



# Lindab **RCWB**

Swirl diffuser



# Swirl diffuser

# RCWB



## Description

RCWB is a swirl diffuser (RCW) with integral box, particularly suitable for rooms with a high ceiling. The diffuser is equipped with adjustable blades, so the supply air pattern can be changed from vertical to horizontal. The blade settings can be adjusted manually, or the function can be automated using various types of motor. The blade settings can be adjusted manually, or the function can be automated using two types of motors (electric modulating or electric on/off) or a thermal actuator.

RCWB-0 (manual) is supplied with a blade setting of 30° (horizontal) as standard.

RCWB-1 (modulating motor) can vary the blade setting between 30° to 75°, where 30° blade setting provides horizontal dispersal pattern, and 45° to 75° provides vertical dispersal patterns with different air throws.

RCWB-2 (on/off motor) switches the blade settings between 30° (horizontal) and 75° (vertical) as standard.

RCWB-3 (thermal actuator) is changing between 30° (horizontal) and 75° (vertical) depending on the supply air temperature.

- Suitable for both cooling and heating
- Horizontal and vertical dispersal pattern
- High induction

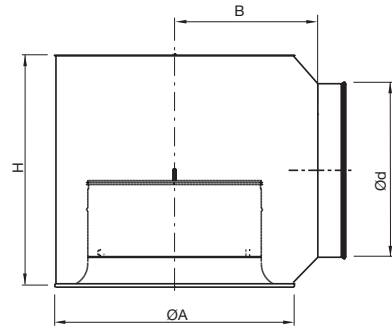
## Maintenance

The visible parts of the diffuser can be wiped with a damp cloth. For other maintenance, see installation instructions.

## Order code

Product	RCWB	a	bbb	c	A
Type					
Manual	0				
Motorized - modulating	1				
Motorized- on/off	2				
Thermal actuator	3				
Galvanised box	0				
Box RAL 9010	1				
Size					
Version					

## Dimensions



Ød Size	ØA mm	H mm	B mm	Weight* kg
250	360	415	250	5.70
315	460	480	300	8.20
400	560	570	350	11.80
500	670	670	412	17.20
630	870	800	500	25.70

\* Motorized models weigh approx. 1 kg more than the weight stated in the table above.

## Motortype

RCWB-1 Ød	Motor
315-400	NM24A-MF-F
500-630	LH24A-MF60

RCWB-2 Ød	Motor
250-400	NM24A-F
500-630	LH24A60

## Materials and finish

Material: Aluminium & steel  
 Standard finish: Powder-coated  
 Standard colour: RAL 9003 or 9010 Gloss 30  
 Box: Hot-galvanised steel

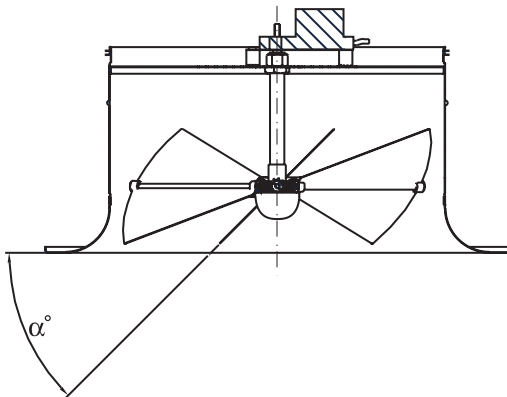
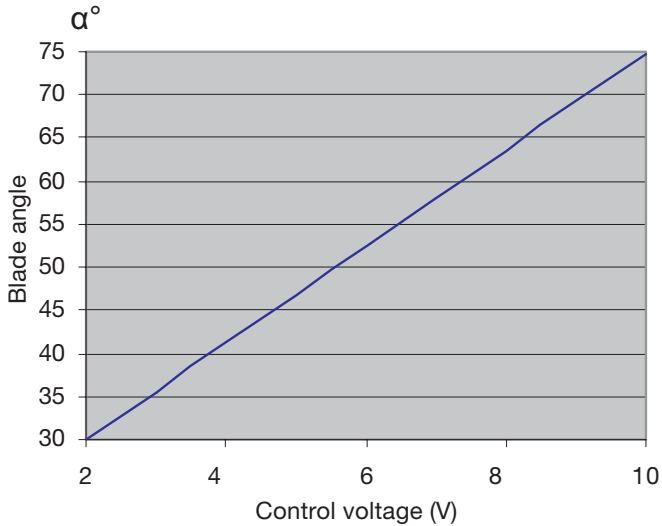
Available in other colours. Please contact Lindab's sales department for further information.

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## Technical data

### RCWB with electric modulating motor



### RCWB with thermal actuator

To achieve horizontal dispersal pattern keep supply temperature at the diffuser below 17°C for minimum 15 minutes.  
 To achieve vertical dispersal pattern keep supply temperature above 26°C for minimum 15 minutes.

## Capacity

Volume flow  $q_v$  [l/s] and [m<sup>3</sup>/h], total pressure  $\Delta p_t$  [Pa], throw  $l_{0.2}$  [m] and sound power level  $L_{WA}$  [dB(A)] can be seen in the diagrams.

### Throw $l_{0.2}$ / turning point $l_{0.0}$

Throw  $l_{0.2}$ [m] can be seen in the diagrams for isothermal air at a speed of 0.2 m/s. Turning point  $l_{0.0}$  [m] can be seen in the diagrams for heated air, +5 K, +10 K and +15 K respectively.

### Frequency-related sound effect level

The sound effect level in the frequency band is defined as  $L_{WA}+K_{ok}$ .  $K_{ok}$  values are specified in charts beneath the diagrams on the following pages.

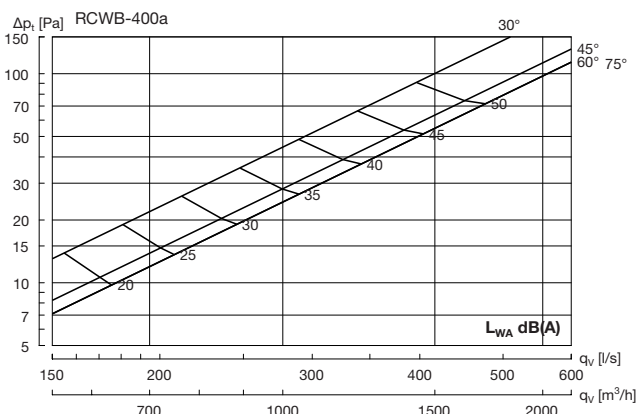
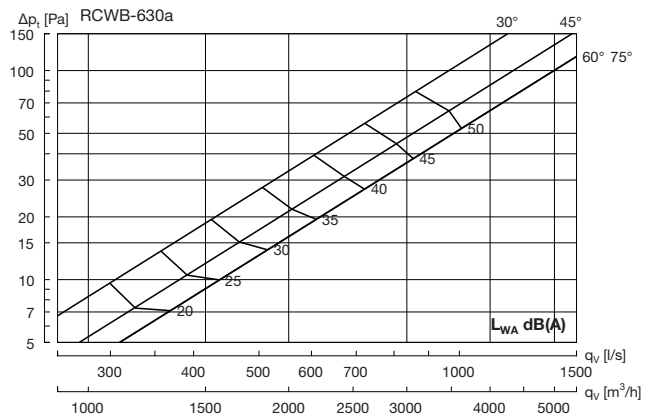
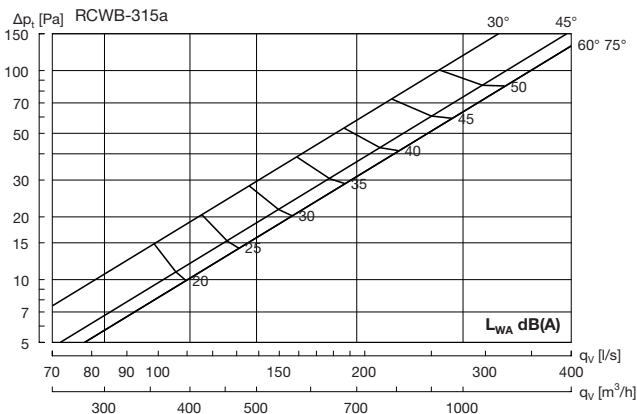
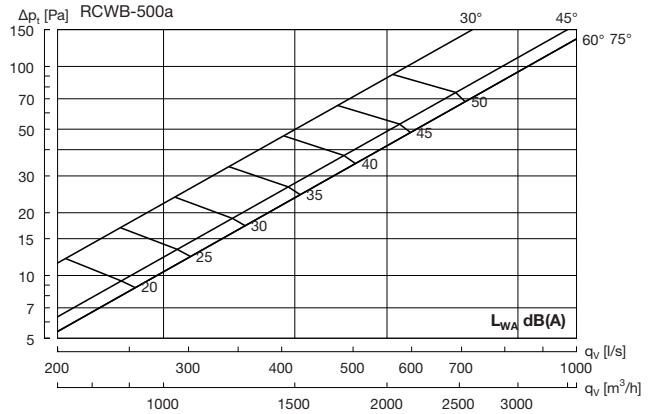
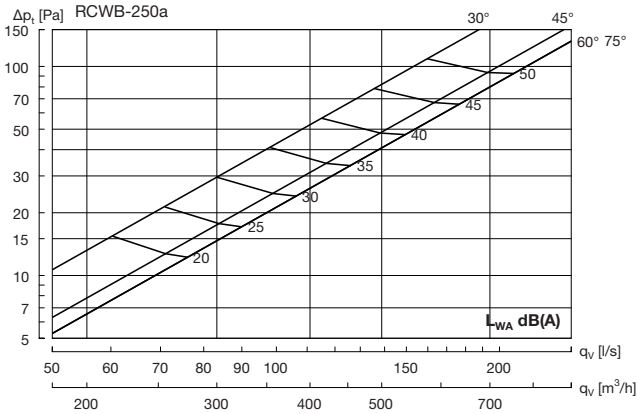
## Quick selection

Size	Angle	$q_v$ l/s	$q_v$ m <sup>3</sup> /h	$P_t$ Pa	$l_{0.2}$ isoterm m	$l_{0.0}$ +10K m
<b><math>L_{WA} = 40</math></b>						
250	30°	115	415	57	8	
250	75°	115	415	28		4
315	30°	187	672	53	5	
315	75°	187	672	29		5
400	30°	290	1043	49	4	
400	75°	290	1043	27		5
500	30°	403	1451	47	4	
500	75°	403	1451	22		4
630	30°	605	2178	39	5	
630	75°	605	2178	19		5
<b><math>L_{WA} = 50</math></b>						
250	30°	160	575	108	11	
250	75°	160	575	54		5
315	30°	257	924	101	6	
315	75°	257	924	54		7
400	30°	397	1428	91	6	
400	75°	397	1428	50		7
500	30°	565	2034	91	6	
500	75°	565	2034	43		6
630	30°	861	3098	80	7	
630	75°	861	3098	39		7
<b><math>L_{WA} = 60</math></b>						
250	30°	221	796	208	15	
250	75°	221	796	103		7
315	30°	353	1271	190	8	
315	75°	353	1271	103		9
400	30°	543	1954	170	8	
400	75°	543	1954	93		9
500	30°	792	2851	180	8	
500	75°	792	2851	85		8
630	30°	1224	4407	161	9	
630	75°	1224	4407	78		10

# Swirl diffuser

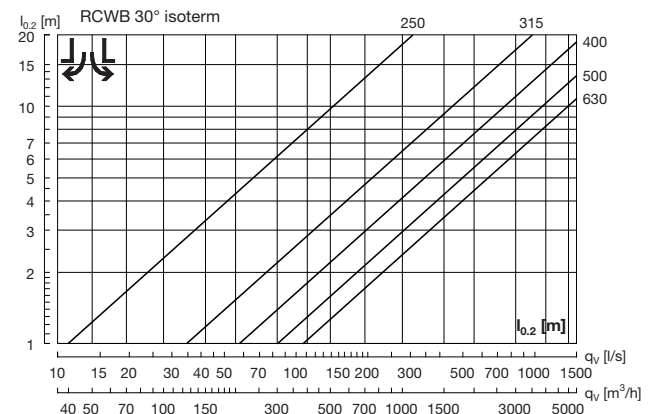
# RCWB

## Technical data



## Throw $l_{0.2}$ horizontal

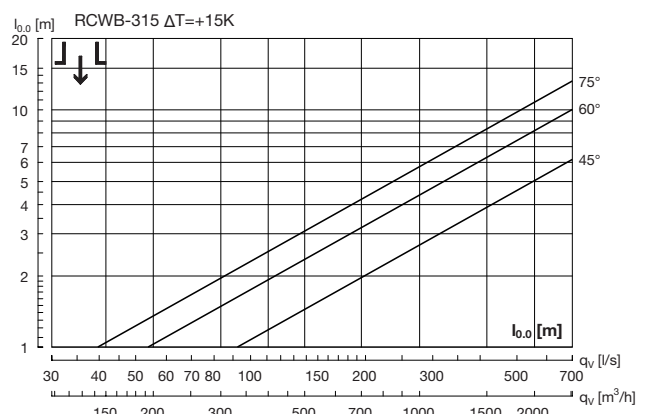
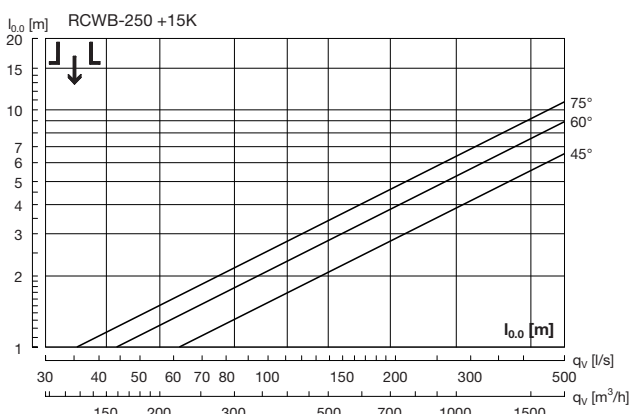
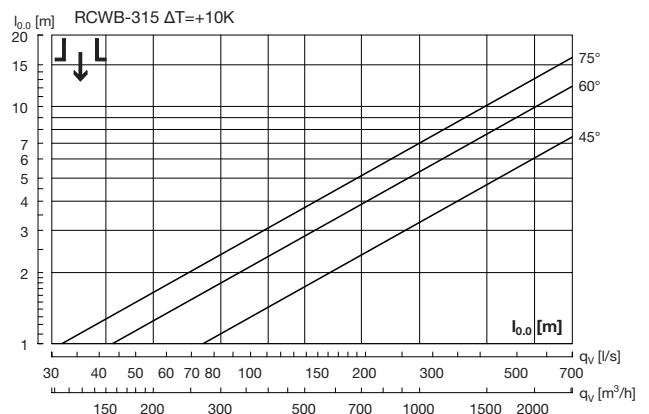
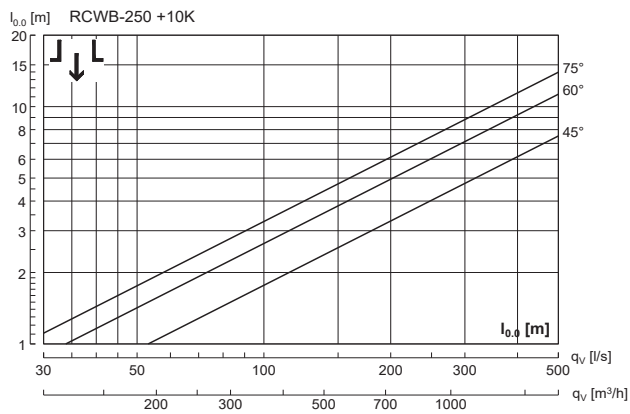
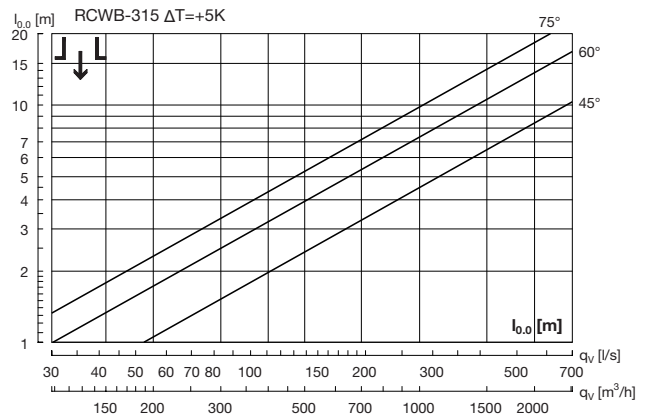
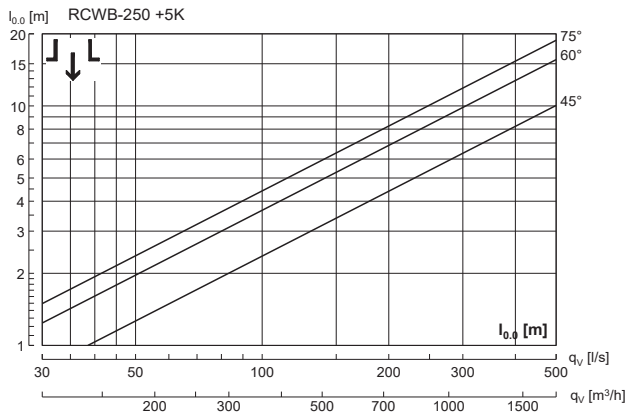
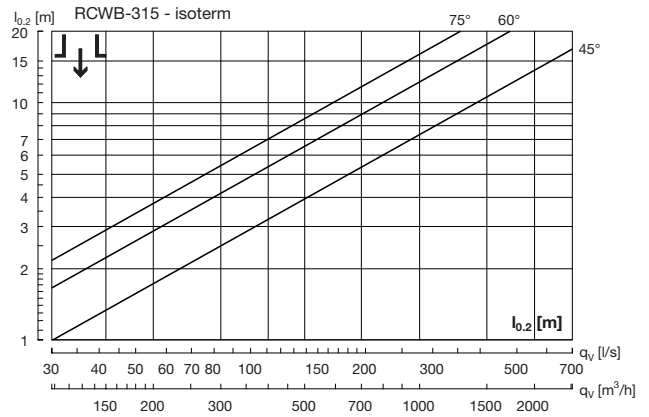
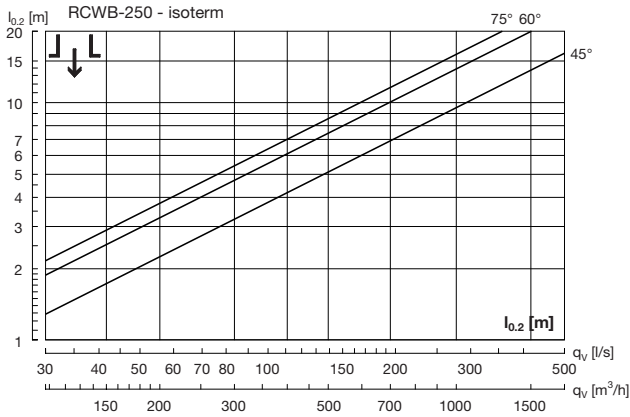
Horizontal throw  $l_{0.2}$  is specified for free suspension. If the diffuser is installed < 300 mm from the ceiling, the value must be multiplied by 1.4.



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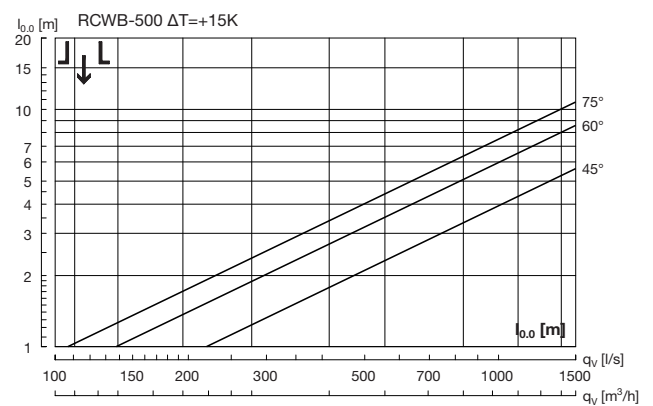
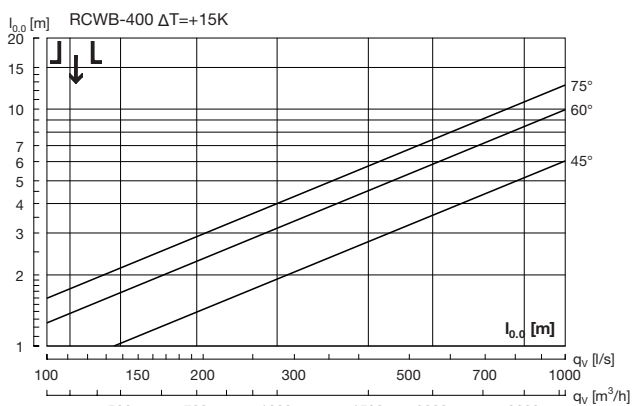
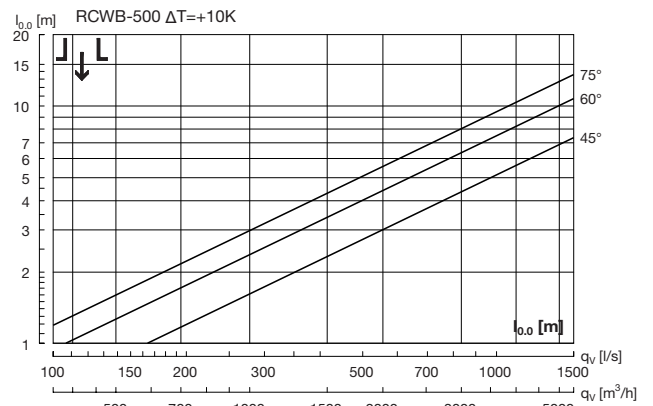
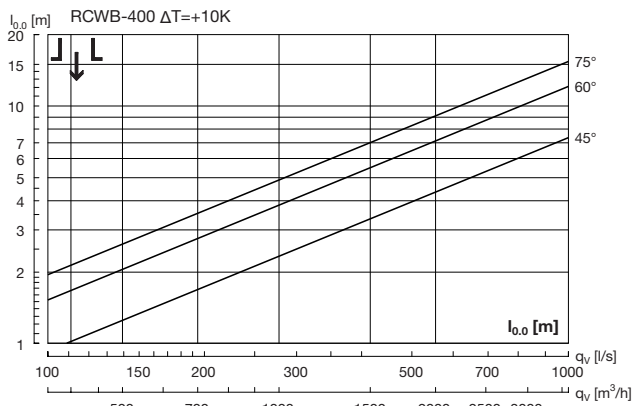
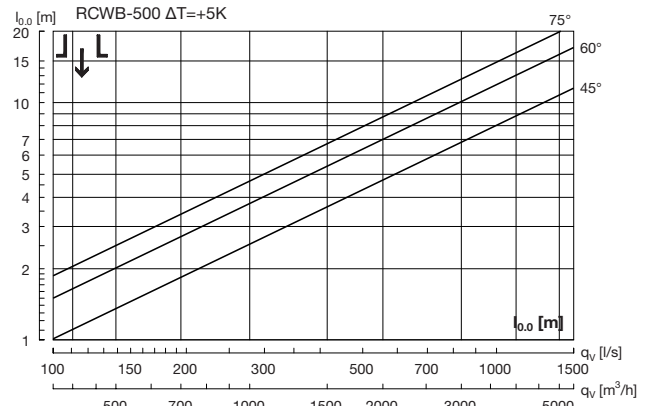
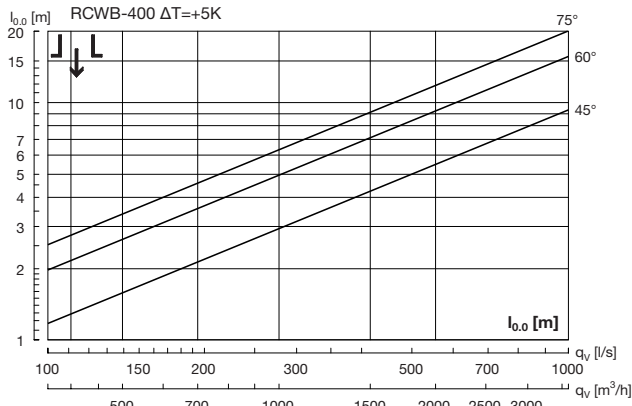
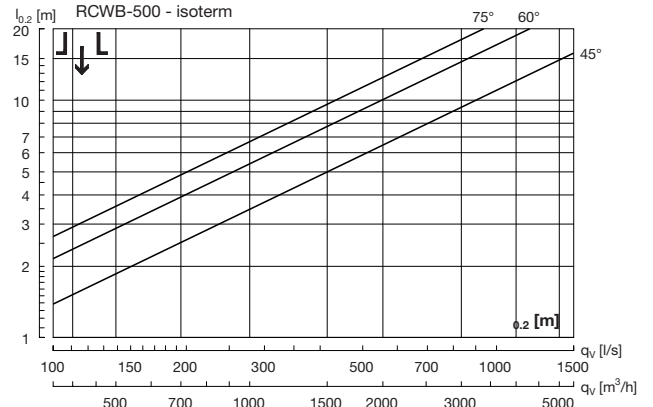
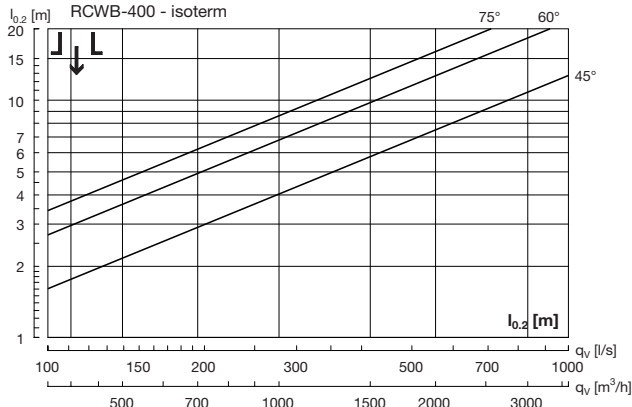
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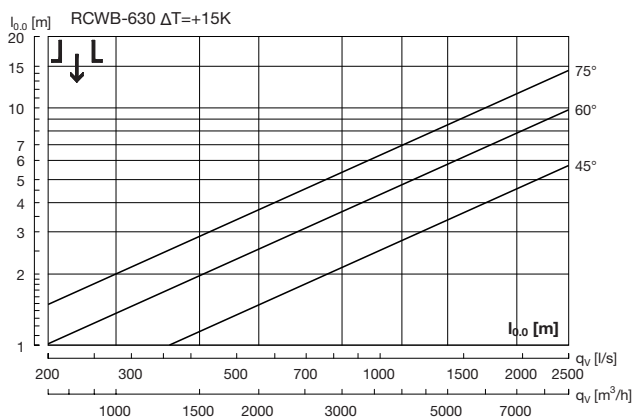
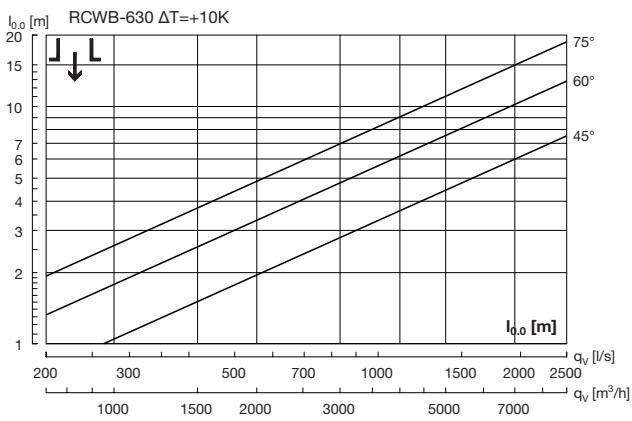
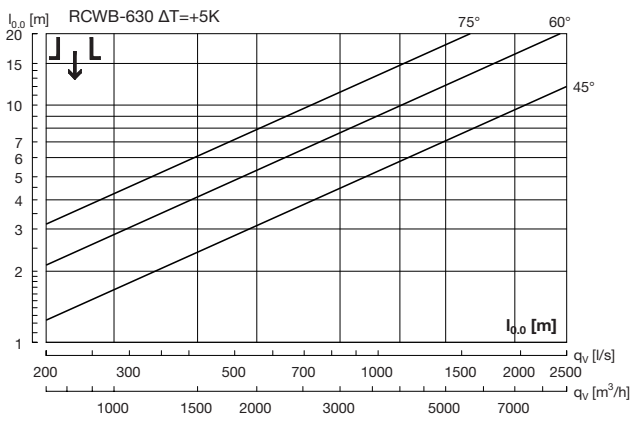
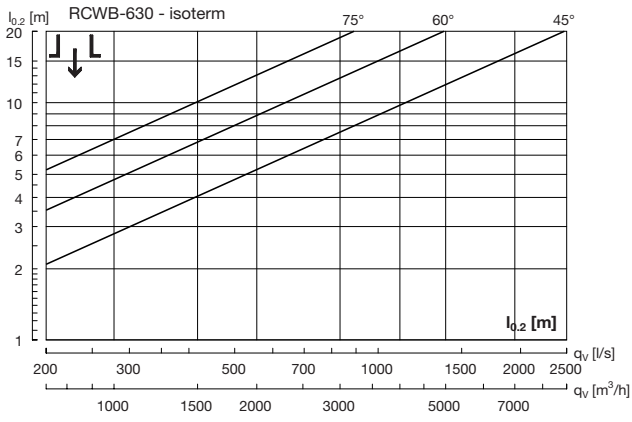
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Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

[Lindab](#) | For a better climate