

DVE-4



Characteristics

Variable geometry diffusers.

Material

Casing in aluminium, blades in steel with simultaneously movable.

Finish

White epoxy powder paint RAL 9010.

Fixing

Fixing by screws located on the diffuser's neck.

Models

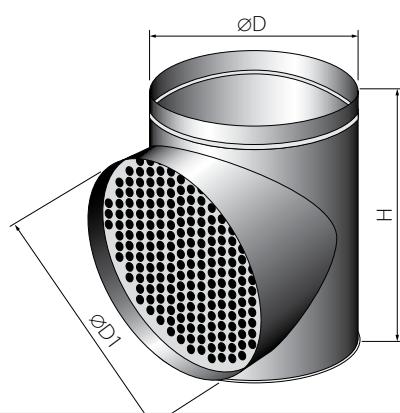
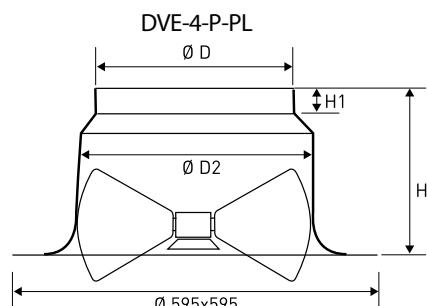
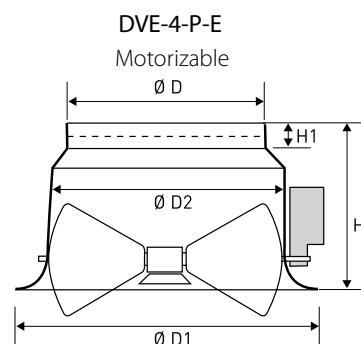
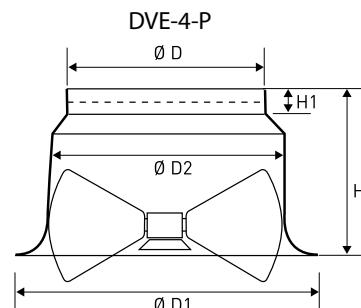
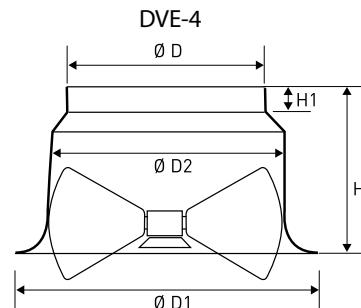
DVE-4: diffuser with manually and simultaneously movable blades.

DVE-4-P: diffuser with manually and simultaneously movable blades, with equalizer.

DVE-4-P-E: diffuser with simultaneously movable blades by motor drive, with equalizer.

DVE-4-P-PL: diffuser with manually and simultaneously movable blades, with equalizer, made on 595x595 panel.

DVE-4-T: diffuser with thermostatic actuator.



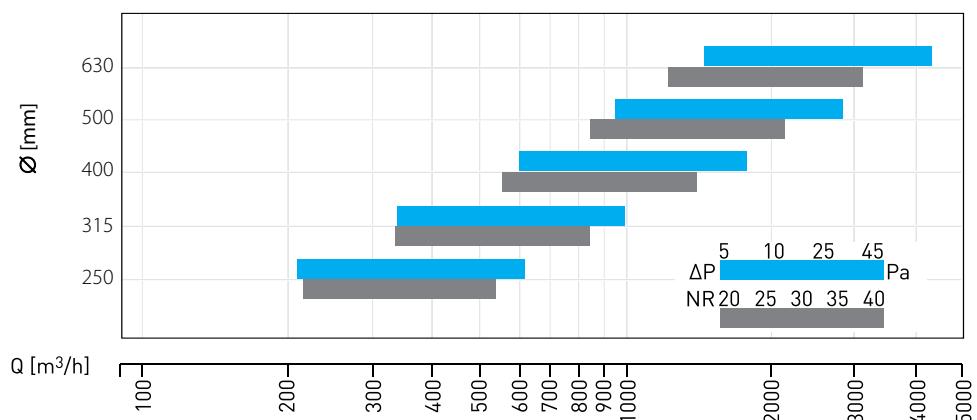
Dimensions Ø mm

$\varnothing = 250 \ 315 \ 400 \ 500 \ 630$

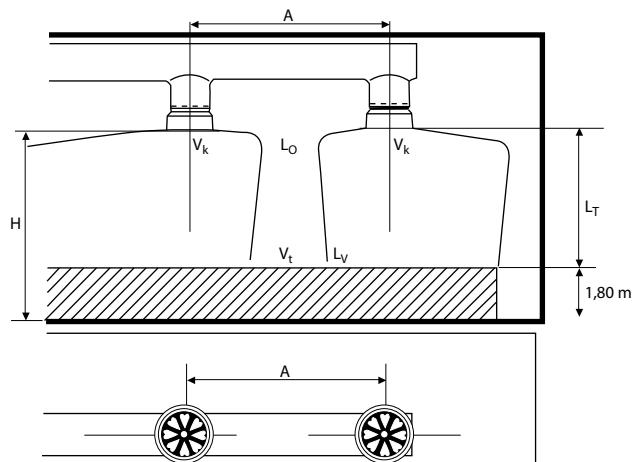
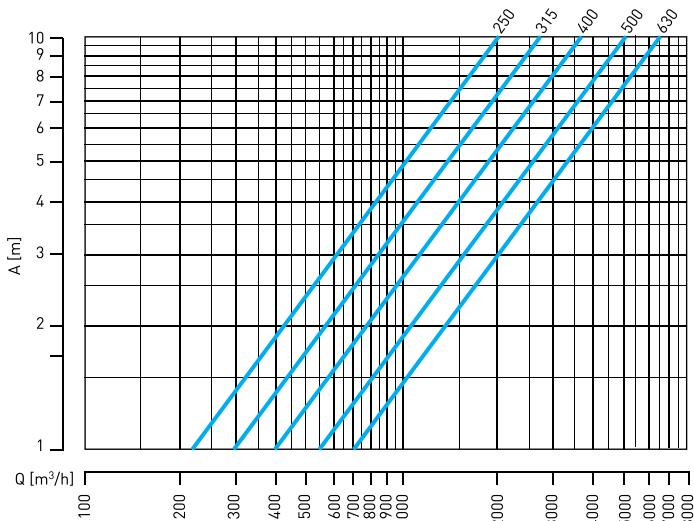
\varnothing	DVE-3				
	$\varnothing D$	$\varnothing D1$	$\varnothing D2$	H	$H1$
250	248	400	315	200	40
315	313	475	375	235	40
400	398	600	460	260	50
500	498	785	570	315	60
630	628	920	700	320	80

SYMBOL	DESCRIPTION
Q	Air flow (m^3/s or m^3/h)
NR	Sound level
DP	Pressure drop (Pa)
V_k	Air delivery velocity (m/s)
A	Distance between diffusers (m)
H	Height (m)
H_o	Height – Occupation zone (1,80 m)
V_t	Air delivery velocity (m/s)
L_o	Throw horizontal (m)
L_v	Throw vertical (m)
L_t	L_v (Throw) on $V_t = 0,20 \text{ m/s}$
Δt	Difference between the supply air temp. and room air temp.
α	Blades - tilt

Quick selection diagram



Distance between diffusers



Ordering key

DVE-4 - E - P - PL / 315

Size

Platte [595 x 595 mm]

Perforated sheet

- Manual operation

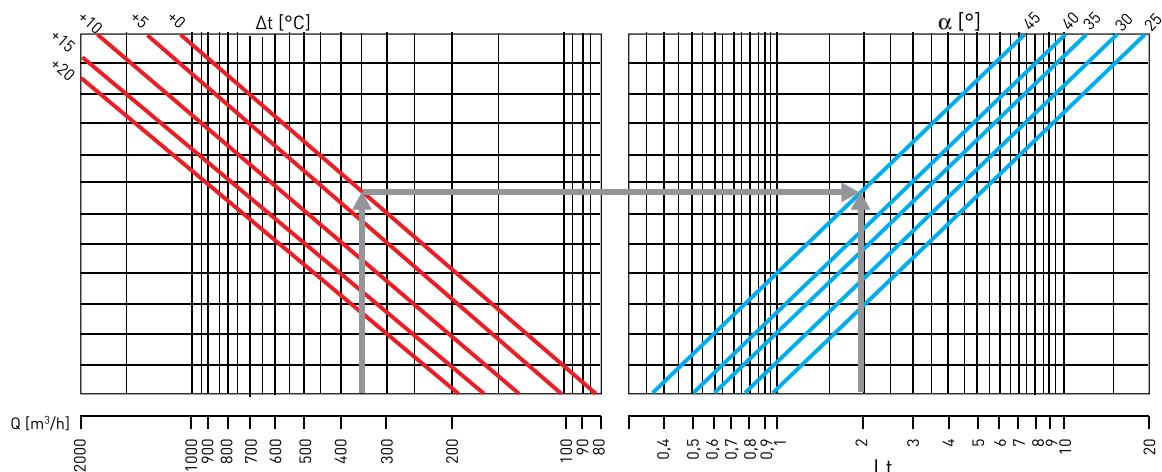
E - Prepared for drive

T - Thermostatic regulation

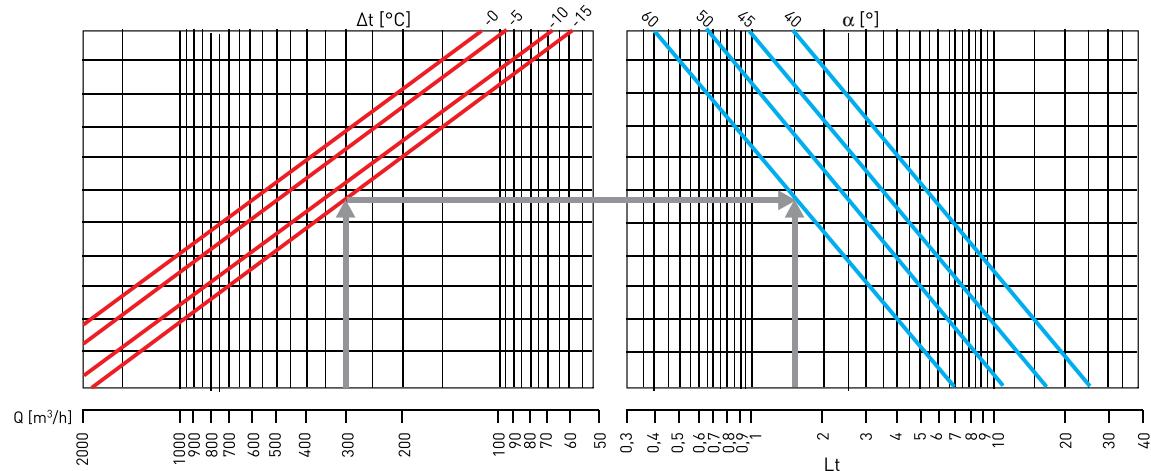
Variable diffuser

Ordering key

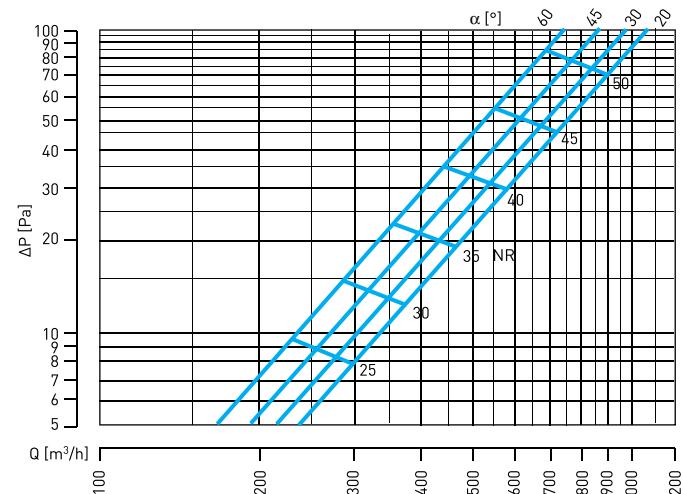
Throw – heating – DVE-4 Ø 250



Throw – heating – DVE-4 Ø 250

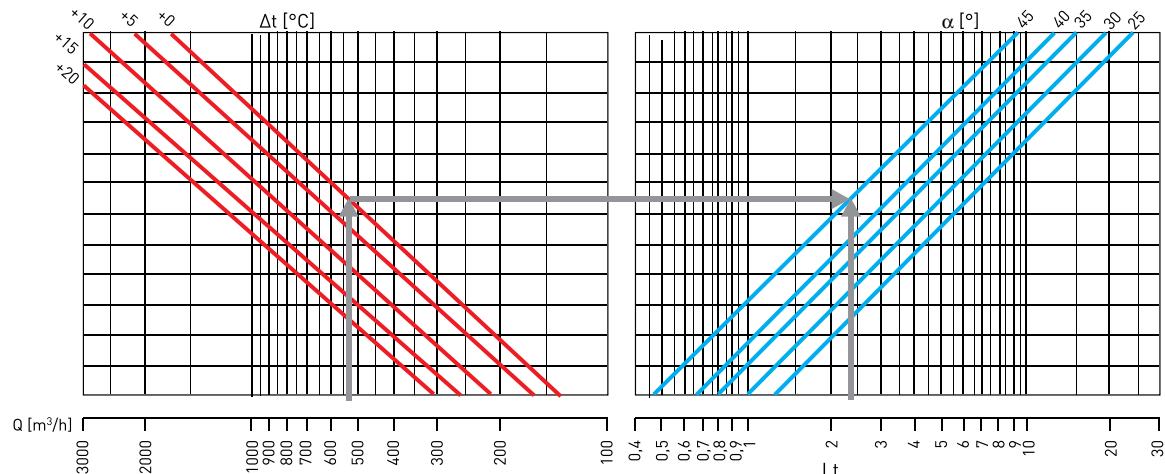


Pressure drop and noise level – DVE-4 Ø 250

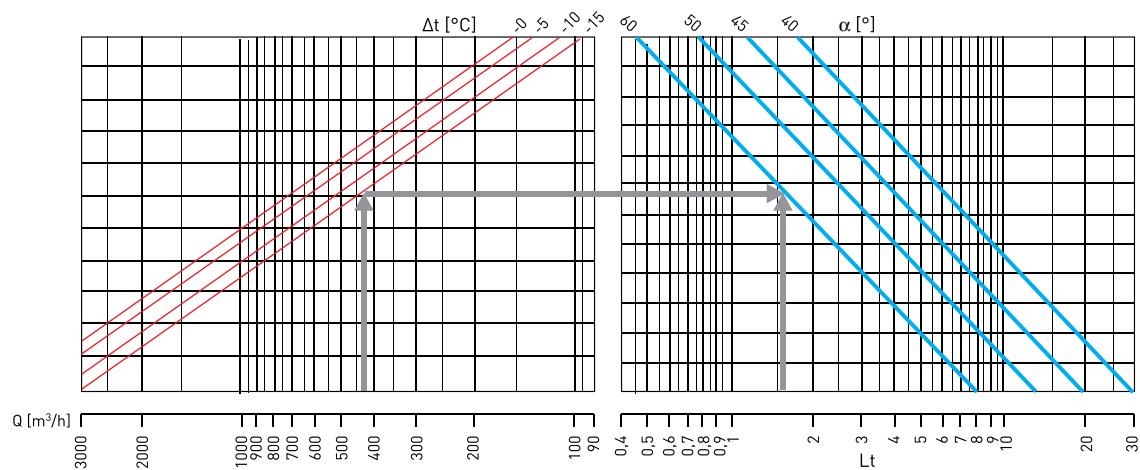


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V_k	Air delivery velocity (m/s)
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H_o	Height – Occupation zone ($1,80 \text{ m}$)
V_t	Air delivery velocity (m/s)
L_o	Throw horizontal (m)
L_v	Throw vertical (m)
L_t	L_v (Throw)) on $V_t = 0,20 \text{ m}/\text{s}$
Δt	Difference between the supply air temp. and room air temp.
α	Blades - tilt

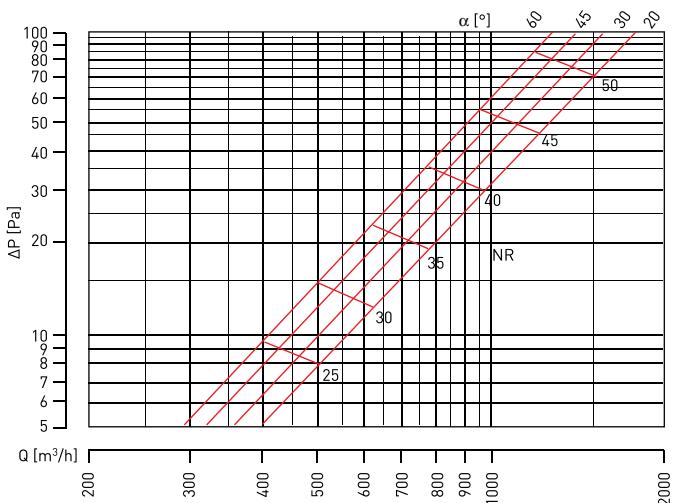
Throw – cooling – DVE-4 Ø 315



Throw – cooling – DVE-4 Ø 315

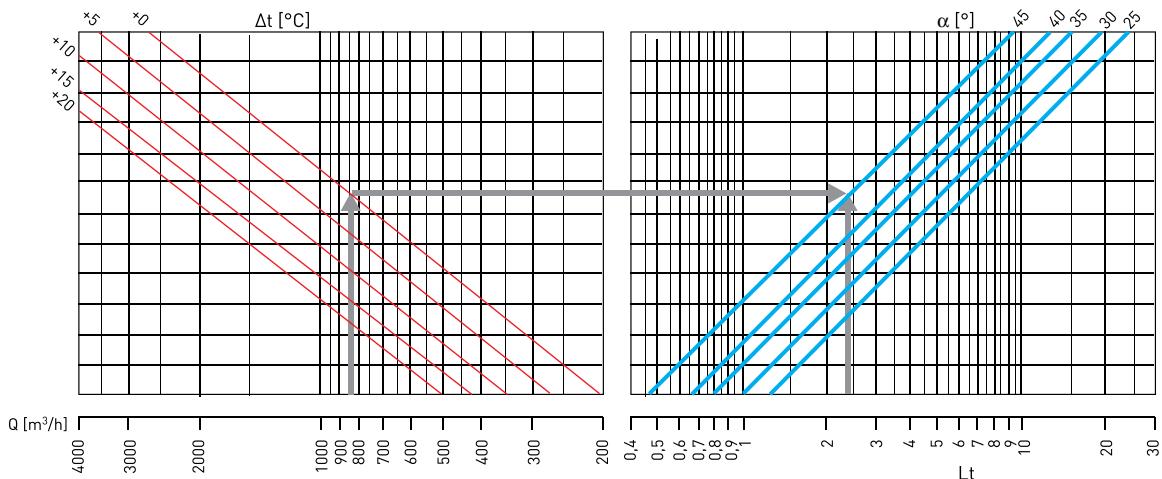


Pressure drop and noise level – DVE-4 Ø 315

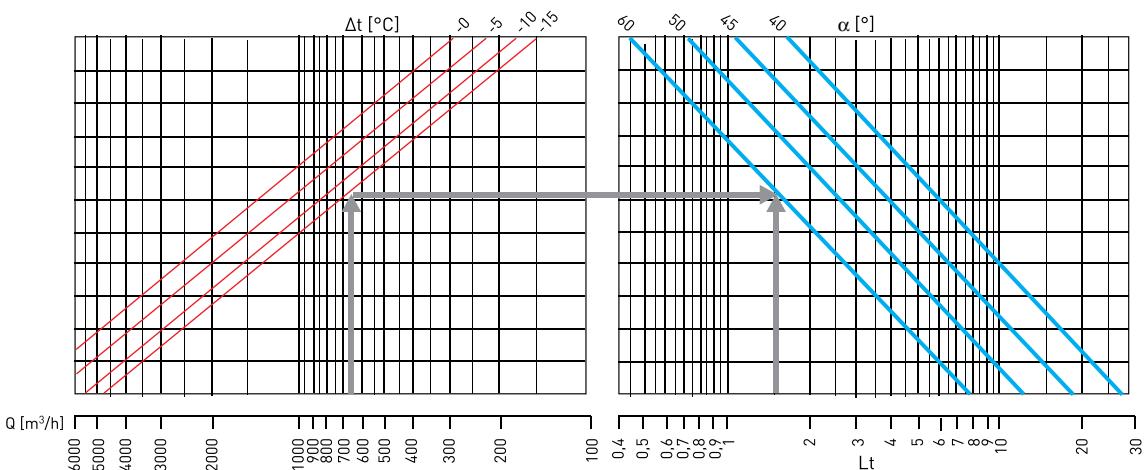


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Δt	Difference between the supply air temp. and room air temp.
α	Blades - tilt

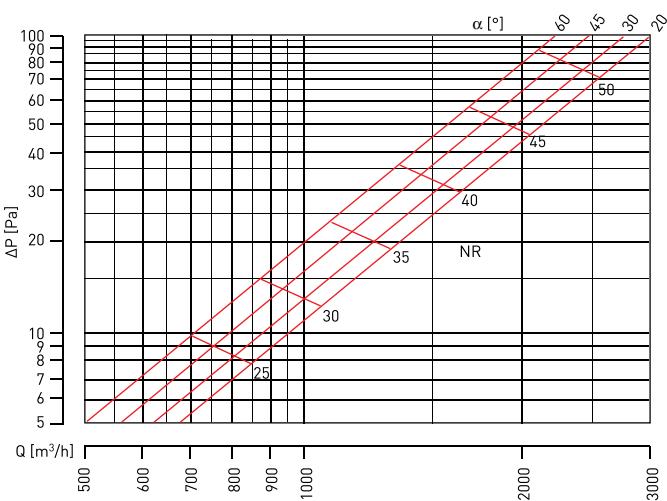
Throw – heating – DVE-4 Ø 400



Throw – cooling – DVE-4 Ø 400

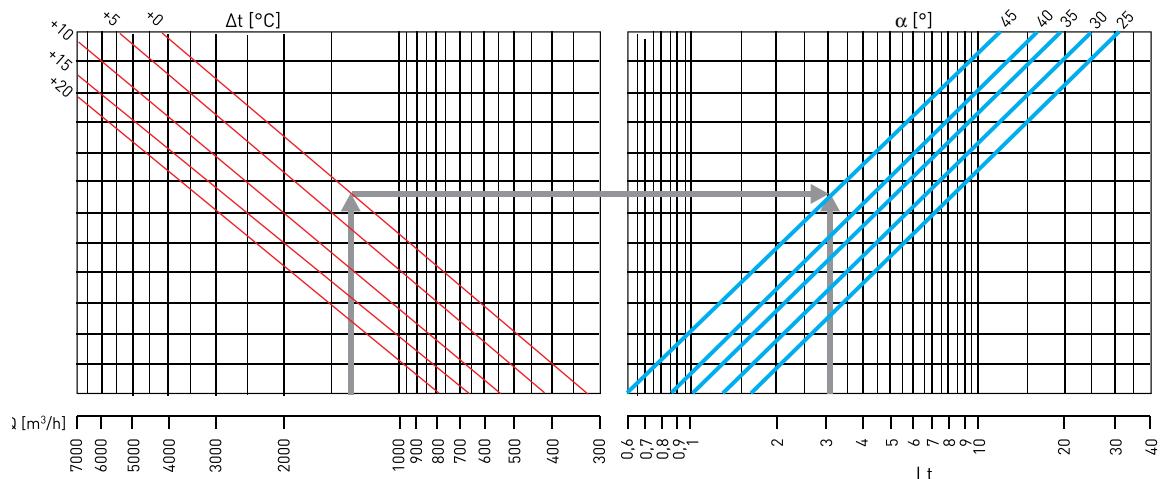


Pressure drop and noise level – DVE-4 Ø 400

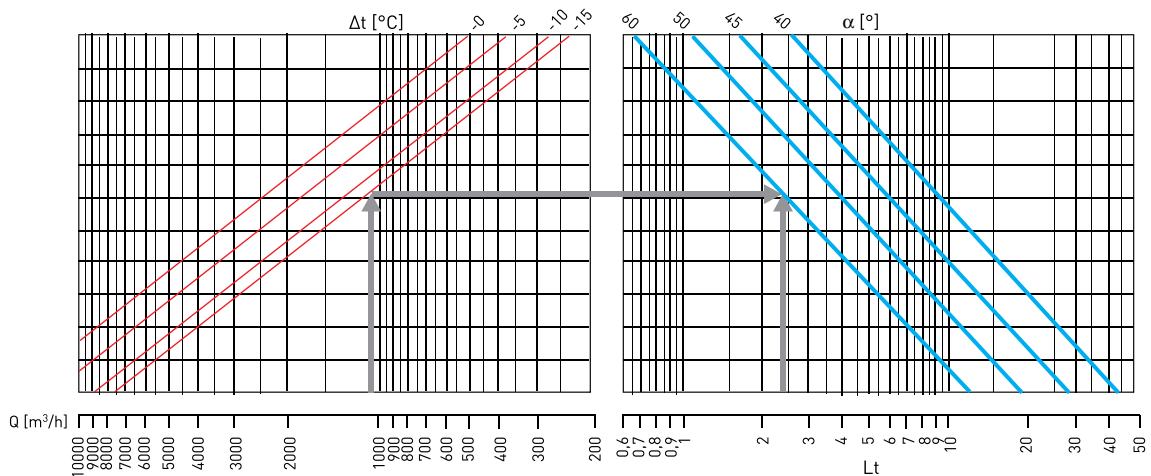


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Δt	Difference between the supply air temp. and room air temp.
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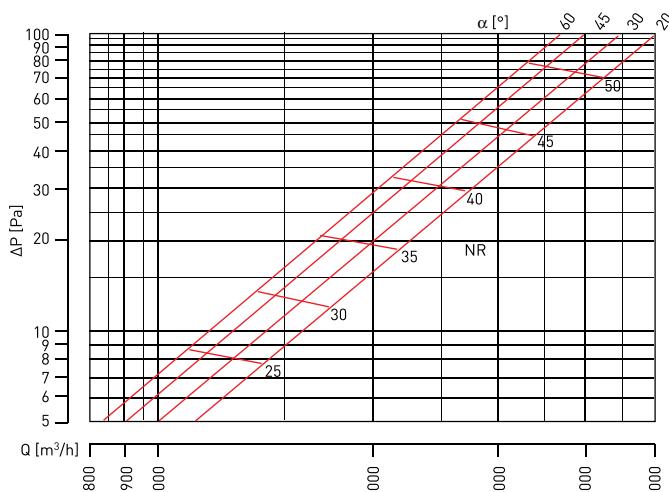
Throw – heating – DVE-4 Ø 500



Throw – cooling – DVE-4 Ø 500

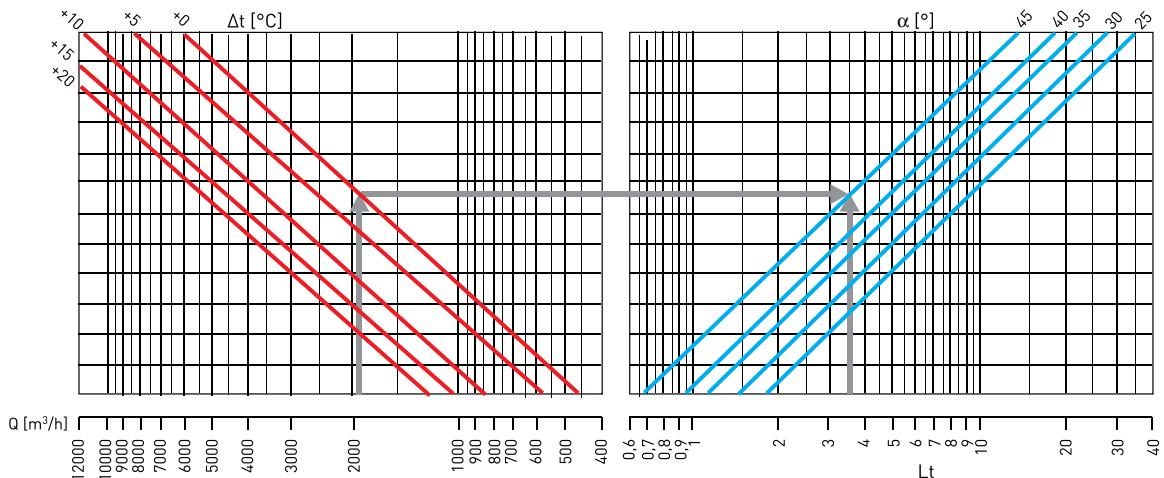


Pressure drop and noise level – DVE-4 Ø 500

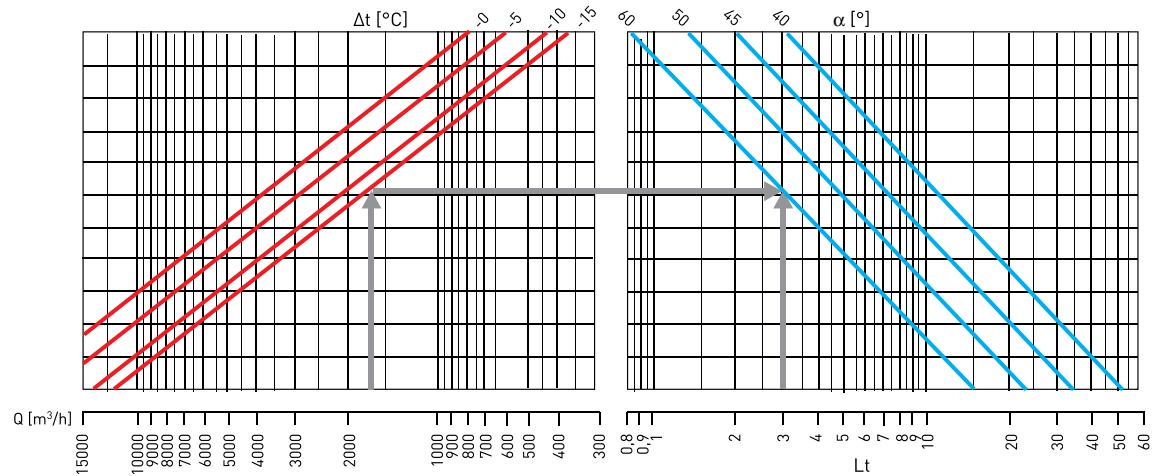


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L_t	L_v (Throw)) on $V_t = 0,20$ m/s
Δt	Difference between the supply air temp. and room air temp.
α	Blades - tilt

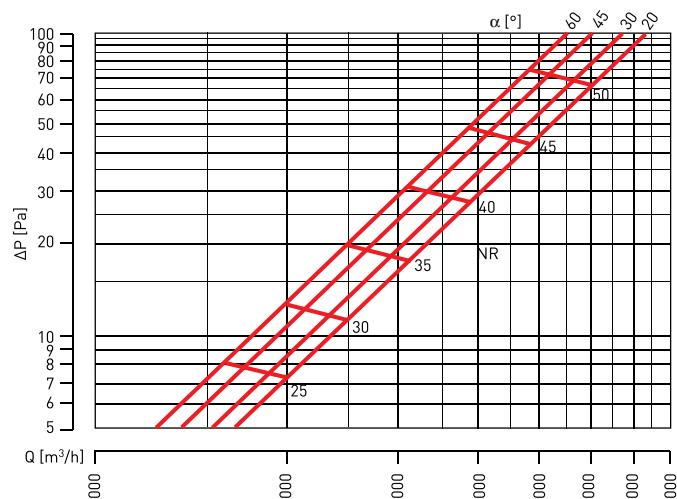
Throw – heating – DVE-4 Ø 630



Throw – cooling – DVE-4 Ø 630

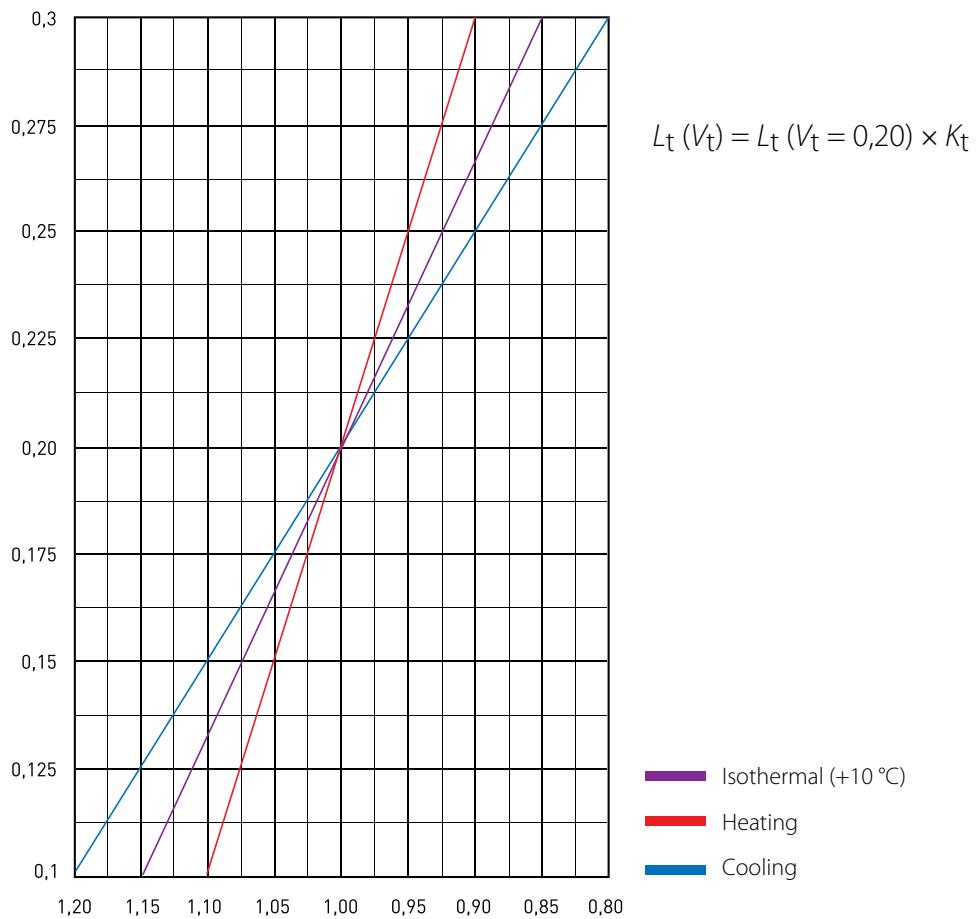


Pressure drop and noise level – DVE-4 Ø 630



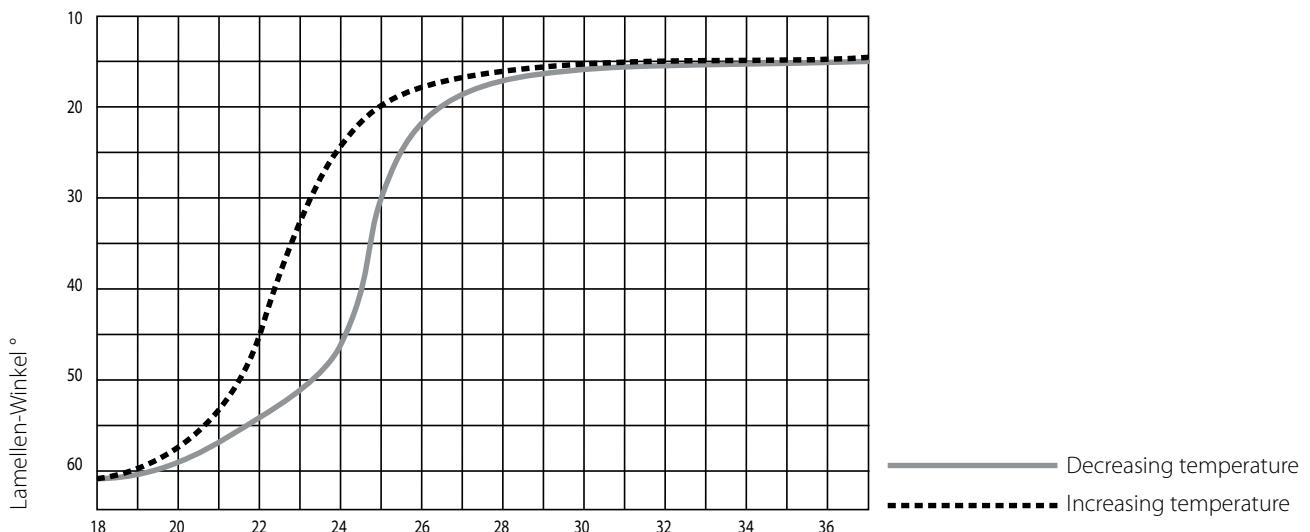
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Δt	Difference between the supply air temp. and room air temp.
α	Blades – tilt

Correction KT for LT



Thermostatic regulation

Diagram below shows how the angle of blades depends on temperature.



Thermal actuator feels temperature and adjusts angle of the blades automatically. Temperature range is from 18 °C to 36 °C. Additional source of energy and electric installation is unnecessary.