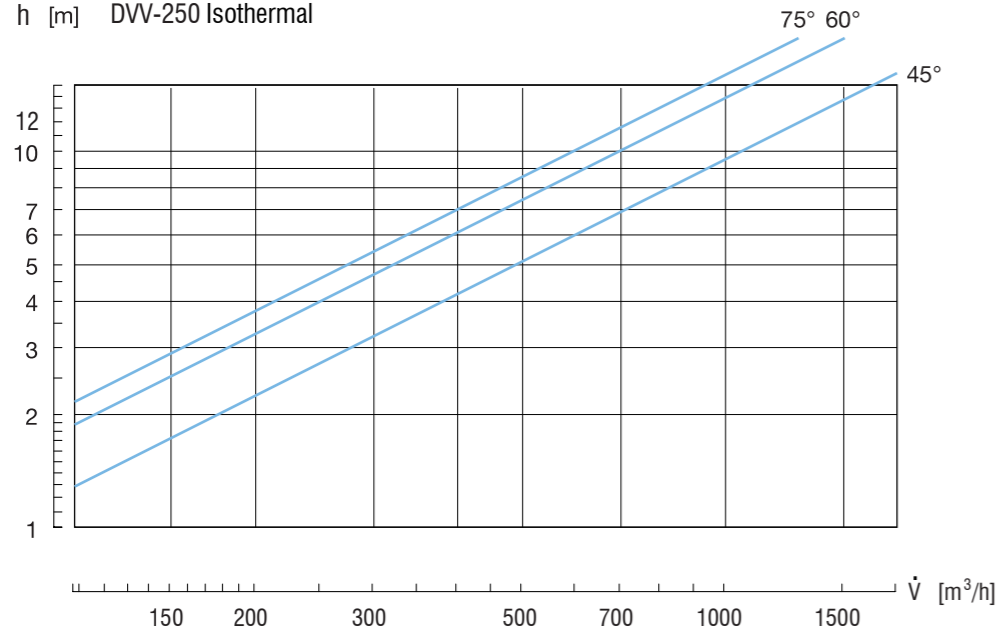


Selection diagram

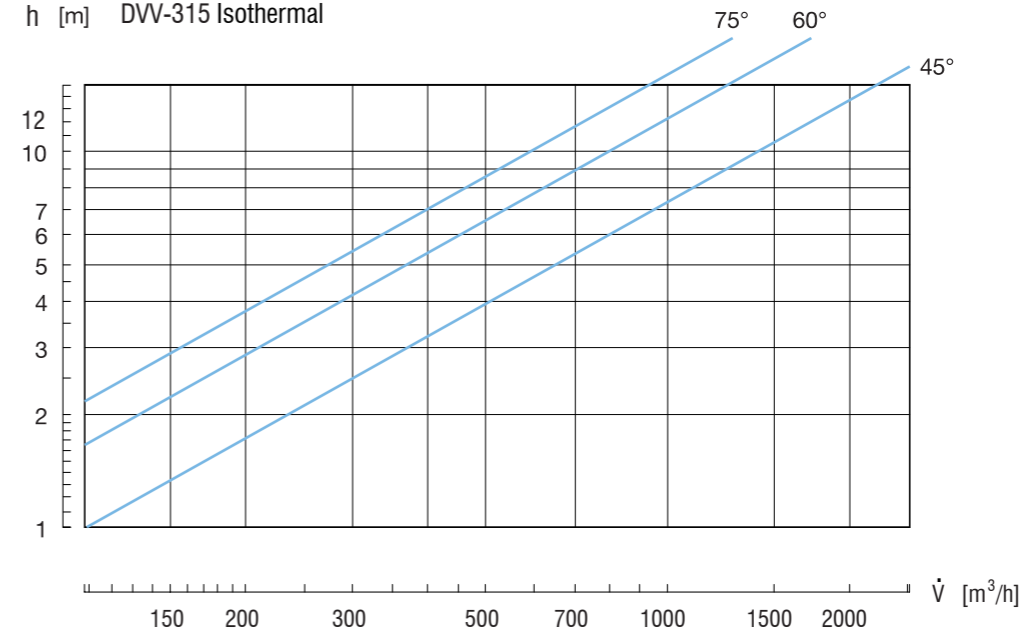


If installed less than 300mm from ceiling, values from diagrams should be multiplied by 1.4

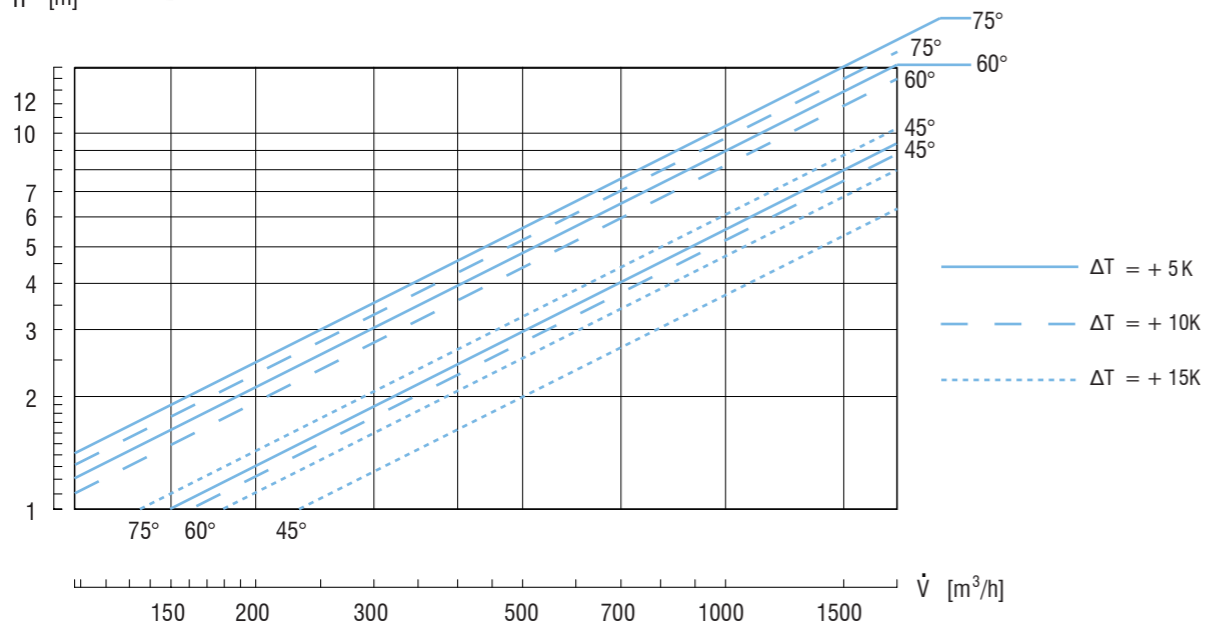
h [m] DVV-250 Isothermal



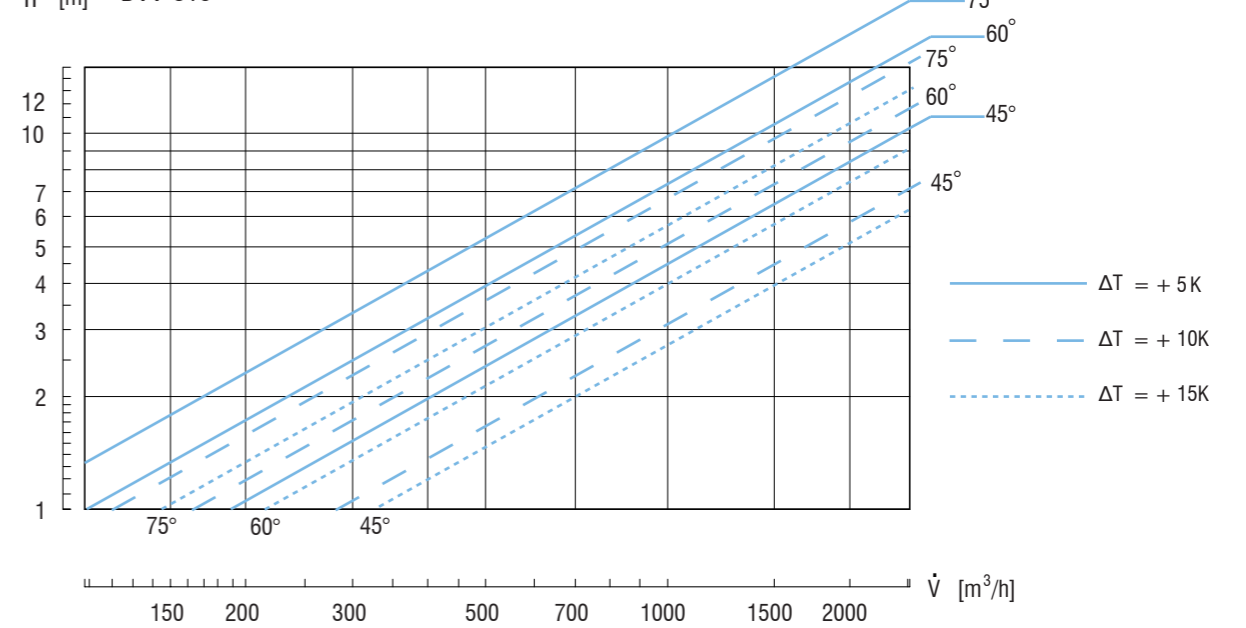
h [m] DVV-315 Isothermal

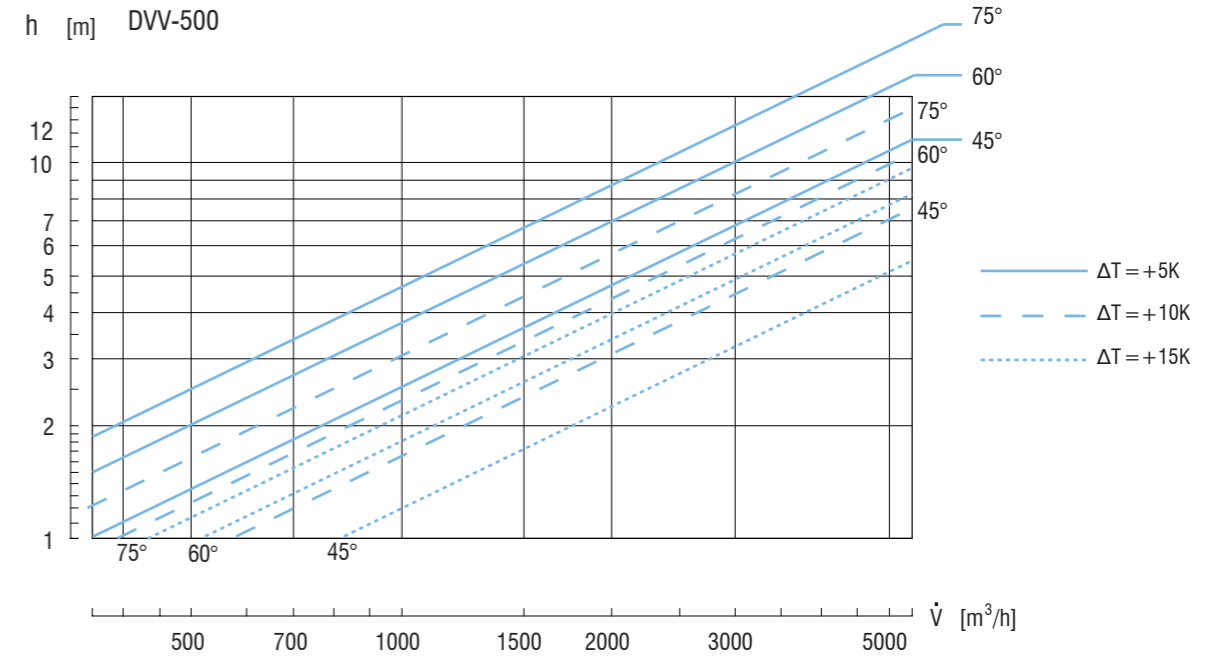
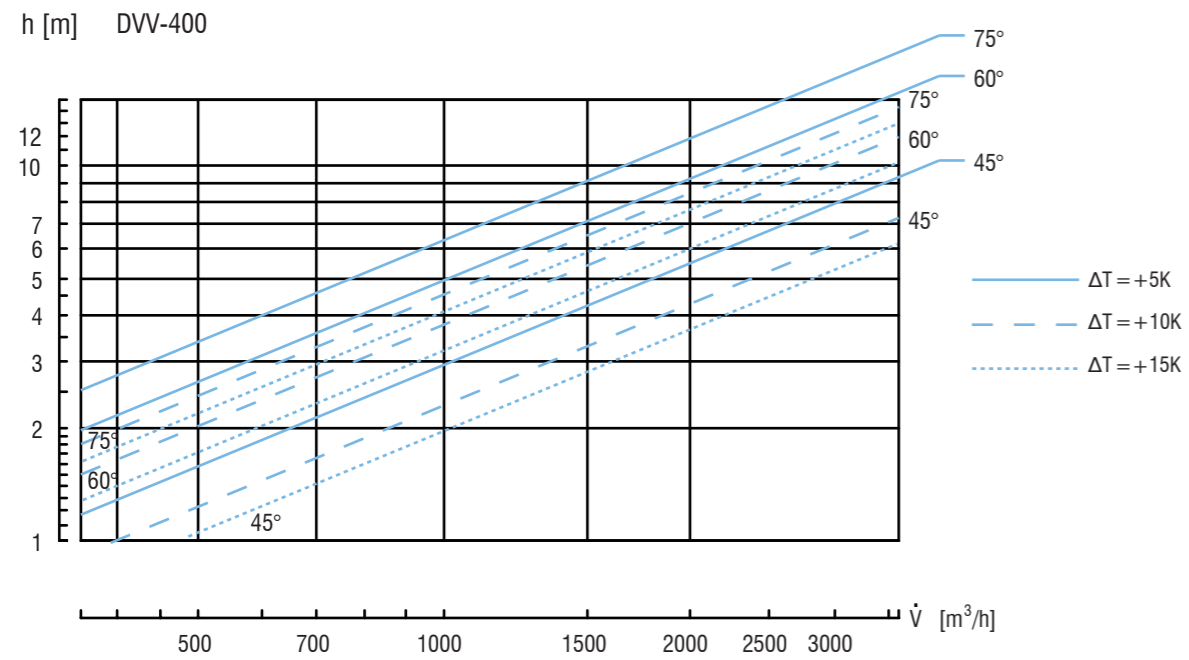
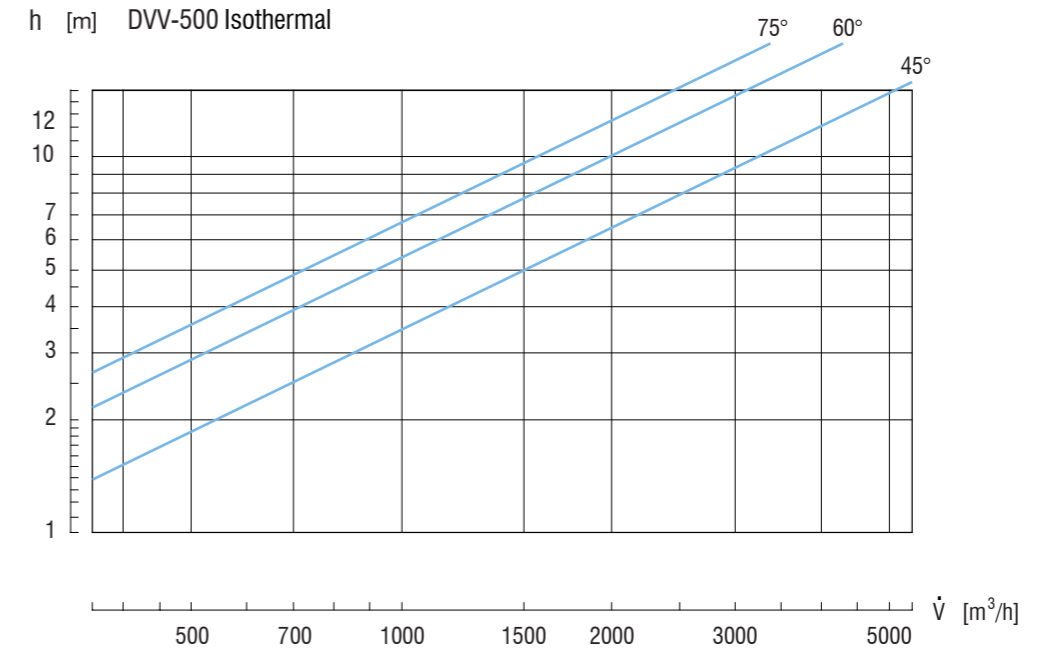
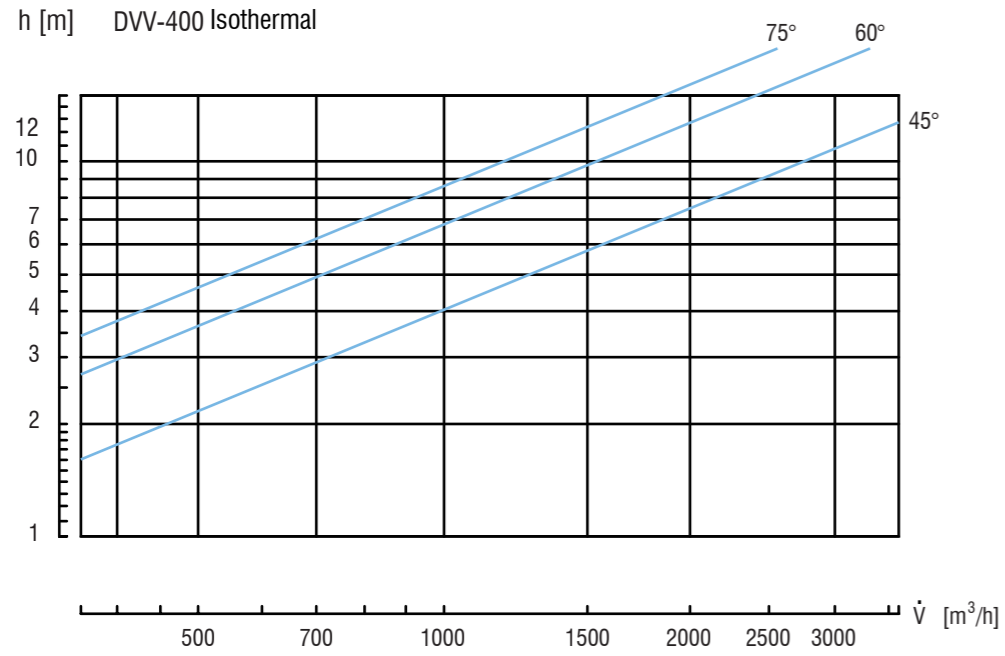


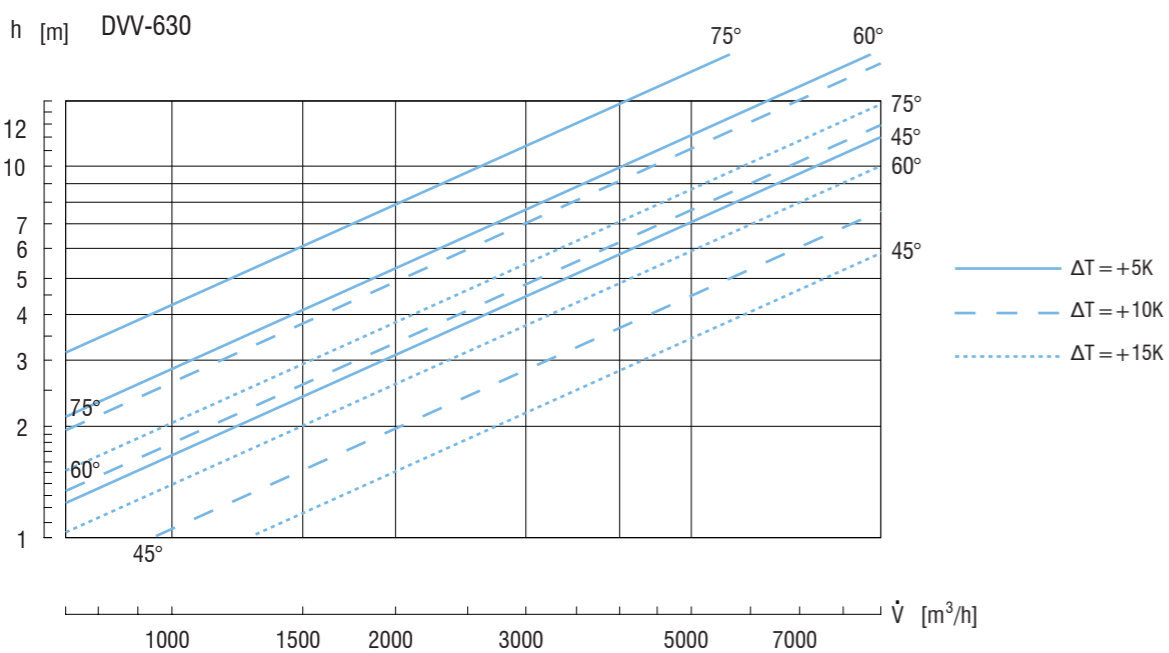
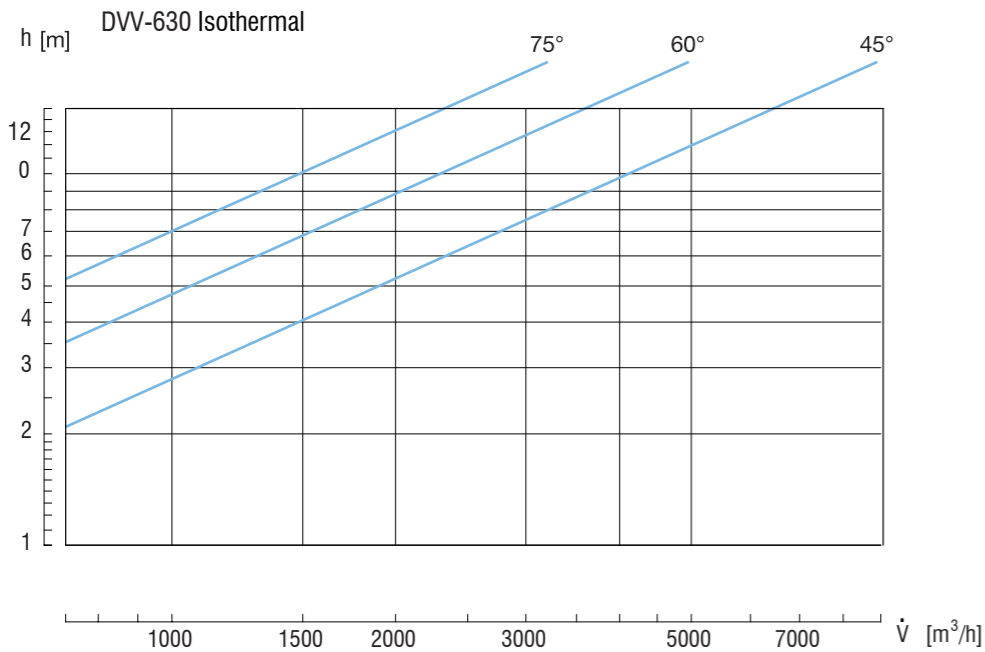
h [m] DVV-250



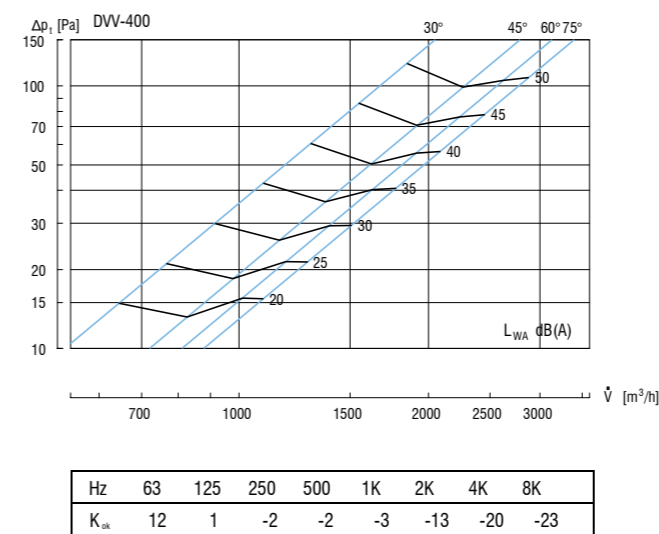
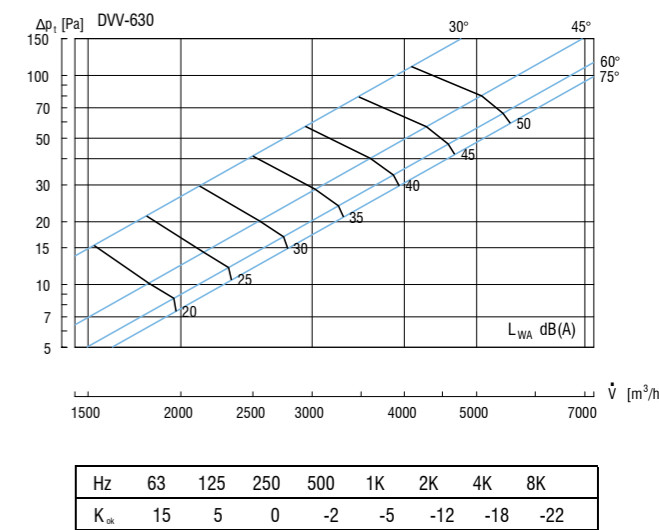
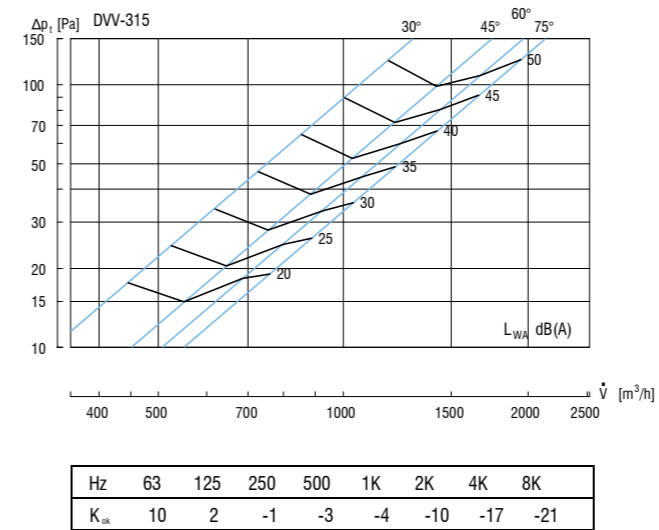
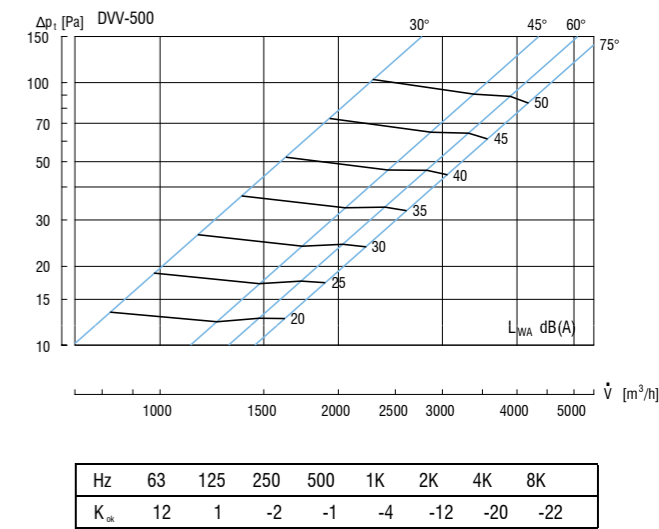
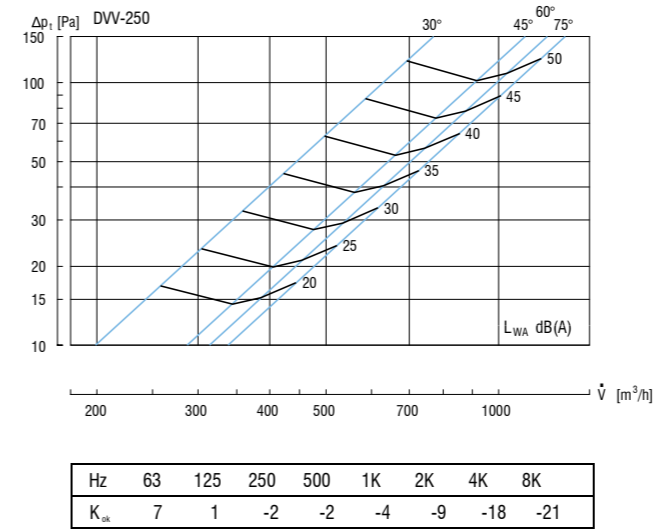
h [m] DVV-315







Sound level and pressure drop



Example:

Given:

Tip DVV 500
isothermal flow
h = 5 m
V = 1500 m³/h

Solution:

Diagram pg. 9
Angle 45°
Diagram pg. 11
 $\Delta p = 17Pa$
 $L_{WA} = 25 dB (A)$