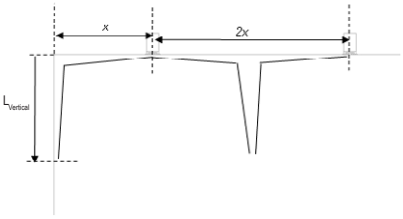
Chart for selection of ASN 623x623 diffusers taking the influence of a wall and a second diffuser into account.

Q_h [m^3/h]	Q [m^3/s]	Type	623 x 623	x (distance from a wall)				
				1 m	2 m	3 m	4 m	5 m
				$L_{Vertical}$ (Vertical range)				
200	0,056	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,2 0,9 0,33 <35					
250	0,069	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,3 1,1 0,42 <35					
300	0,083	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,4 1,4 0,50 <35	0,11				
400	0,111	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,7 1,9 0,67 <35	0,25				
500	0,139	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	1,0 2,5 0,83 <35	0,41	0,13			
600	0,167	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	1,4 3,1 1,00 <35	0,56	0,30	0,02		
700	0,194	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	1,9 3,7 1,17 <35	0,73	0,47	0,15		
800	0,222	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	2,4 4,3 1,33 <35	0,89	0,64	0,29	0,04	
900	0,250	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	2,9 4,9 1,50 <35	1,06	0,82	0,43	0,14	
1000	0,278	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	3,5 5,5 1,67 35	1,24	0,99	0,58	0,23	0,03
1200	0,333	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	4,8 6,8 2,00 <40	1,59	1,36	0,87	0,43	0,12
1400	0,389	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	6,3 8,2 2,33 <40	1,95	1,74	1,18	0,63	0,21
1600	0,444	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	8,0 9,5 2,67 <40	2,32	2,12	1,49	0,84	0,30
1800	0,500	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	9,8 10,9 3,00 40	2,70	2,52	1,80	1,05	0,39

Note:

Chart concerns diffusers with open dampers.
Values are approximate.
Pressure loss for a single diffuser.

Δ [Pa]	Pressure loss
$L_{v=0,25}$ [m]	Distance along the ceiling at which the maximal air stream velocity does not exceed 0.25 m/s. Average air stream velocity ranging from 0.08-0.1 m/s
$L_{Vertical}$ [m]	Vertical distance from the ceiling at which the maximal air stream velocity does not exceed 0.25 m/s. Average air stream velocity ranging from 0.08-0.1 m/s
x [m]	Distance from a wall, or half a distance between diffusers
V [m/s]	Maximum adhering air stream velocity at the edge of the diffuser
dB	Noise



The degree of damper closure can be taken into account using the coefficient

Closing angle	Coefficient
20%	1.2
40%	1.5
60%	3.0
80%	7.0
100%	15.0

$\Delta p_{slice} \approx \Delta p$ x Coefficient
$L_{v=0,25\ slice} \approx L_{v=0,25}$ / Coefficient