

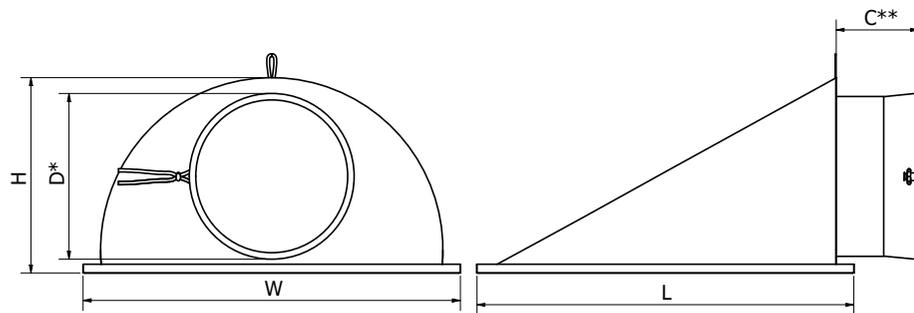
# Technical data

## Supply unit, SMM

The FabricAir SMM ceiling diffusers are drop-in diffusers, suitable for T-profile-based suspended ceiling installations and are used for both cooling and isothermal air supply. They are quick to install and require no tools. The diffusers can be connected to both solid and flexible ducts. The plenum box – the upper and hidden part of the diffuser – is insulated. The connection sleeve is centered

on the end or side of the plenum box and it fits for duct sizes from Ø125 to Ø250 mm by adjusting the strap lock. The flow panel – the lower and visual part – is a fabric with a MicroFlow™ flow model and is available in alternative colors or printed patterns. FabricAir® Ceiling Diffusers are made from FabricAir Combi 80 and Combi 90 fabrics and they come with a 10-year warranty.

## Dimensions



## Performance data

Tested in general accordance to standards EN 12238, ISO 3744 and ISO 7235, and ISO 3741 and ISO 5135. Tests performed with straight metal duct connection. Actual performance may vary in the field depending on upstream duct layout and when flexible duct is used.

Sizing Diagrams: air volume  $q$  [m<sup>3</sup>/h], total pressure loss  $\Delta p_t$  [Pa], sound power level  $L_{WA}$  [dB(A)] and throw  $l_{0,2}$  [m] are shown. The throw is specified as the

## Performance data

Size mm	W (mm)	L (mm)	H (mm)	D* (mm)	C** (mm)		m (kg)
					Solid duct	Flexible duct	
600 x 600	595	595	300	260	205	110	1,7
600 x 1200	595	1195	300	260	205	110	2,8
1200 x 600	1195	595	300	260	205	110	2,8
625 x 625	620	620	300	260	205	110	1,9
625 x 1250	620	1245	300	260	205	110	3,1
1250 x 625	1245	620	300	260	205	110	3,1

### Notes:

- \* Fits for duct sizes Ø125-250 mm by adjusting the strap lock.
- \*\* Length of the connection sleeve when fully extended. Length decreases with the size of the duct when connected. Smaller duct diameter results in a shorter length of the connection sleeve.

**Disclaimer:** Diffuser flow panels may experience a small amount of sagging during operation or at rest after extended use.

vertical distance from the diffuser to the jet average terminal velocity of 0,2 m/s. Recommended max. air volume 250 m<sup>3</sup>/h (600 x 600, 625 x 625 mm) and 500 m<sup>3</sup>/h (1200 x 600, 600 x 1200, 1250 x 625, 625 x 1250 mm). Recommended max. permissible difference between supply and room air temperature is  $\Delta T$  of -5°C. The number of perforated holes is the same between the units 600 x 600 mm, 600 x 1200 mm, 1200 x 600 mm and 625 x 625 mm, 625 x 1250 mm, 1250 x 625 mm respectively. Hence the performance data is the same.

## Code compliance

							Feature
EN 13501-1	UL 723	ULC s102.2	GOST 30244	NFP 92:507	DS 428	GB 8624	Anti-microbial
B-s1, d0	✓	✓	✓	M1	✓	B-s1, d0, t1	✓

SMM 600 x 600 mm

SMM 625 x 625 mm

### Sound attenuation, dB

Connecting duct diameter [mm]	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
125	-	-	-	-	3,2	0,8	2,6	4,3
160	-	-	-	-	5,2	-	0,4	3,0
200	-	0,6	-	-	6,5	1,5	1,6	4,1
250	-	0,2	-	0,1	5,8	2,5	3,7	3,8

Sound attenuation of the diffuser  $\Delta L$  from duct to room in dB.

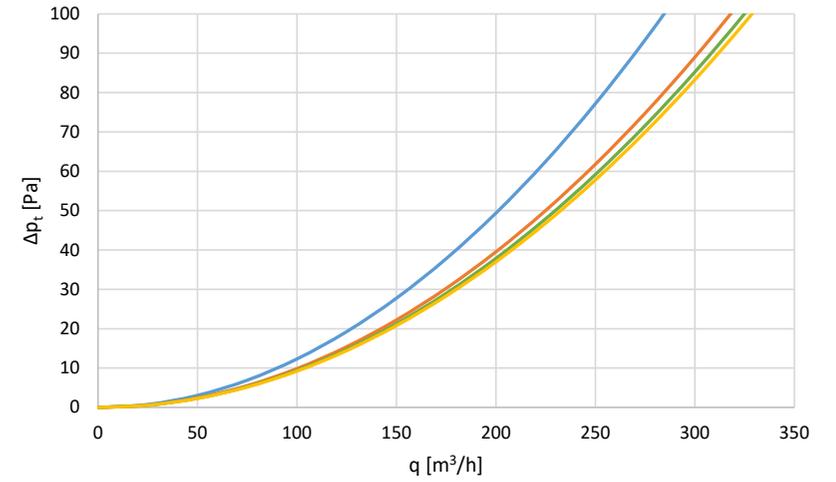
Dash (-) denotes attenuation was not determined.

### Air distribution pattern

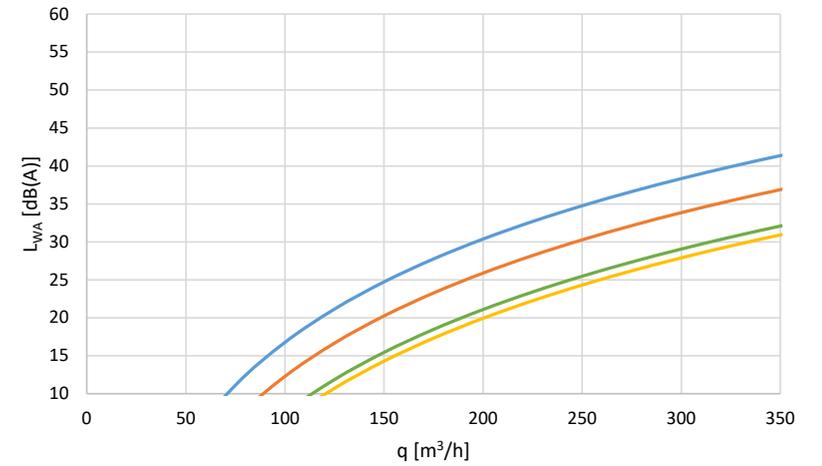


The air at isothermal or cooling conditions is distributed below the diffuser creating a low velocity air dispersion beneath it.

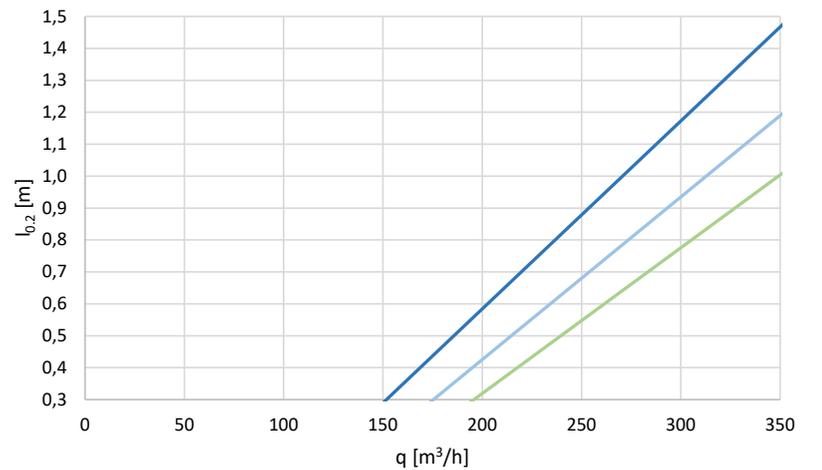
### Sizing diagrams



—  $\phi 125$  —  $\phi 160$  —  $\phi 200$  —  $\phi 250$



—  $\phi 125$  —  $\phi 160$  —  $\phi 200$  —  $\phi 250$



— Isothermal —  $\Delta T=2^\circ C$  —  $\Delta T=5^\circ C$

SMM 600 x 1200 mm

SMM 625 x 1250 mm

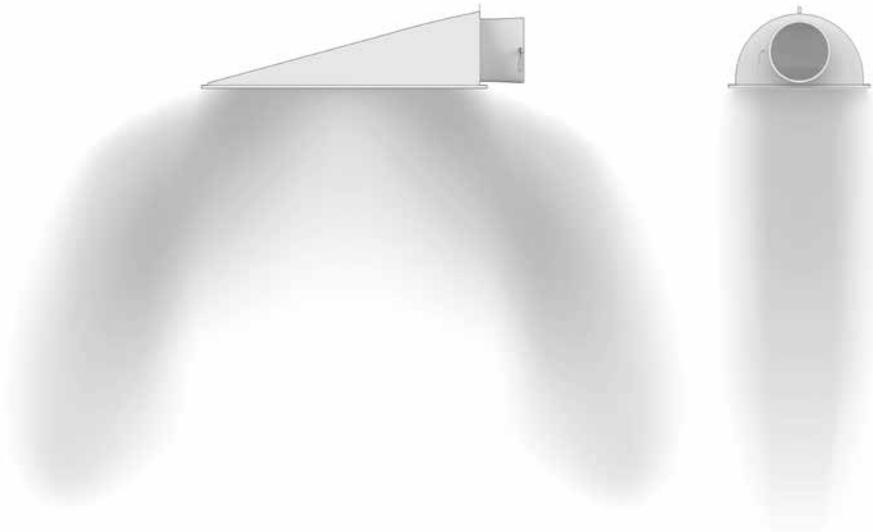
### Sound attenuation, dB

Connecting duct diameter [mm]	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
125	0,1	0,1	-	-	5,6	1,0	2,0	6,6
160	0,6	0,2	-	-	5,5	1,4	0,5	3,3
200	0,8	0,5	-	-	4,7	3,6	-	4,3
250	1,6	1,0	-	1,0	6,4	5,9	3,1	7,1

Sound attenuation of the diffuser  $\Delta L$  from duct to room in dB.

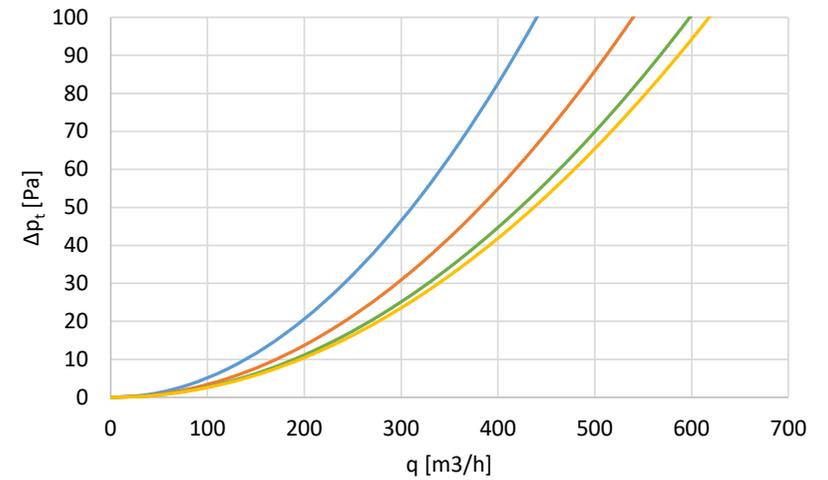
Dash (-) denotes attenuation was not determined.

### Air distribution pattern

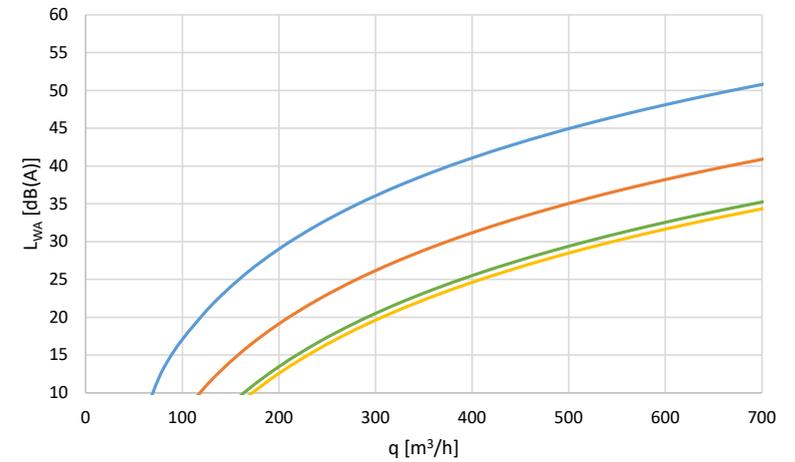


The air at isothermal or cooling conditions spreads wider beneath the diffuser. The effect becomes stronger as the air volume increases, allowing to cover a larger area of the room with the fresh air while preventing draft.

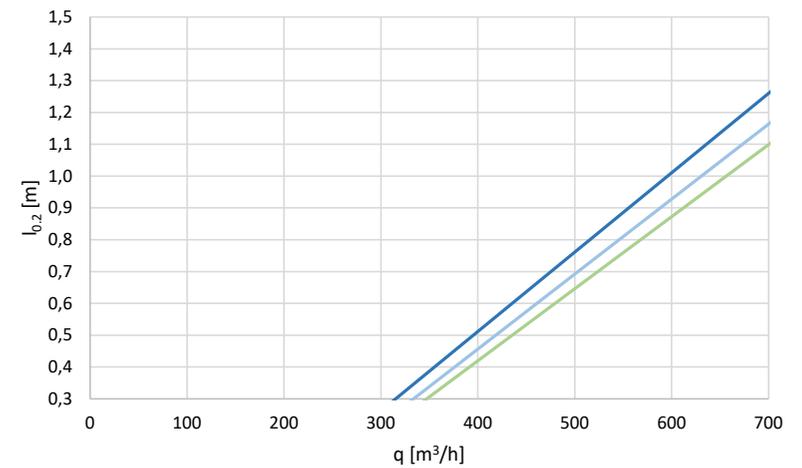
### Sizing diagrams



— Ø125 — Ø160 — Ø200 — Ø250



— Ø125 — Ø160 — Ø200 — Ø250



— Isothermal — ΔT=2°C — ΔT=5°C

SMM 1200 x 600 mm

SMM 1250 x 625 mm

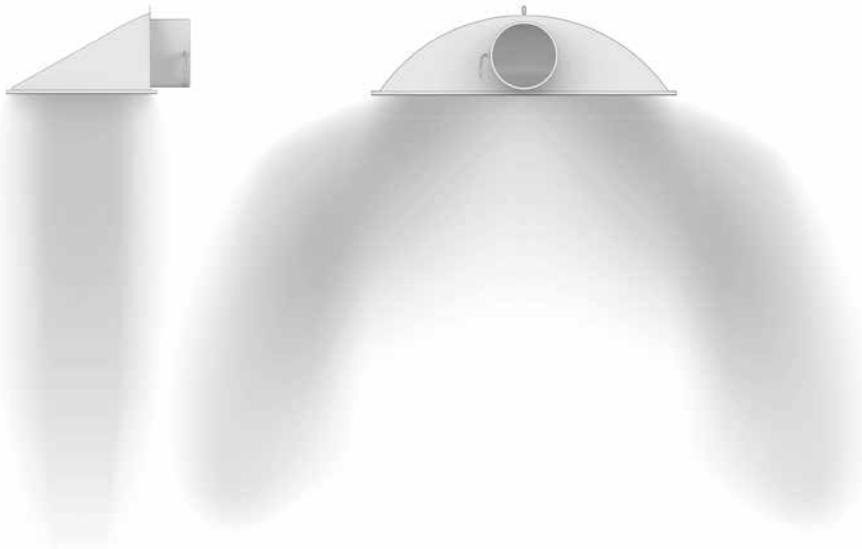
### Sound attenuation, dB

Connecting duct diameter [mm]	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
125	-	0,3	-	-	6,7	3,1	3,8	1,1
160	-	0,1	-	-	6,9	3,0	2,9	1,8
200	-	0,7	0,1	-	9,4	5,3	5,3	3,4
250	-	1,0	1,7	1,1	10,0	4,0	4,5	6,2

Sound attenuation of the diffuser  $\Delta L$  from duct to room in dB.

Dash (-) denotes attenuation was not determined.

### Air distribution pattern



The air at isothermal or cooling conditions spreads wider beneath the diffuser. The effect becomes stronger as the air volume increases, allowing to cover a larger area of the room with the fresh air while preventing draft.

### Sizing diagrams

