

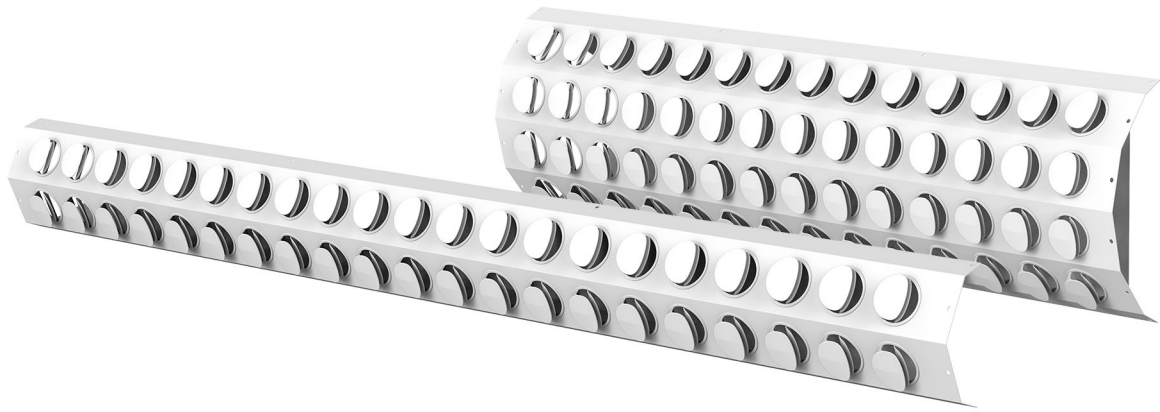
CAP-RD

Multi-Nozzle Diffuser



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Description

CAP-RD is a multi-nozzle diffuser for installation on the circular ventilation duct. It is mainly intended for air supply, eventually it can be used for air extract. Air flow pattern can be adjusted by nozzle rotation.

The field of application of CAP-RD is ventilation in industrial or public spaces with exposed ventilation ducts.

The recommended elevation for installation of CAP-RD is up to 6 m.

Highlights

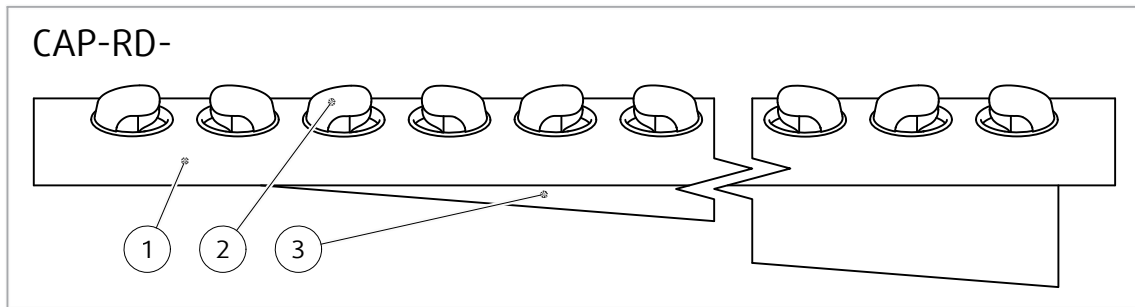
- Individually adjustable nozzles for a large variety of air flow patterns
- Excellent air induction
- Low level of generated sound

Design

The CAP-RD is made from galvanized steel, composed of the front diffuser plate formed to match the circular duct shape, with polymer nozzles and the rear perforated air flow equalizing box. The nozzles can be rotated by 360° in the plane of the diffuser plate. The proper directional adjustment of the individual nozzles results in the desired air discharge pattern. The diffuser can be attached to the duct by screws. Self-adhering foam seal stripes as a part of product delivery can be used to hermitize the joint between the diffuser and the duct.

The standard surface finish for the diffuser is powder paint in signal seal stripes as a part of white color RAL9003, gloss 30%. The nozzles are also RAL9003. Other RAL colors are available upon request.

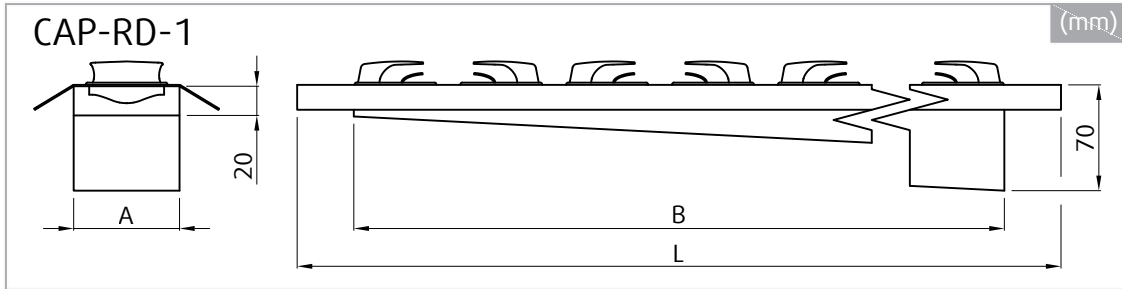
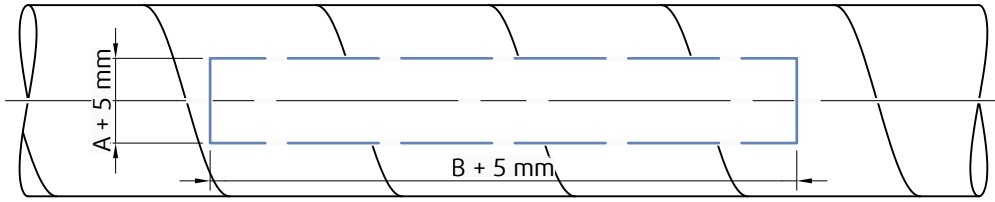
Product Parts



Legend

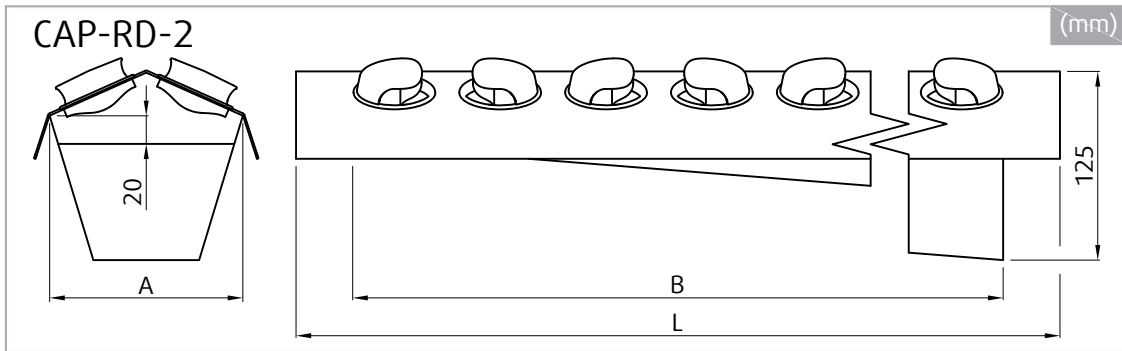
- 1 Diffuser frame
- 2 Nozzle
- 3 Equalizer screen

Dimensions



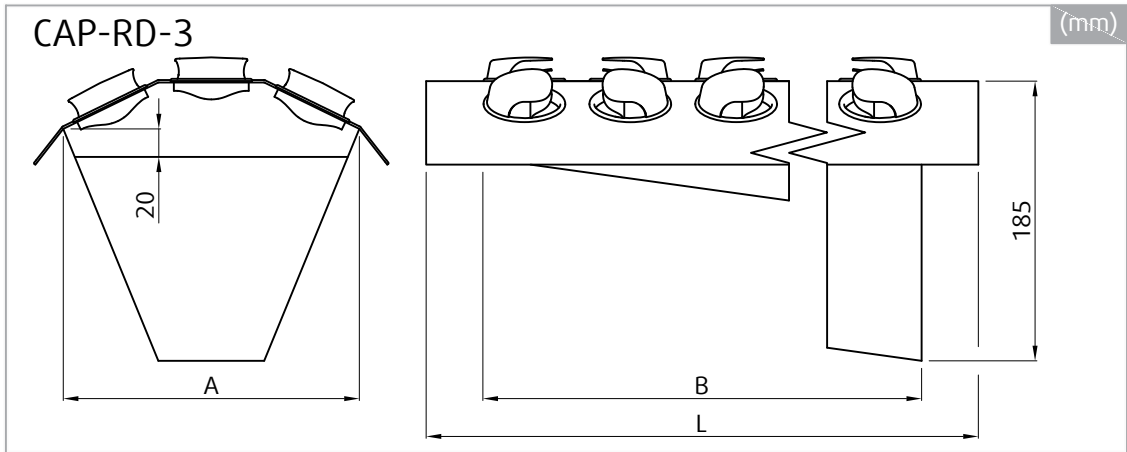
CAP-RD-1-1000	L	A	B	m
	mm			kg
CAP-RD-1-1000-100	1040	70	965	1,7
CAP-RD-1-1000-125				
CAP-RD-1-1000-140				
CAP-RD-1-1000-160				
CAP-RD-1-1000-180				
CAP-RD-1-1000-200				
CAP-RD-1-1000-225				
CAP-RD-1-1000-250				

CAP-RD-1-1500	L	A	B	m
	mm			kg
CAP-RD-1-1500-100	1540	70	1465	2,5
CAP-RD-1-1500-125				
CAP-RD-1-1500-140				
CAP-RD-1-1500-160				
CAP-RD-1-1500-180				
CAP-RD-1-1500-200				
CAP-RD-1-1500-225				
CAP-RD-1-1500-250				



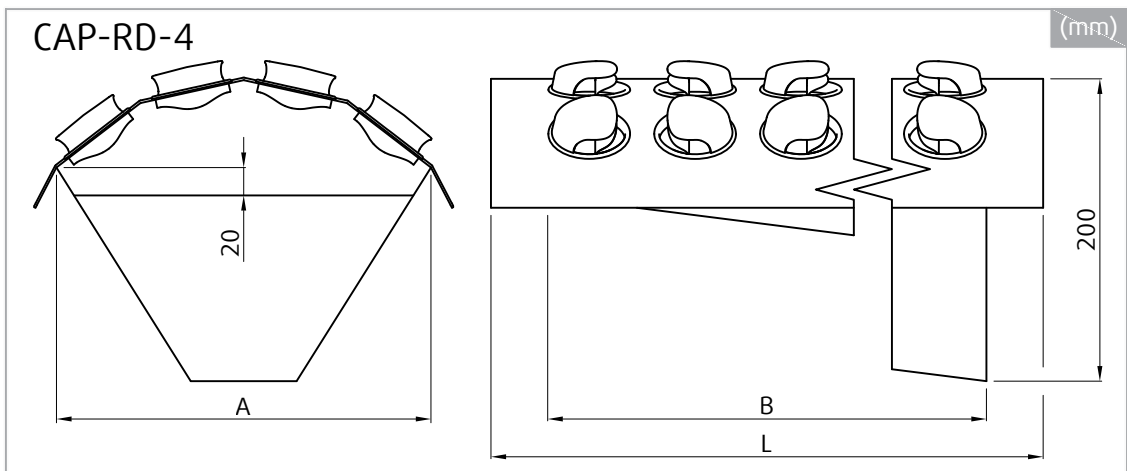
CAP-RD-2-1000	L	A	B	m
	mm			kg
CAP-RD-2-1000-160	1040	129	965	2,4
CAP-RD-2-1000-180		131		
CAP-RD-2-1000-200		133		
CAP-RD-2-1000-225		134		
CAP-RD-2-1000-250		135		
CAP-RD-2-1000-280		136		
CAP-RD-2-1000-315		137		

CAP-RD-2-1500	L	A	B	m
	mm			kg
CAP-RD-2-1500-160	1540	129	1465	3,5
CAP-RD-2-1500-180		131		
CAP-RD-2-1500-200		133		
CAP-RD-2-1500-225		134		
CAP-RD-2-1500-250		135		
CAP-RD-2-1500-280		136		
CAP-RD-2-1500-315		137		



CAP-RD-3-1000	L	A	B	m
	mm			kg
CAP-RD-3-1000-315	1040	197	965	3,3
CAP-RD-3-1000-355		200		
CAP-RD-3-1000-400		202		
CAP-RD-3-1000-450		204		
CAP-RD-3-1000-500		205		
CAP-RD-3-1000-560		206		
CAP-RD-3-1000-630		207		

CAP-RD-3-1500	L	A	B	m
	mm			kg
CAP-RD-3-1500-315	1540	197	1465	4,8
CAP-RD-3-1500-355		200		
CAP-RD-3-1500-400		202		
CAP-RD-3-1500-450		204		
CAP-RD-3-1500-500		205		
CAP-RD-3-1500-560		206		
CAP-RD-3-1500-630		207		



CAP-RD-4-1000	L	A	B	m
	mm			kg
CAP-RD-4-1000-315	1040	249	965	3,8
CAP-RD-4-1000-355		256		
CAP-RD-4-1000-400		260		
CAP-RD-4-1000-450		264		
CAP-RD-4-1000-500		267		
CAP-RD-4-1000-560		270		
CAP-RD-4-1000-630		272		

CAP-RD-4-1500	L	A	B	m
	mm			kg
CAP-RD-4-1500-315	1540	249	1465	5,6
CAP-RD-4-1500-355		256		
CAP-RD-4-1500-400		260		
CAP-RD-4-1500-450		264		
CAP-RD-4-1500-500		267		
CAP-RD-4-1500-560		270		
CAP-RD-4-1500-630		272		

Ordering Codes

Number of nozzle rows

- 1
- 2
- 3
- 4

Size

- 1000
- 1500

Duct diameter (mm)

- 100
- 125
- 140
- 160
- 180
- 200
- 225
- 250
- 280
- 315
- 355
- 400
- 450
- 500
- 560
- 630

Surface finish

SW Signal white (RAL9003, gloss 30%)

Example of the Ordering Code

CAP-RD-1-1000-100-SW

Diffuser with 1 row of nozzles, length 1000 mm for duct diameter 100 mm, signal white RAL9003.

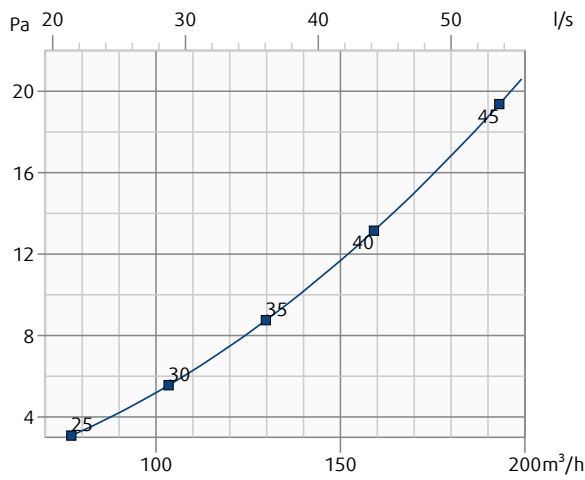
Technical Parameters

Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

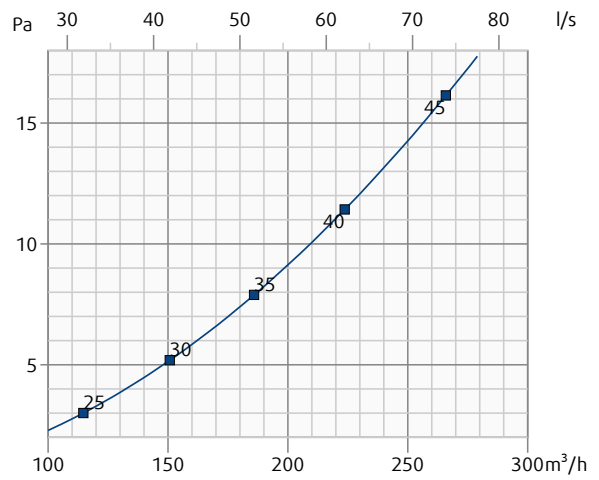
CAP-RD-1-1000-100-SW

Pressure drop & A-weighted sound power level in dB(A)



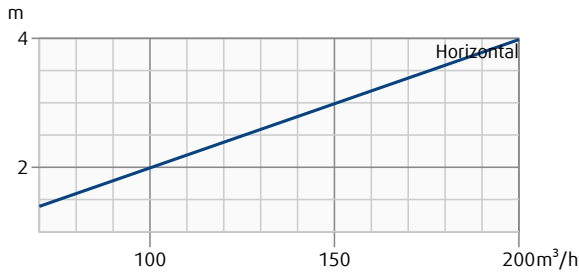
CAP-RD-1-1500-100-SW

Pressure drop & A-weighted sound power level in dB(A)



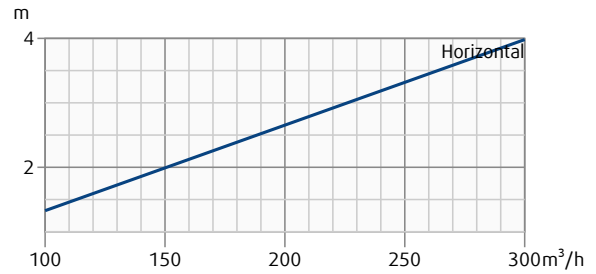
CAP-RD-1-1000-100-SW

Throw length (terminal velocity 0.2 m/s)



CAP-RD-1-1500-100-SW

Throw length (terminal velocity 0.2 m/s)

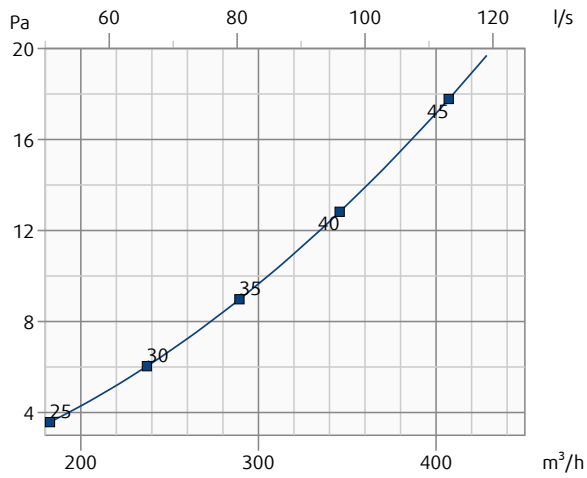


Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

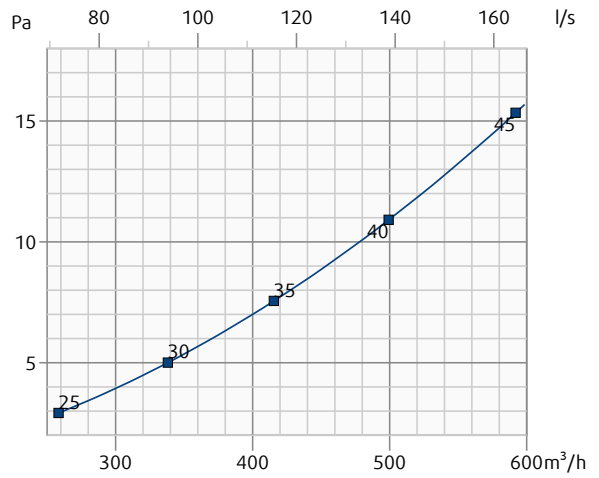
CAP-RD-2-1000-160-SW

Pressure drop & A-weighted sound power level in dB(A)



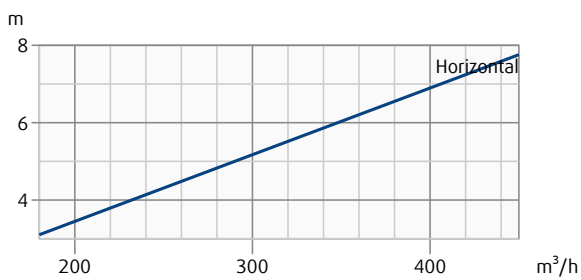
CAP-RD-2-1500-160-SW

Pressure drop & A-weighted sound power level in dB(A)



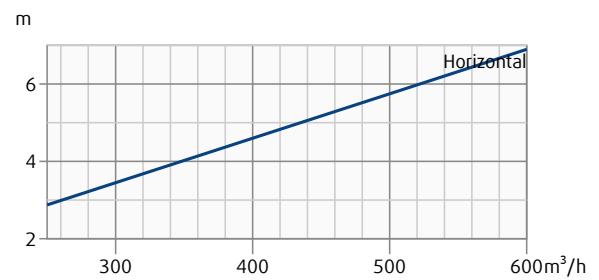
CAP-RD-2-1000-160-SW

Throw length (terminal velocity 0.2 m/s)



CAP-RD-2-1500-160-SW

Throw length (terminal velocity 0.2 m/s)

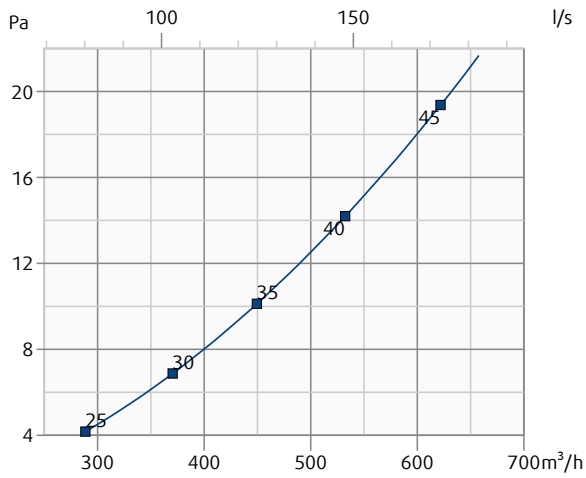


Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

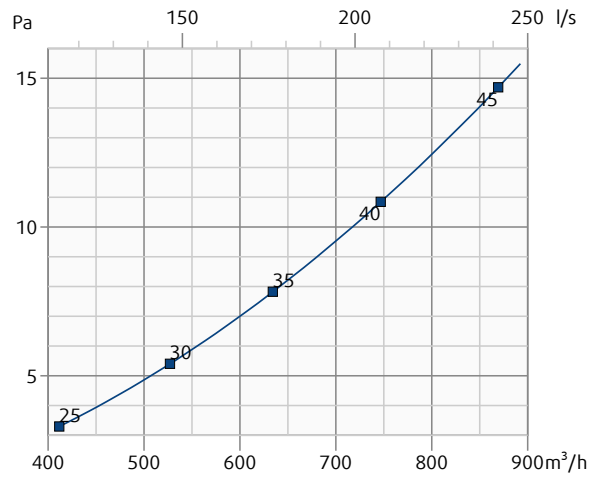
CAP-RD-3-1000-315-SW

Pressure drop & A-weighted sound power level in dB(A)



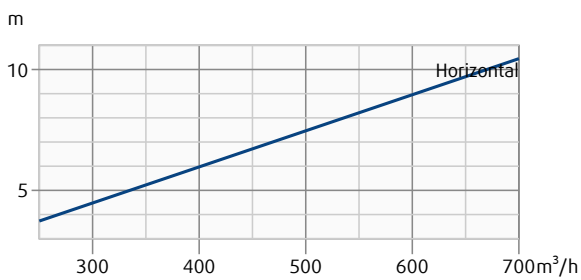
CAP-RD-3-1500-315-SW

Pressure drop & A-weighted sound power level in dB(A)



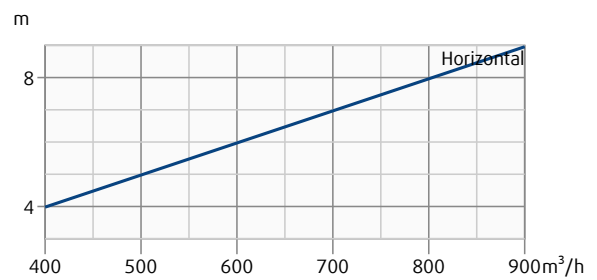
CAP-RD-3-1000-315-SW

Throw length (terminal velocity 0.2 m/s)



CAP-RD-3-1500-315-SW

Throw length (terminal velocity 0.2 m/s)

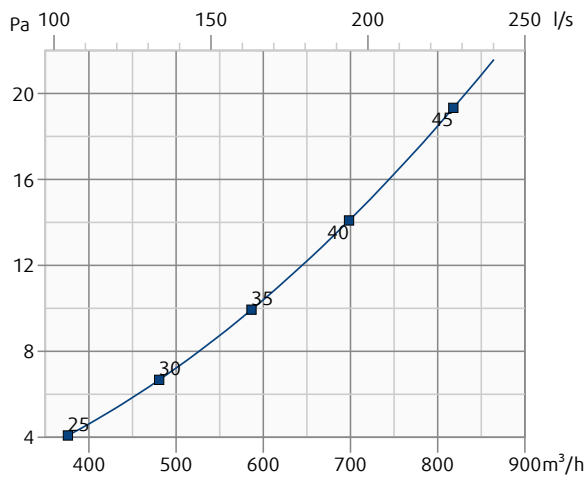


Pressure drop and radiated sound power level dependent on air flow volume.

Throw length with terminal velocity 0,2 m/s dependent on air flow volume.

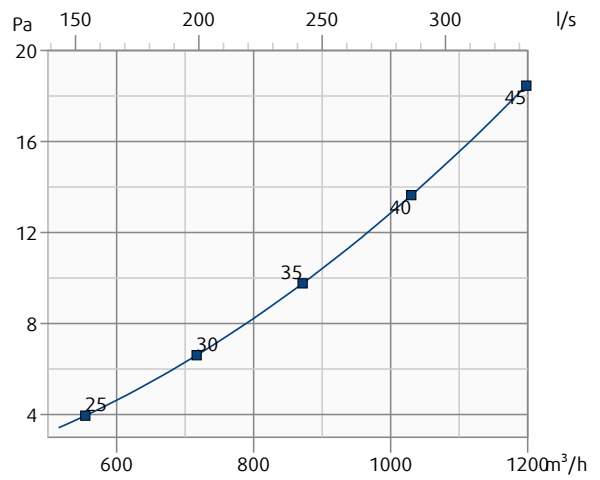
CAP-RD-4-1000-315-SW

Pressure drop & A-weighted sound power level in dB(A)



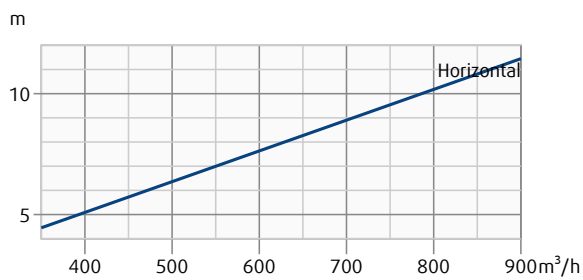
CAP-RD-4-1500-315-SW

Pressure drop & A-weighted sound power level in dB(A)



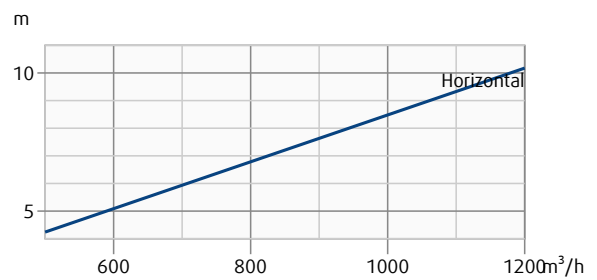
CAP-RD-4-1000-315-SW

Throw length (terminal velocity 0.2 m/s)



CAP-RD-4-1500-315-SW

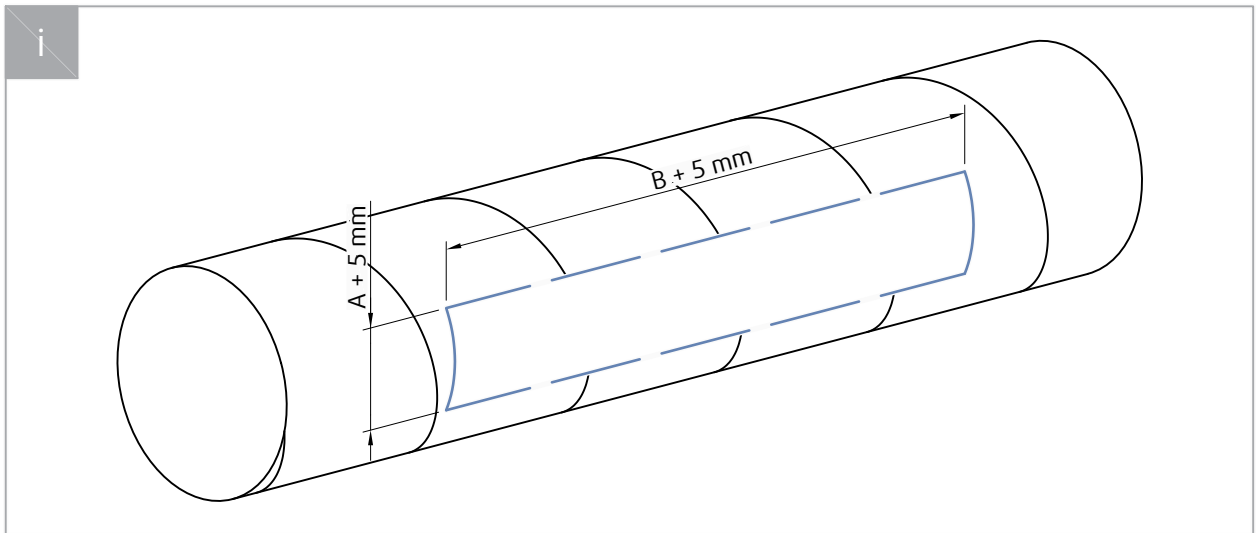
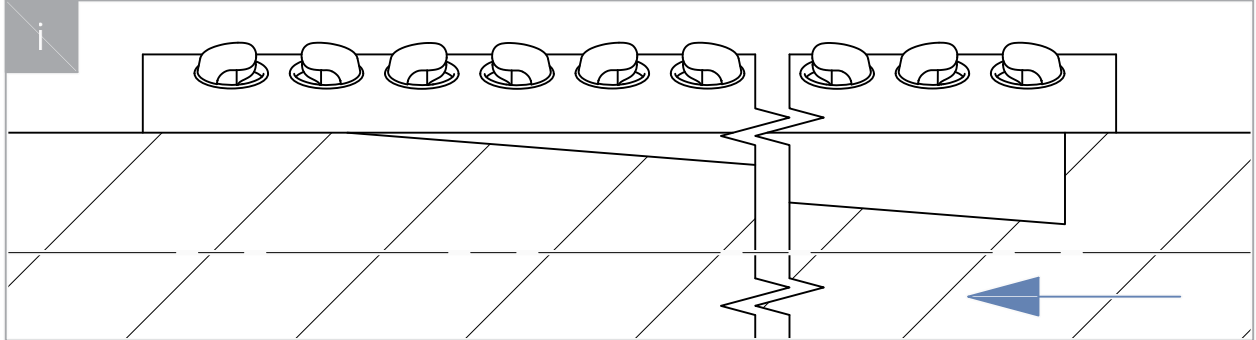
Throw length (terminal velocity 0.2 m/s)



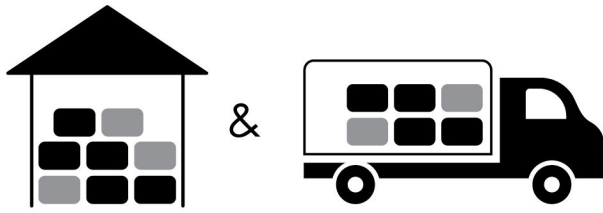
Installation

CAP-RD is fixed to the duct by the screws through the holes in the diffuser frame.


Proper orientation of the equalizing screen to the air flow direction shall be considered.



Transport, Storage and Operation




 °C -40°C ... +50°C

 % ≤ 95%



 °C -20°C ... +70°C

 % ≤ 95%

Supplement

Any deviations from the technical specifications contained on our website and the terms should be discussed with the manufacturer. We reserve the right to make any changes to the product without prior notice, provided that these changes do not affect the quality of the product and the required parameters. Current information on all products is available on design.systemair.com.

