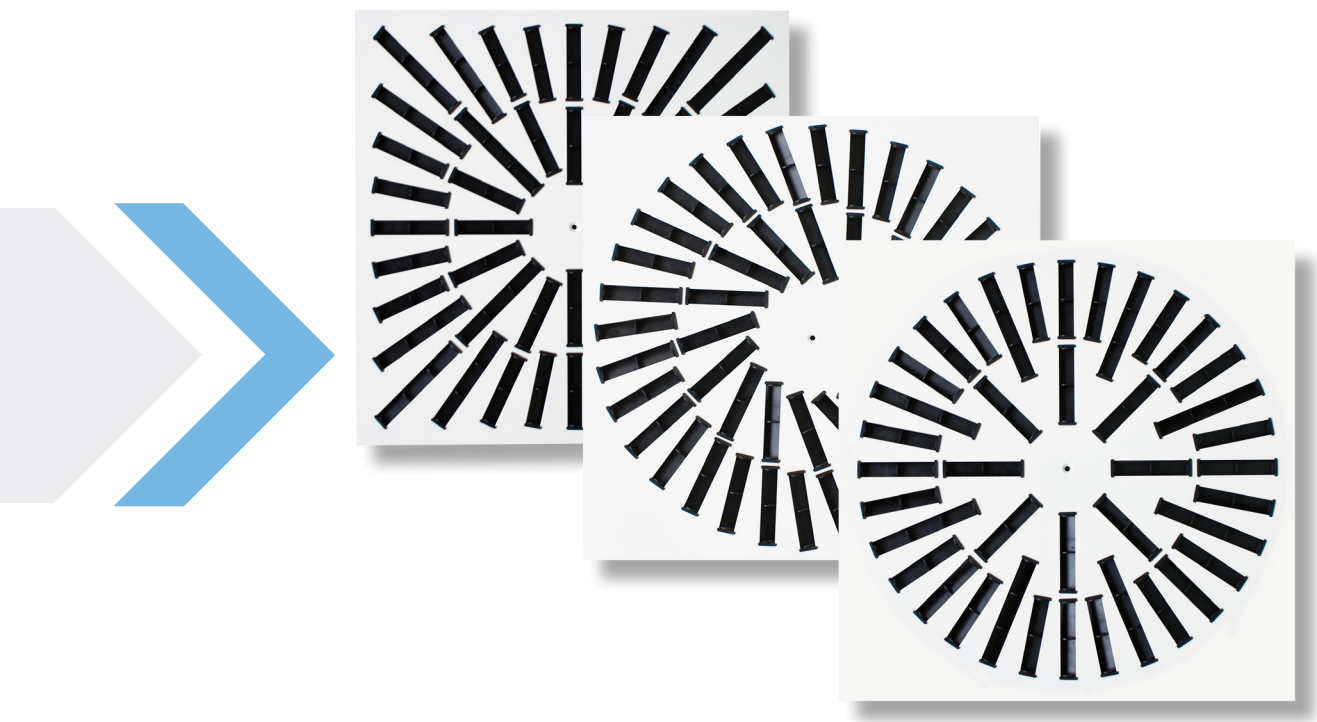


2/S5

NASTAWNE NAWIEWNIKI WIROWE

DEV, DEK, DEU

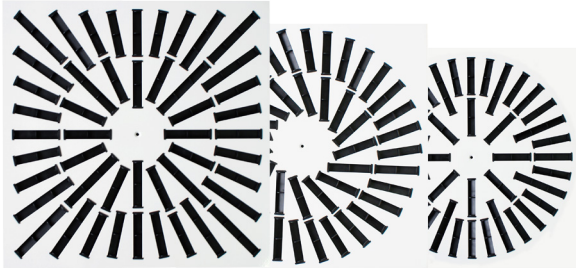


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Oznaczenia:

V [m ³ /h]	- Przepływ powietrza	v_h [m/s]	- Średnia prędkość strugi w odległości h (m) od nawiewnika
V_{uk} [m ³ /h] -	- Całkowita objętość powietrza w strudze	Δp [Pa]	- Całkowita strata ciśnienia
h [m]	- Odległość od stropu do strefy przebywania ludzi	t_p [°C]	- Temperatura powietrza w pomieszczeniu
H [m]	- Wysokość pomieszczenia	t_z [°C]	- Temperatura powietrza nawiewanego
A, B [m]	- Odległość między nawiewnikami	t_m [°C]	- Temperatura powietrza w strudze
x [m]	- Odległość od ściany	Δt_z [°C]	- $(t_z - t_p)$
L [m]	- Zasięg strugi ($x+h$)	Δt_L [°C]	- $(t_m - t_p)$
A_{ef} [m ²]	- Powierzchnia efektywna	i	- Indukcja V_{uk}/V
v_{ef} [m/s]	- Prędkość efektywna	L_{WA} [dB(A)]	- Moc akustyczna
v_L [m/s]	- Średnia prędkość strugi w odległości L od nawiewnika		



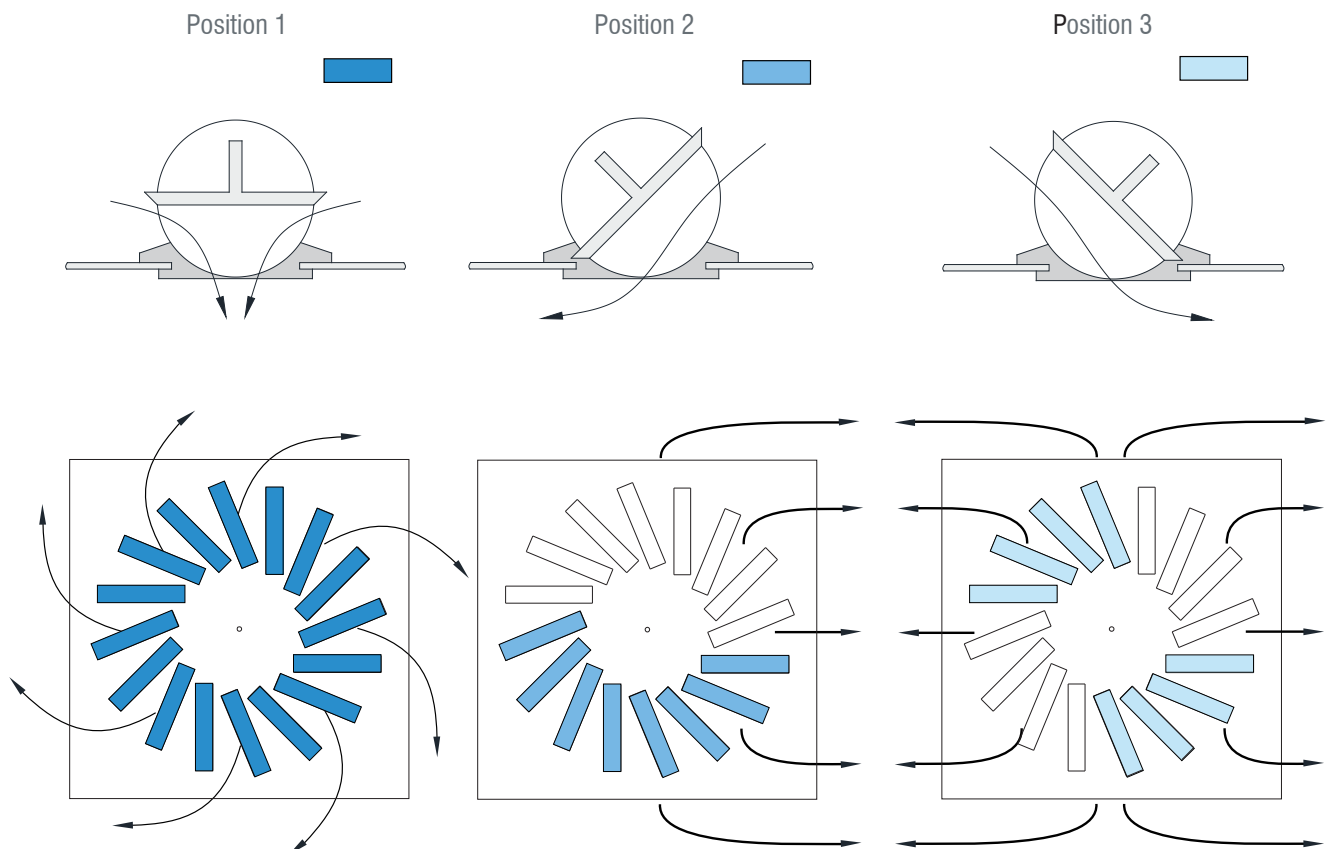
DEV, DEK, DEU

- Nawiewnik przeznaczony do pomieszczeń o wysokości od 2,3 do 4m.
- Wykonany z blachy stalowej, malowany na RAL 9010
- Regulowany kąt nawiewu
- Montaż centralny - śrubowy

Opcjonalnie:

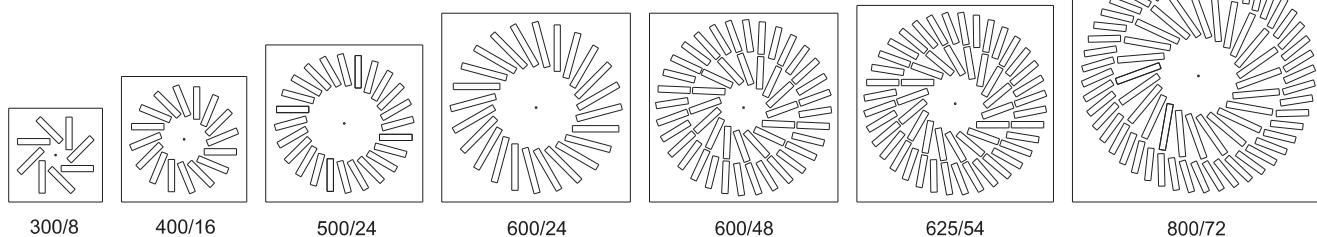
- RAL...
- Skrzynka rozprężna
- Elementy nastawne w kolorze białym lub czarnym

Regulacja kierunku nawiewu:

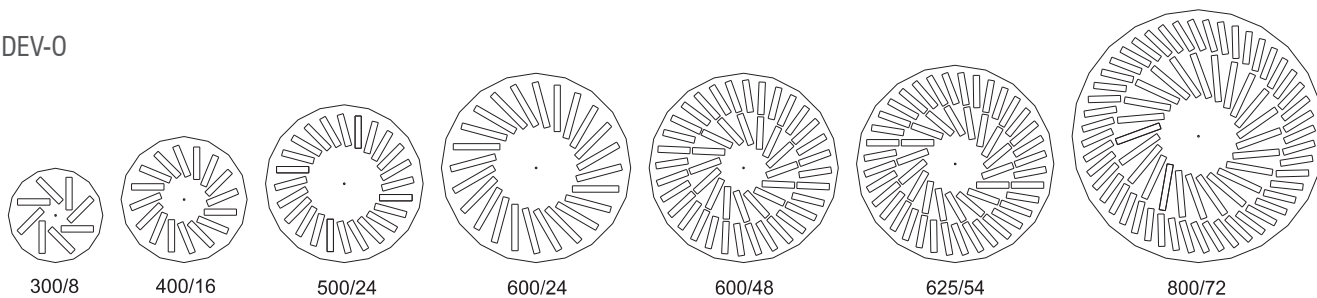


Nawiewniki wirowe

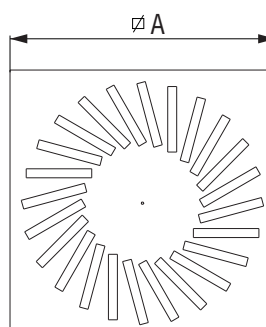
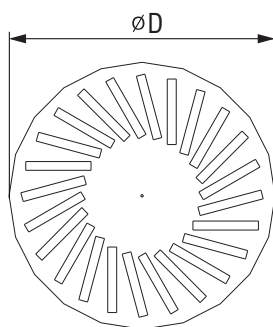
DEV-K



DEV-O



DEV	$\varnothing A$ [mm]	$\varnothing D$ [mm]	Liczba szczelin	A_{ef} [m ²]	$\varnothing d$ [mm]
300/8	298	298	8	0,0095	158
400/16	398	398	16	0,0189	198
500/16	498	498	16	0,0189	198
500/24	498	498	24	0,0284	198
600/16	595	595	16	0,0189	198
600/24	595	595	24	0,0449	248
600/48	595	595	48	0,0568	248
625/16	623	623	16	0,0189	198
625/24	623	623	24	0,0449	248
625/48	623	623	48	0,0568	248
625/54	623	623	54	0,0639	248
800/72	798	798	72	0,1017	313



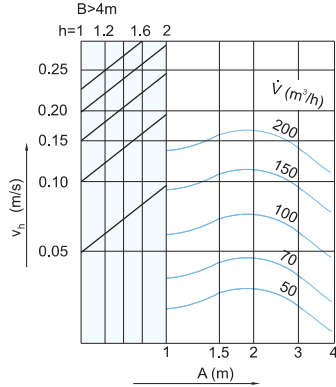
Klucz zamówienia:

Typ	DEV	- K	- 600/16	- B	- A	- H	- $\varnothing d$	- Z
K - maska kwadratowa								
O - maska okrągła								
Wielkość								
B - białe elementy nastawne								
C - czarne elementy nastawne								
A - nawiew								
B - wywiew								
H - króciec poziomy								
V - króciec pionowy								
Średnica króćca								
Izolacja								

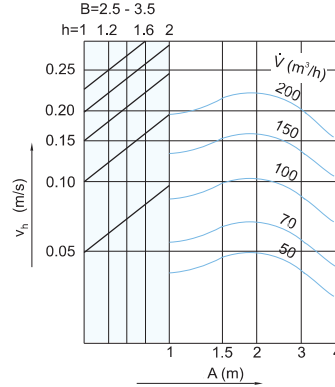
Diagramy doboru dla DEV-K i DEV-O

Diagram średniej prędkości strugi w odległości B, oraz diagram średniej prędkości strugi w funkcji różnicy temperatur DEV (300/8 - 625/24)

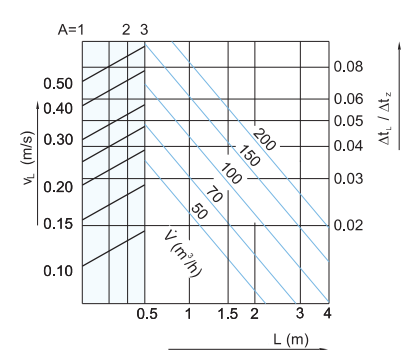
300/8



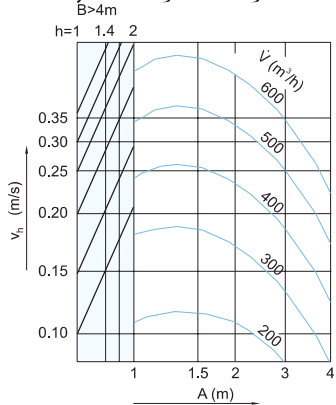
300/8



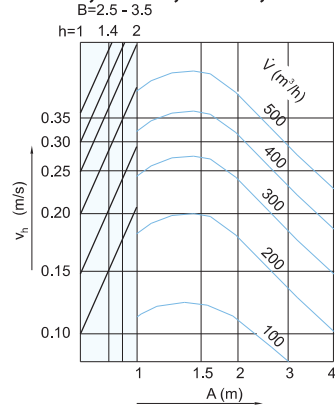
300/8



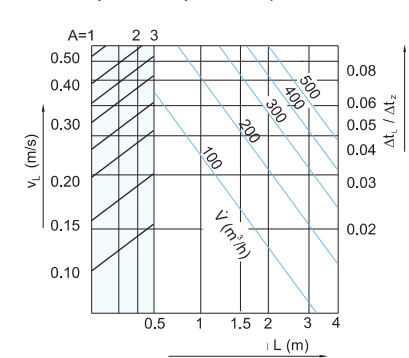
400/16, 500/16, 600/16, 625/16



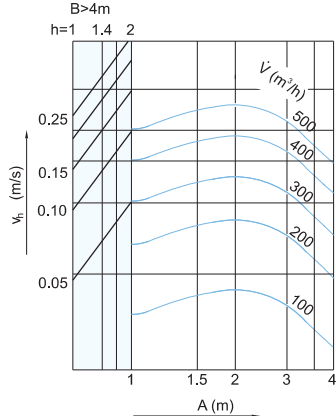
400/16, 500/16, 600/16, 625/16



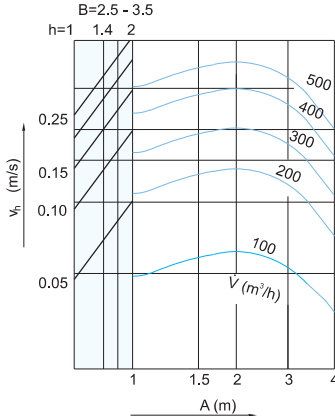
400/16, 500/16, 600/16, 625/16



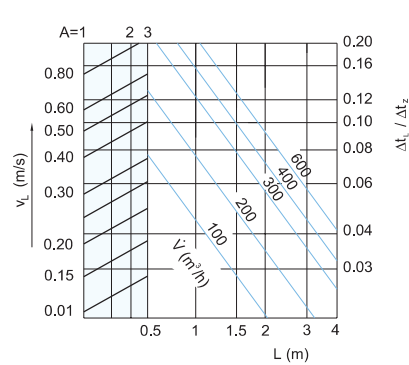
500/24



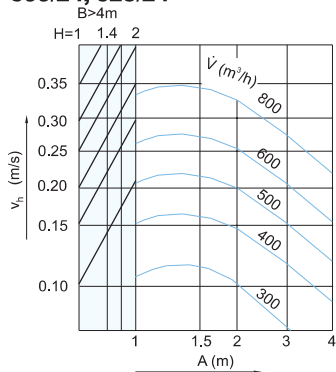
500/24



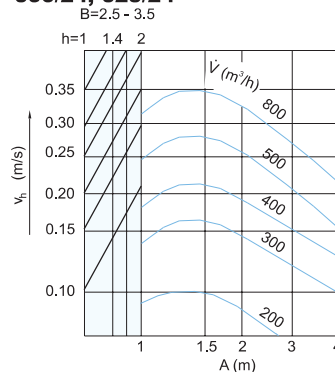
500/24



600/24, 625/24



600/24, 625/24



600/24, 625/24

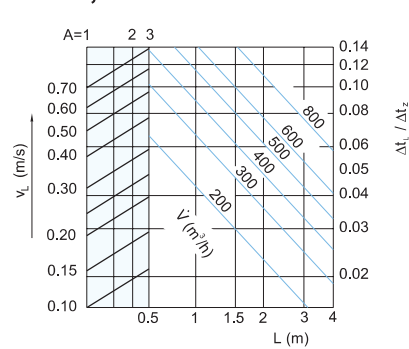
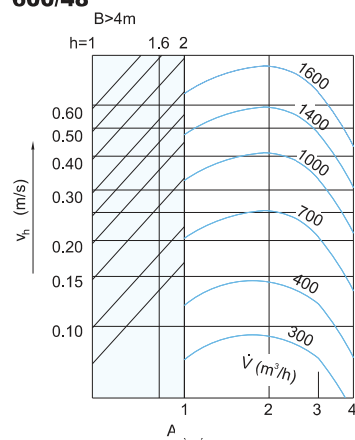
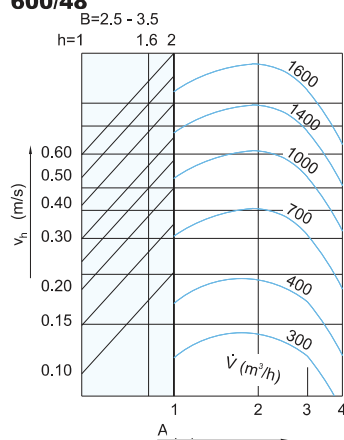


Diagram średniej prędkości strugi w odległości B, oraz diagram średniej prędkości strugi w funkcji różnicy temperatur DEV (625/48 - 825/72)

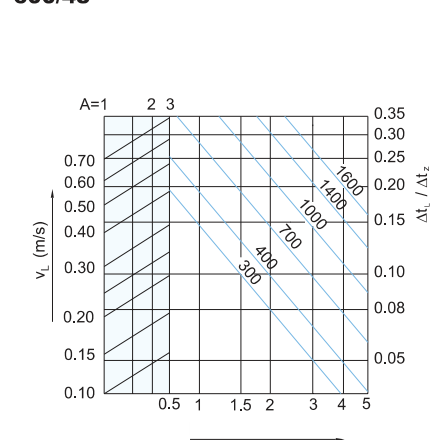
600/48



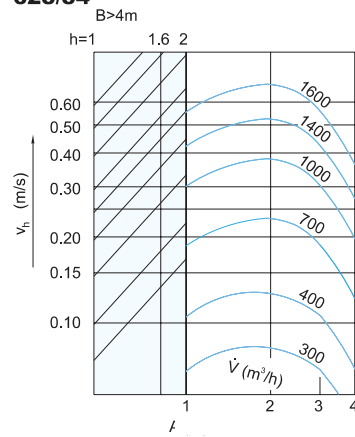
600/48



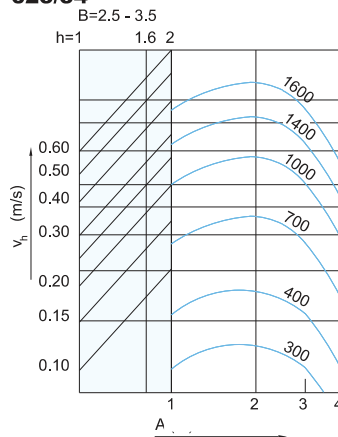
600/48



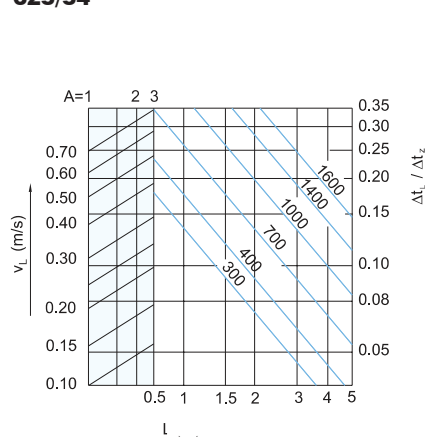
625/54



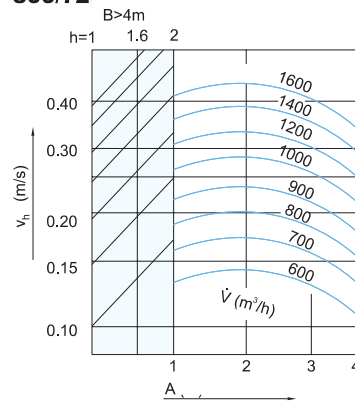
625/54



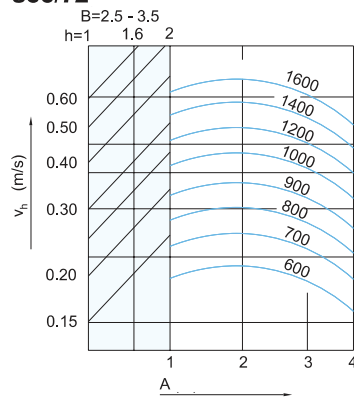
625/54



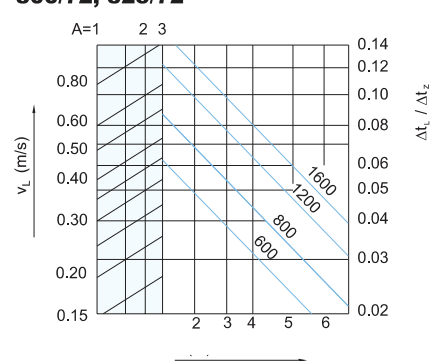
800/72



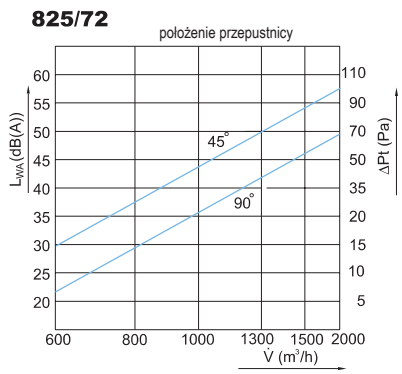
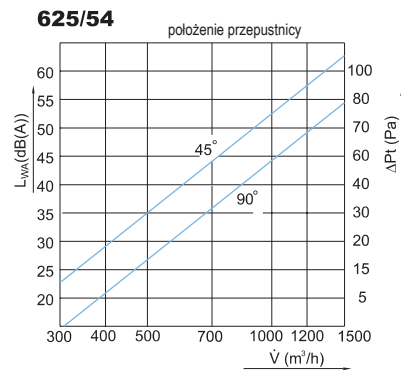
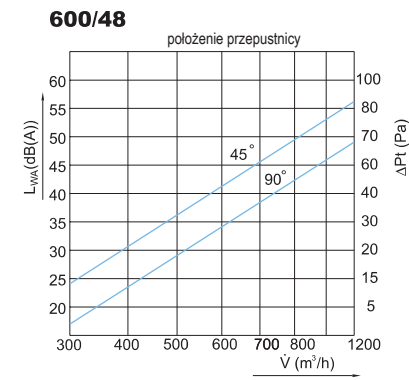
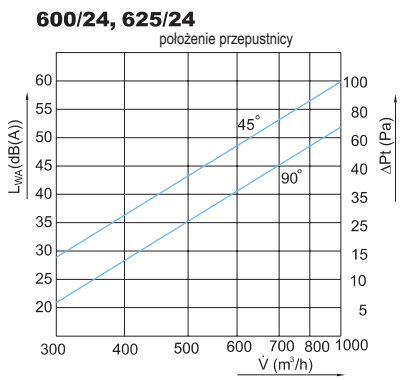
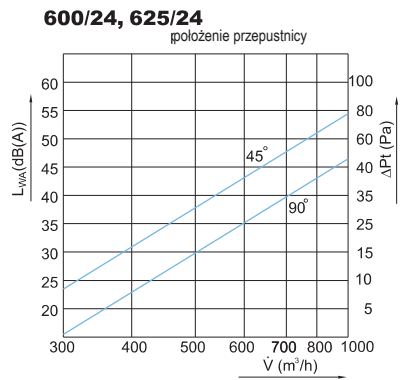
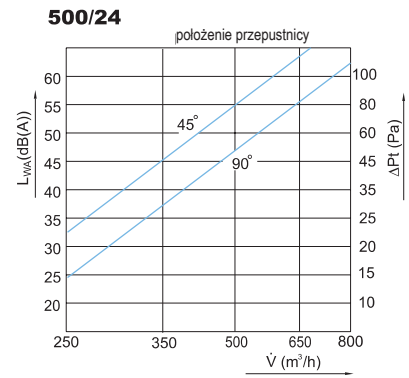
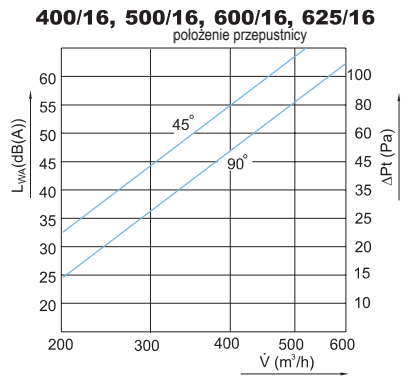
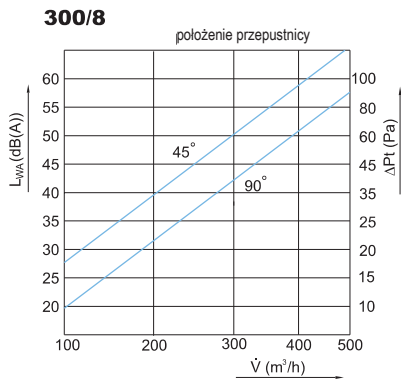
800/72



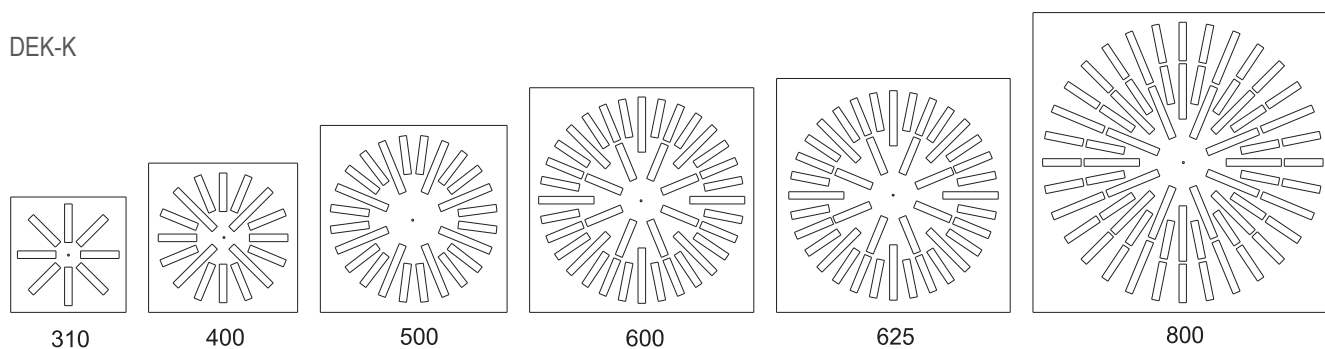
800/72, 825/72



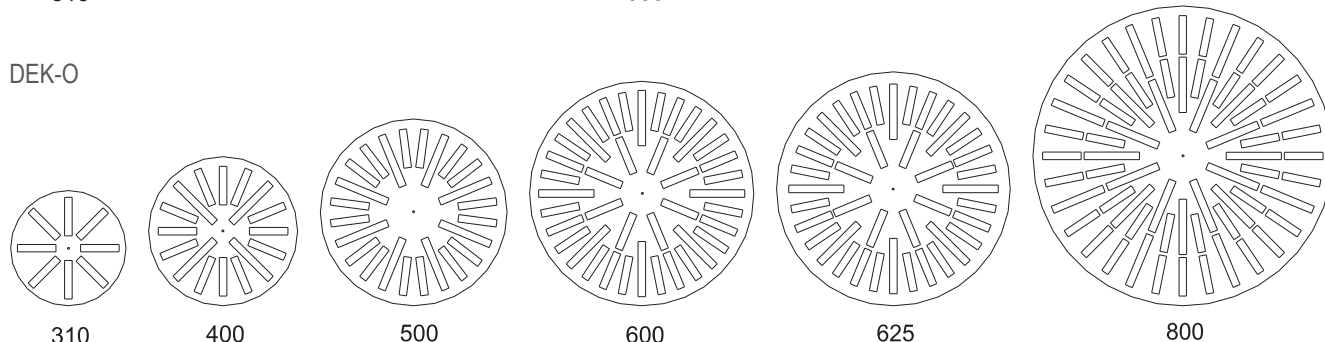
Diagramy straty ciśnienia i mocy akustycznej



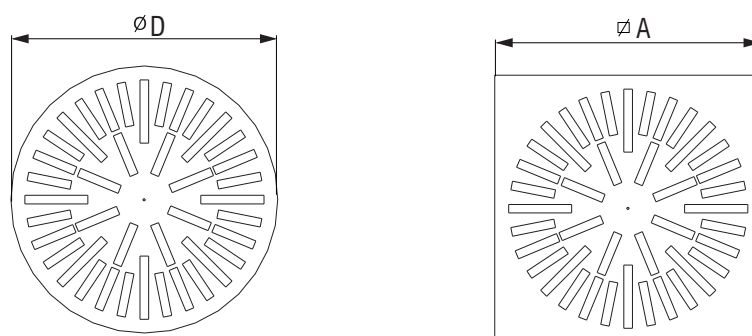
DEK-K



DEK-O



DEK	∅ A [mm]	∅ D [mm]	Liczba szczelin	A _{ef} [m²]	∅ d [mm]
310	308	308	8	0,012	158
400	398	398	16	0,0248	198
500	498	498	24	0,0392	248
600	595	595	40	0,0565	248
625	623	623	40	0,0565	248
800	798	798	64	0,0938	313



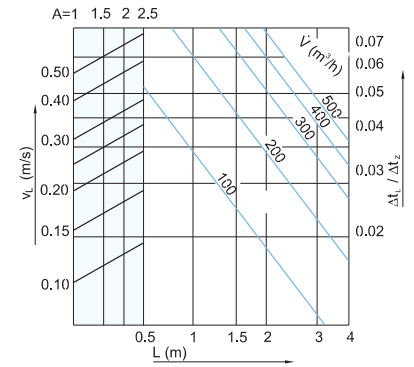
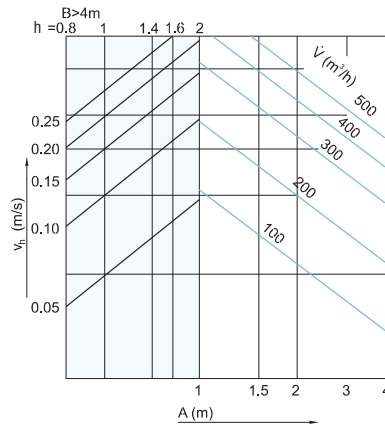
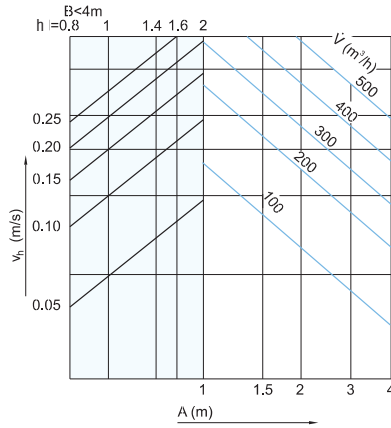
Klucz zamówienia:

Typ	DEK	- K	- 600/16	- B	- A	- H	- ∅d	- Z
K - maska kwadratowa								
O - maska okrągła								
Wielkość								
B - białe elementy nastawne								
C - czarne elementy nastawne								
A - nawiew								
B - wywiew								
H - króciec poziomy								
V - króciec pionowy								
Średnica króćca								
Izolacja								

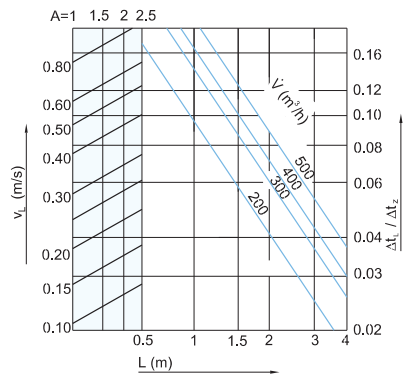
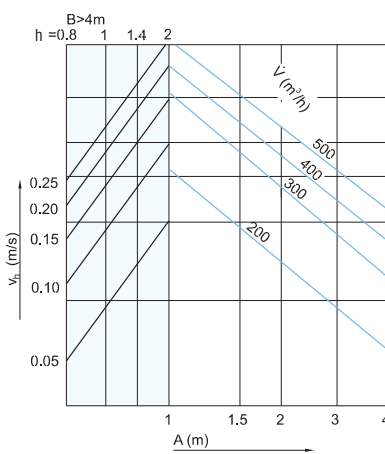
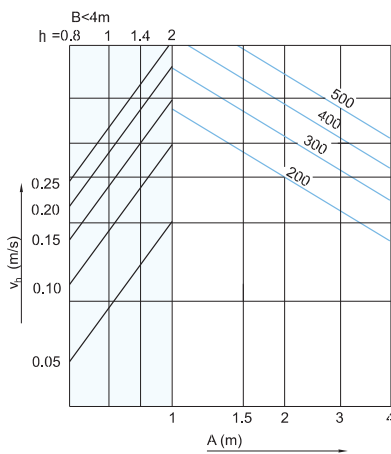
SELECTION DIAGRAMS FOR DEK-K AND DEK-O

Diagram średniej prędkości strugi w odległości B, oraz diagram średniej prędkości strugi w funkcji różnicy temperatur DEK (310 - 500)

310



400



500

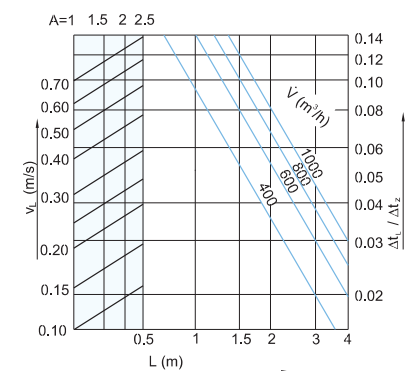
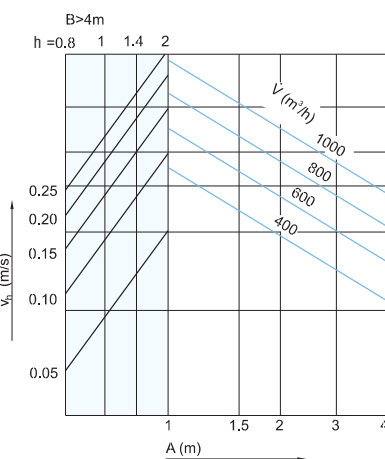
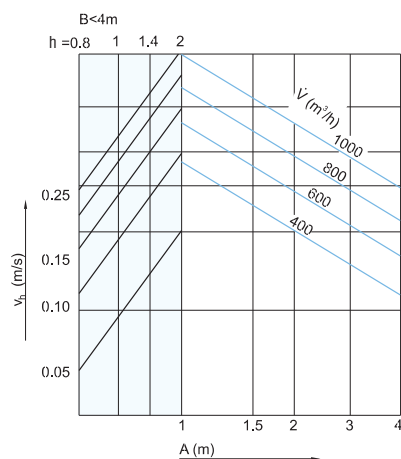
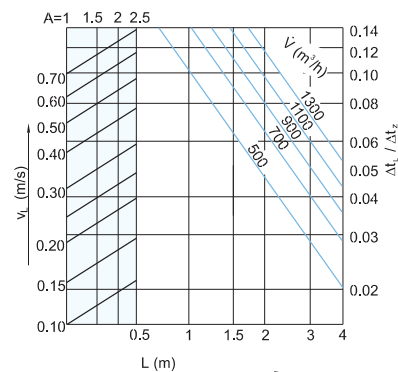
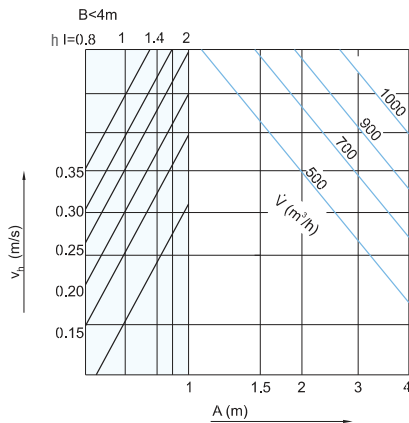
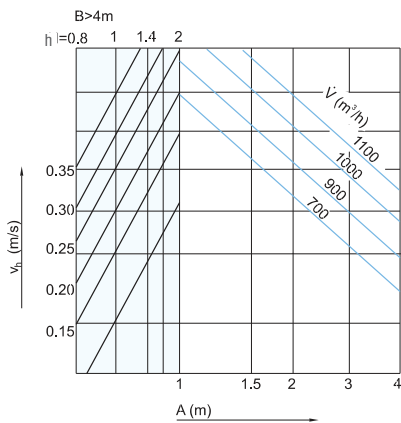
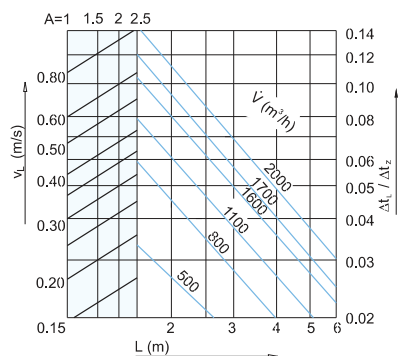
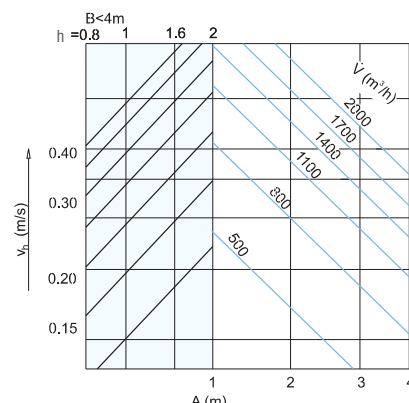
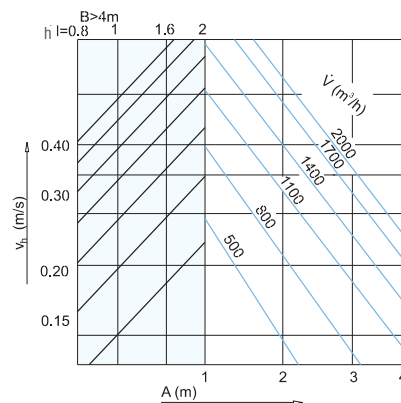


Diagram średniej prędkości strugi w odległości B, oraz diagram średniej prędkości strugi w funkcji różnicy temperatur DEK (600 - 800)

600,625

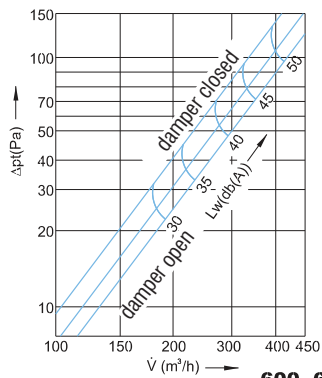


800

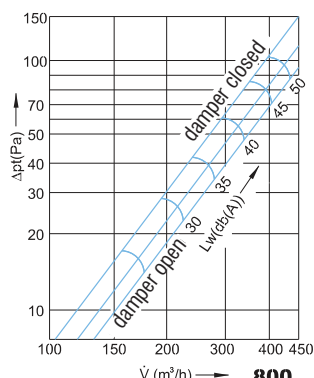


Diagramy straty ciśnienia i mocy akustycznej (dla nawiewnika ze skrzynką rozprężną)

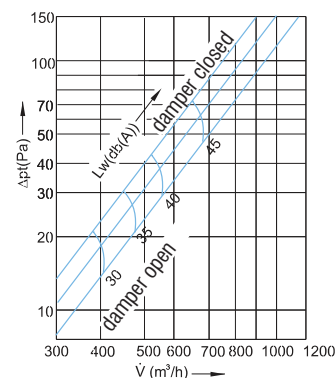
310



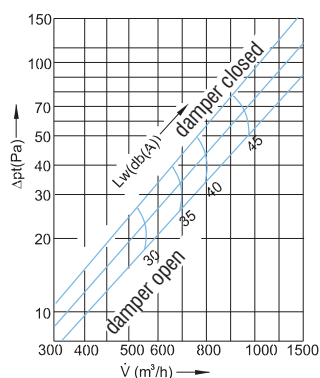
400



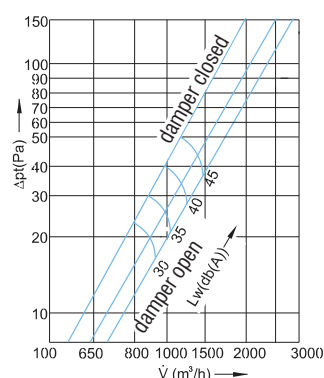
500



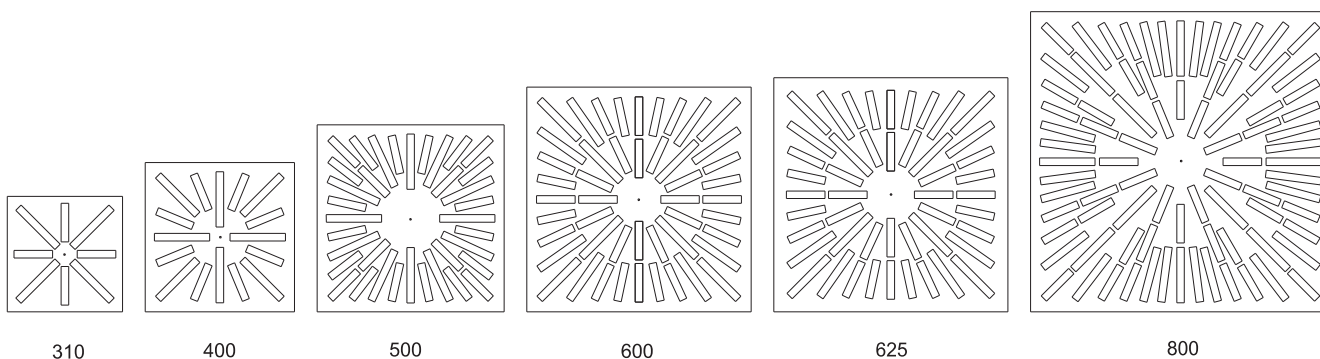
600, 625



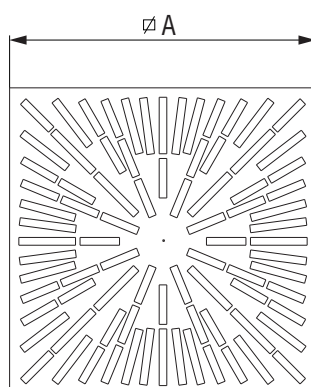
800



DEU



DEU	$\varnothing A$ [mm]	$\varnothing D$ [mm]	Liczba szczelin	A_{ef} [m ²]	$\varnothing d$ [mm]
310	308	-	8	0,0192	158
400	398	-	16	0,0248	198
500	498	-	36	0,0517	248
600	595	-	48	0,0718	248
625	623	-	48	0,0718	248
800	798	-	84	0,1359	313



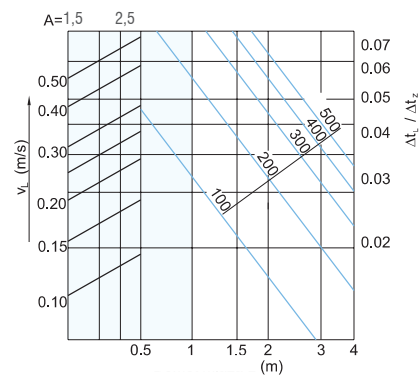
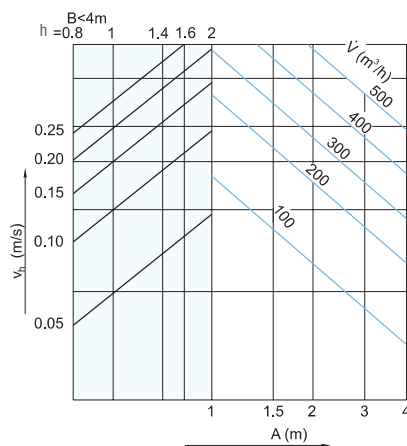
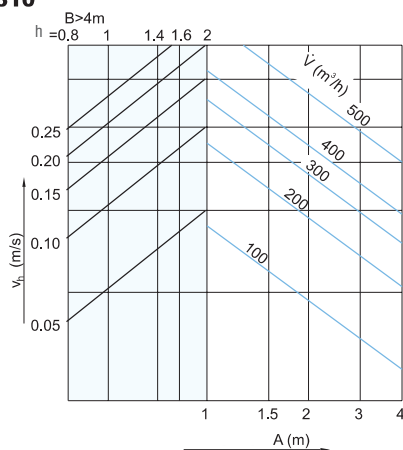
Klucz zamówienia:

Type **DEU - 600 - B - A - H - $\varnothing d$ - Z**
 Wielkość
 B - białe elementy nastawne
 C - czarne elementy nastawne
 A - nawiew
 B - wywiew
 H - króciec poziomy
 V - króciec pionowy
 Średnica króćca
 Izolacja

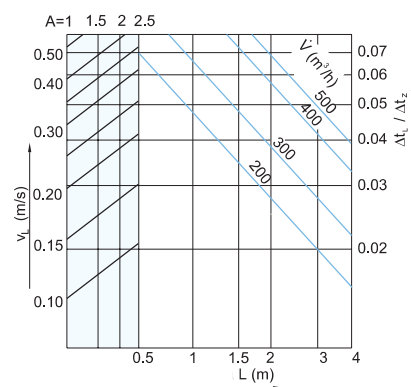
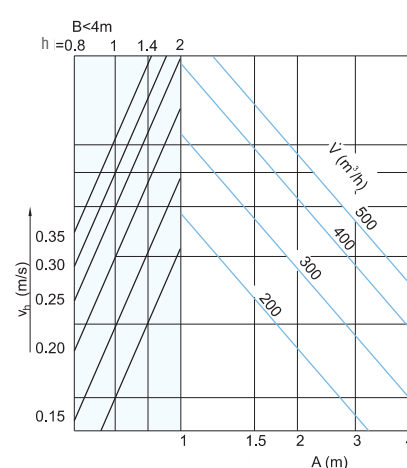
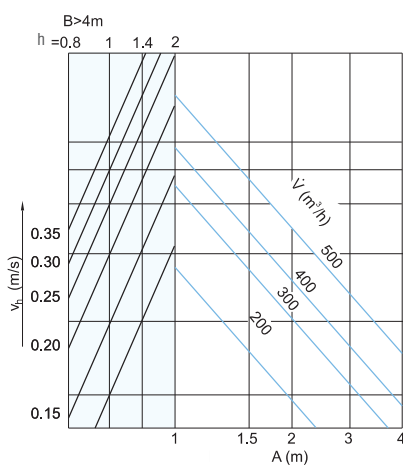
SELECTION DIAGRAM FOR DEU

Diagram średniej prędkości strugi w odległości B, oraz diagram średniej prędkości strugi w funkcji różnicy temperatur DEU (310 - 500)

310



400



500

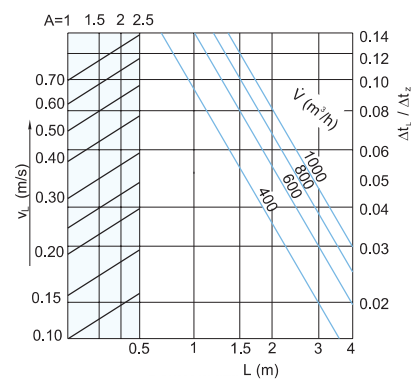
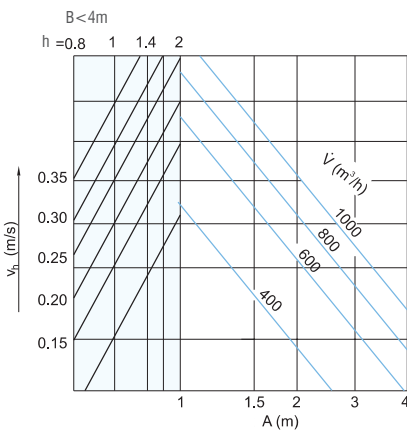
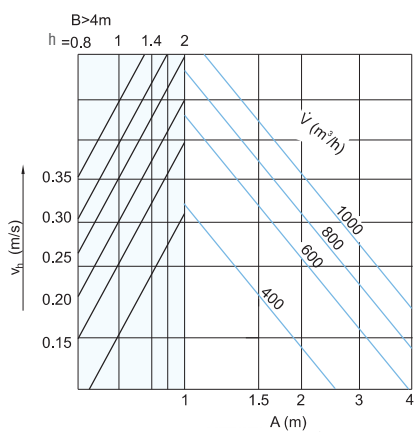
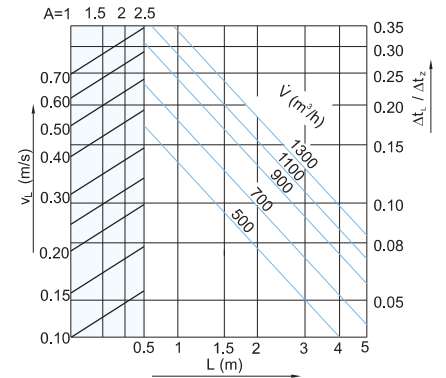
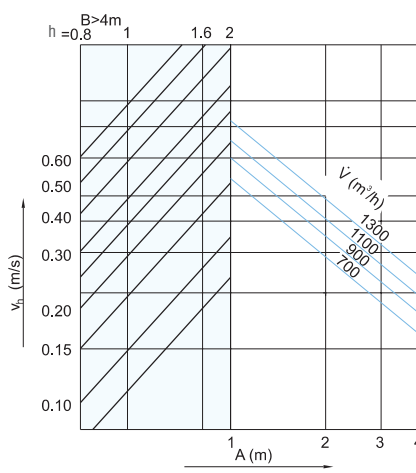
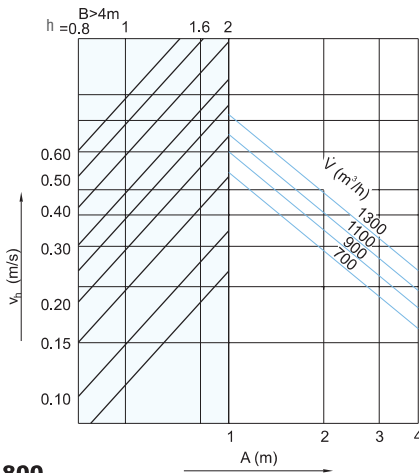
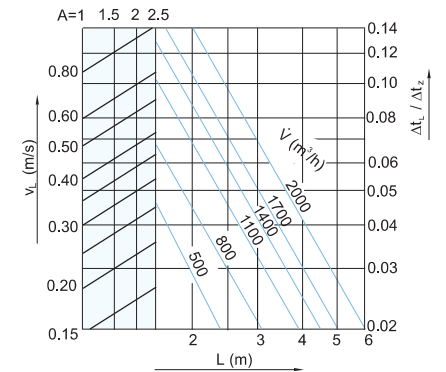
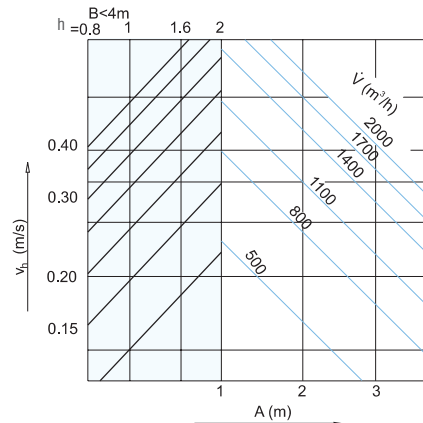
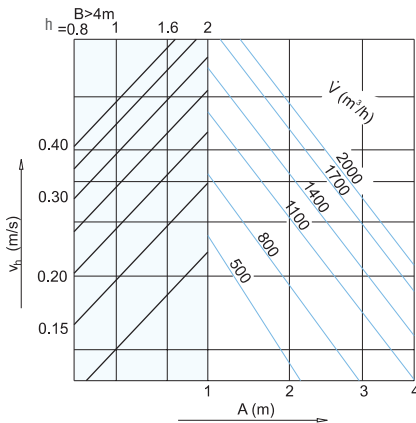


Diagram średniej prędkości strugi w odległości B, oraz diagram średniej prędkości strugi w funkcji różnicy temperatur DEU (600 - 800)

600, 625

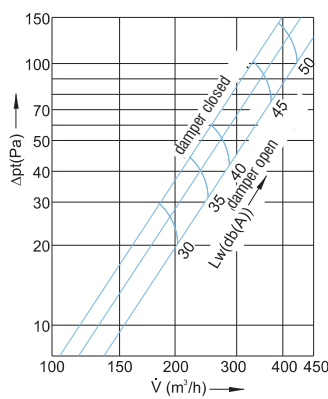


800

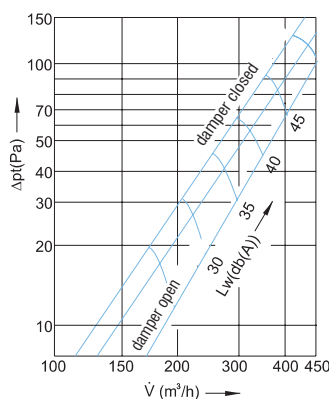


Diagramy straty ciśnienia i mocy akustycznej (dla nawiewnika ze skrzynką rozprężną)

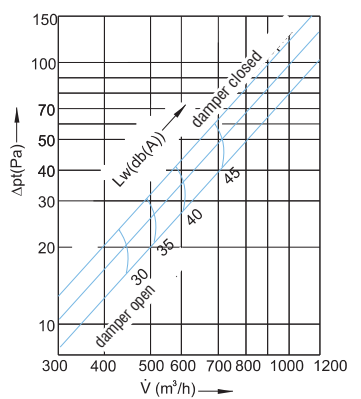
310



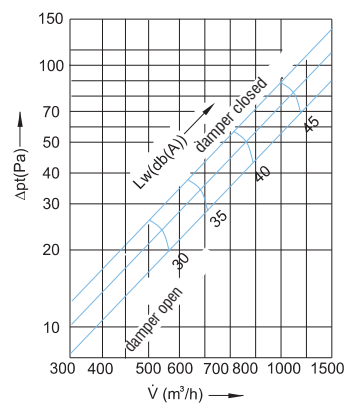
400



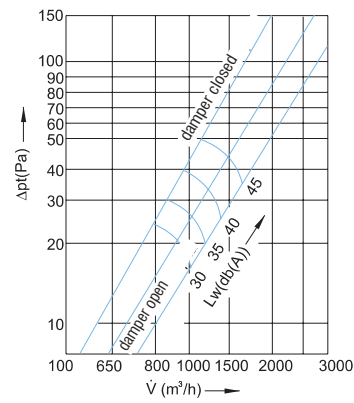
500



600, 625



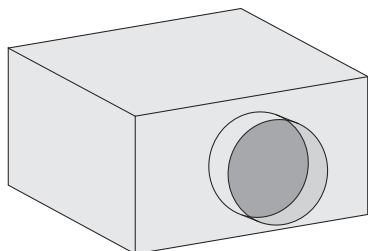
800



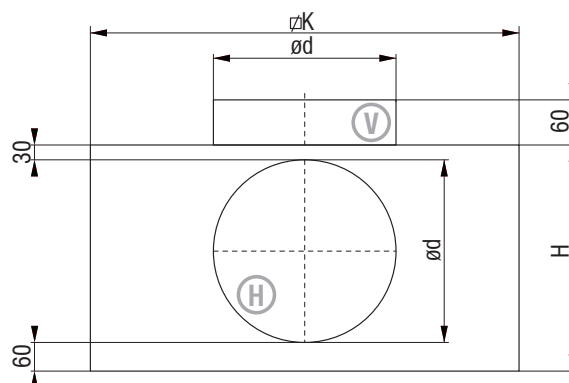
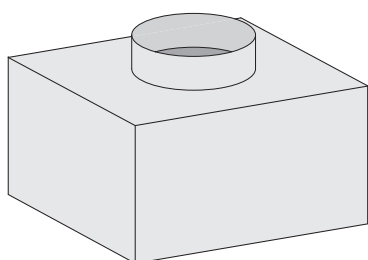
SKRZYNKI ROZPRĘŻNE

Skrzynka rozprężna UPK1

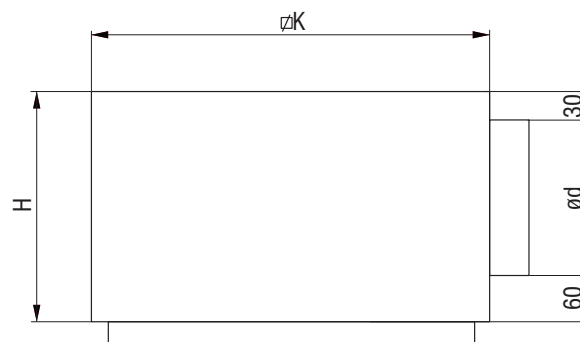
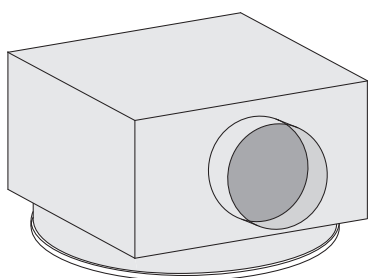
- króciec poziomy UPK1 - H



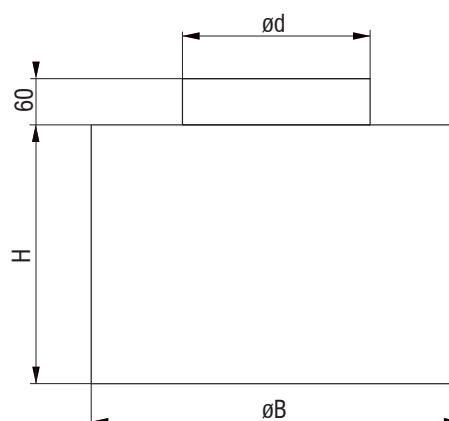
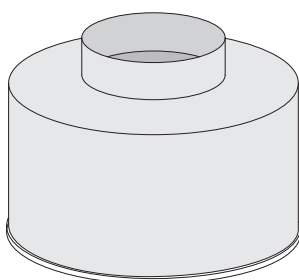
-króciec pionowy UPK1 - V



Skrzynka rozprężna do nawiewników okrągłych UPK2



Skrzynka rozprężna do nawiewników okrągłych UPK3



UPK1	$\varnothing K$ [mm]	H [mm]	$\varnothing d$ [mm]
300	284	250	158
310	294	250	158
400	384	290	198
500	484	290	198
600	590	340	248
625	615	340	248
800	790	405	313

UPK2	$\varnothing K$ [mm]	H [mm]	$\varnothing d$ [mm]
300	284	250	158
310	294	250	158
400	384	290	198
500	484	290	198
600	590	340	248
625	615	340	248
800	790	405	313

UPK3	$\varnothing B$ [mm]	H [mm]	$\varnothing d$ [mm]
300	284	200	158
310	294	200	158
400	384	200	198
500	484	200	198
600	590	200	248
625	615	200	248
800	790	300	313

Przykład:

Dane:

Typ DEV 300/8
 $A = 2 \text{ m}$
 $h = 1.6 \text{ m}$
 $L = 3 \text{ m}$
 $B > 4 \text{ m}$
 $V = 150 \text{ m}^3/\text{h}$

Dobór:

Z diagramu str. 93

$v_h = 0.07 \text{ m/s}$

$v_L = 0.13 \text{ m/s}$

Z diagramu str. 95

Otwarcie przepustnicy 45%

$\rho = 24 \text{ Pa}$

$L_{WA} = 34 \text{ dB (A)}$

