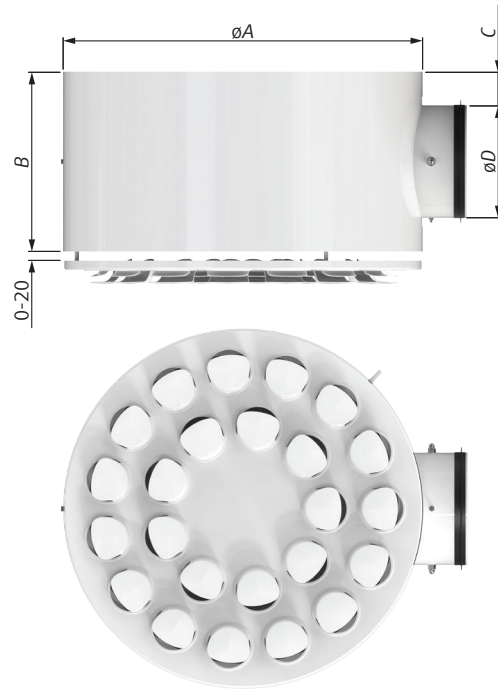


CAP-C

Circular nozzle ceiling diffuser complete with side entry plenum box for visible installation



Dimensions



Function

The CAP-C ceiling diffuser is suitable for visible connection and can be connected directly to the duct using the connection sleeve fitted with a rubber seal tested for air tightness. It is equipped with directionally adjustable nozzles. This enables functionality in a vast range of operation modes like horizontal, vertical, diagonal, single- or multi-directional and swirl for both, cooling and heating. The side gap is adjustable between 0 and 20 mm to enable increased air supply. Though, according to the kind of installation, in this operation mode there is no ceiling effect on the flow pattern. The CAP-C consists of a front plate with nozzles and a sound-insulated plenum box and damper. Installation height is up to 4 m. Max. temperature difference: ΔT 12 K.

Design

The diffuser is made of powder paint coated galvanized steel sheet. The nozzles are ABS Plastics. The diffuser plate is adjustably attached to the base with circular tight horizontal connection with flow adjustment damper.

Fig. 1: CAP-C dimensions

Ordering code	$\varnothing A$	B	C	$\varnothing D$	m
	(mm)				(kg)
CAP-C-100	314	170	35	99	2,8
CAP-C-125	399	200	37	124	4,1
CAP-C-160		250	45	159	4,5
CAP-C-200	599	285	42	199	8,3
CAP-C-250		330	40	249	8,9
CAP-C-315	799	420	53	314	15,2

Tab. 1: CAP-C dimensions and weight

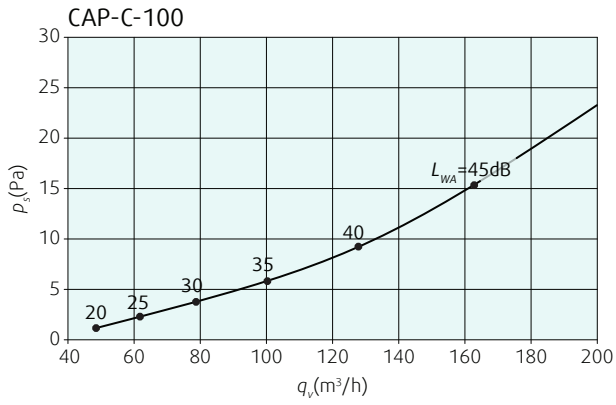


Diagram 1a: Pressure drop and sound power level

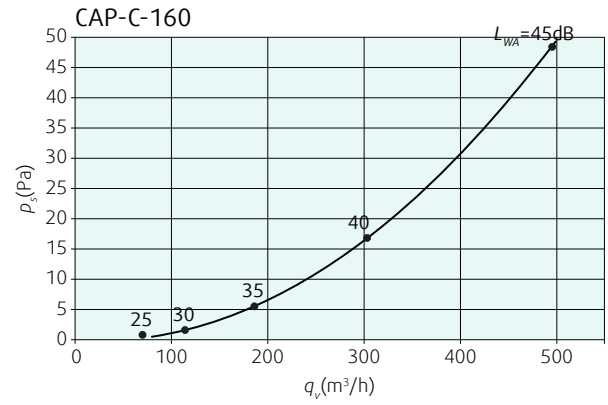


Diagram 3a: Pressure drop and sound power level

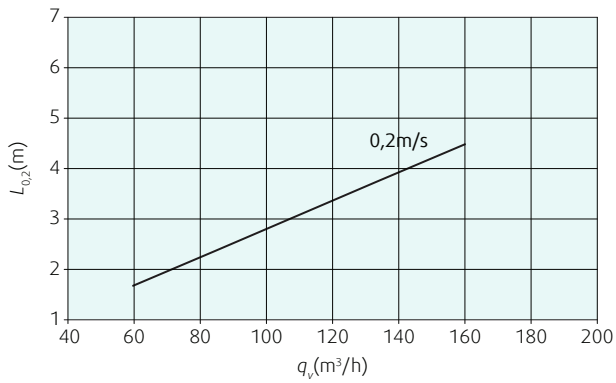


Diagram 1b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

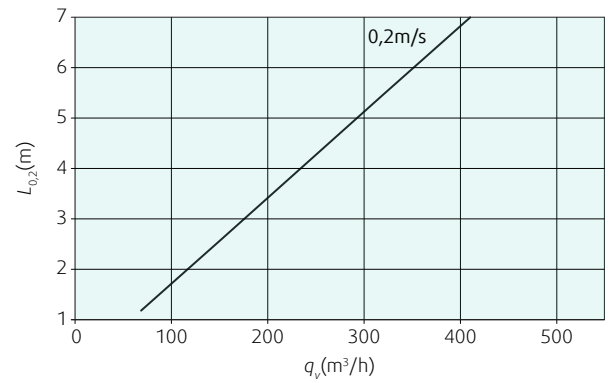


Diagram 3b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

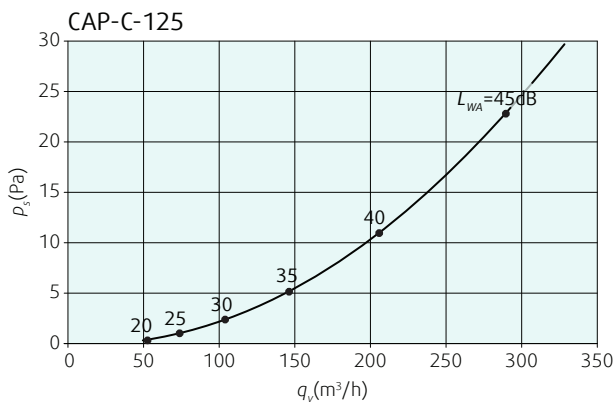


Diagram 2a: Pressure drop and sound power level

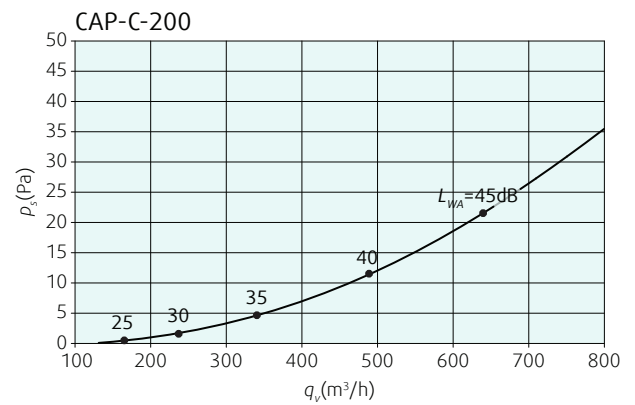


Diagram 4a: Pressure drop and sound power level

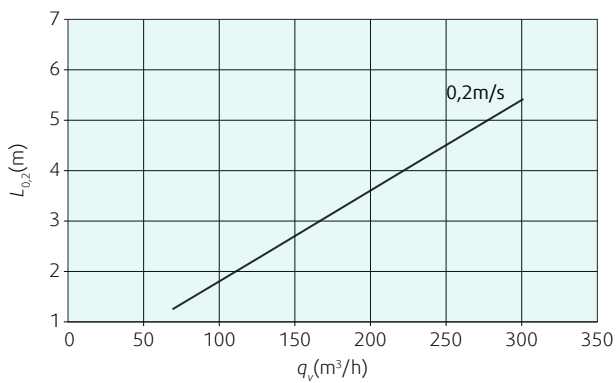


Diagram 2b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

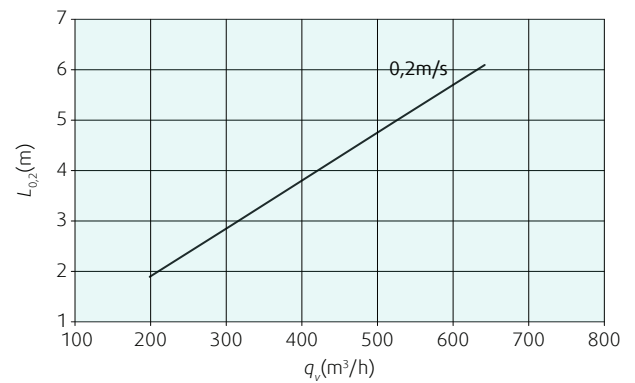


Diagram 4b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

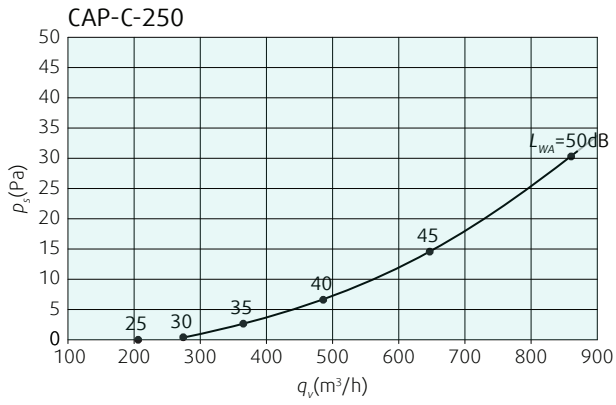


Diagram 5a: Pressure drop and sound power level

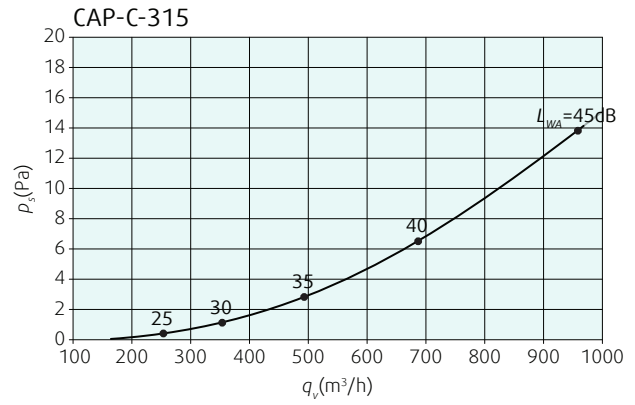


Diagram 6a: Pressure drop and sound power level

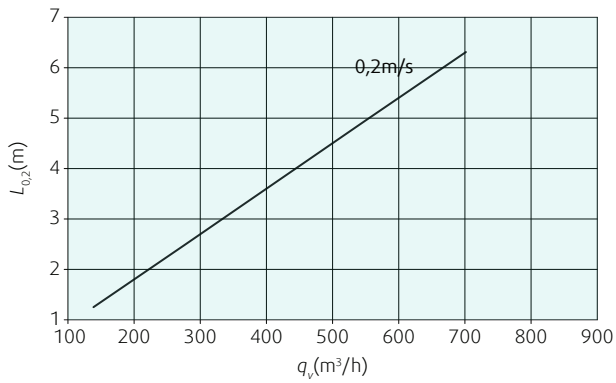


Diagram 5b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

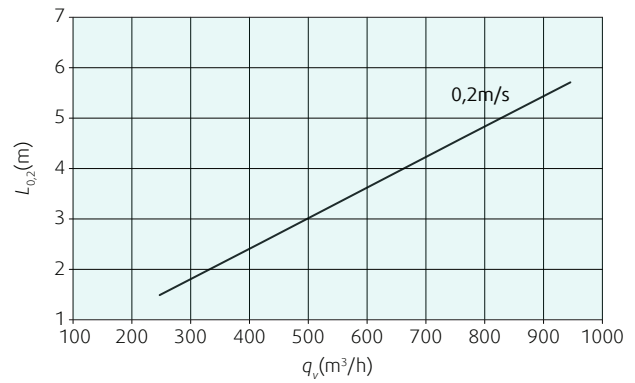


Diagram 6b: Isothermal, 4-way nozzle configuration throw length with terminal velocity 0,2m/s.

CAP-C size	Gap height	k-factor	
	(mm)	m³/h	l/s
100	0	49	13,6
	20	60	16,7
125	0	71	19,7
	20	105	29,2
160	0	83	23,1
	20	110	30,6
200	0	169	46,8
	20	251	69,6
250	0	171	47,4
	20	345	95,7
315	0	257	71,3
	20	465	129,2

Tab. 2: k-factors

Mounting

The diffuser is fixed safely by screwing it up into the ceiling from the inside of the unit. The front plate can be removed by pulling it straight out. The sound absorbing material is cut out of the diffuser's centre to make room for the screws. The diffuser has a M8 blind rivet for suspension.