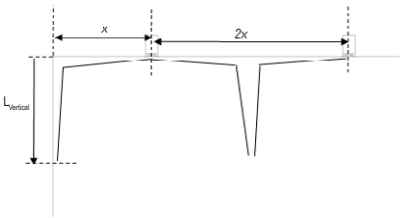
Chart for selection of ASN 598x598 diffusers taking the influence of a wall and a second diffuser into account.

Q_h [m³/h]	Q [m³/s]	Type	598 x 598	x (distance from a wall)				
				1 m	2 m	3 m	4 m	5 m
				$L_{Vertical}$ (Vertical range)				
150	0,042	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,2 0,8 0,29 <35					
200	0,056	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,3 1,0 0,39 <35					
250	0,069	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,4 1,3 0,49 <35	0,09				
300	0,083	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,5 1,6 0,58 <35	0,17				
400	0,111	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	0,9 2,2 0,78 <35	0,33	0,05			
500	0,139	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	1,3 2,8 0,97 <35	0,49	0,22			
600	0,167	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	1,8 3,4 1,17 <35	0,66	0,40	0,10		
700	0,194	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	2,4 4,0 1,36 <35	0,83	0,57	0,24		
800	0,222	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	3,0 4,7 1,56 <35	1,00	0,75	0,38	0,10	
900	0,250	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	3,7 5,3 1,75 35	1,17	0,92	0,52	0,20	0,01
1000	0,278	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	4,5 5,9 1,94 <40	1,34	1,10	0,67	0,29	0,06
1200	0,333	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	6,1 7,2 2,33 <40	1,69	1,47	0,96	0,49	0,14
1400	0,389	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	8,0 8,5 2,72 <40	2,04	1,84	1,26	0,69	0,23
1600	0,444	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	10,2 9,8 3,11 40	2,40	2,21	1,56	0,89	0,32
1800	0,500	Δp [Pa] $L_{v=0,25}$ [m] V [m/s] dB	12,5 11,2 3,50 <45	2,76	2,58	1,86	1,09	0,41

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