



RFB

Displacement diffuser

Supply, round

Floor-mounted

Rotating discharge pattern

Use

The RFB displacement diffuser is suitable for supplying cooled air with a low entry velocity.

The diffuser is designed to be built into raised floors. The raised floor operates as the pressure plenum.

Characteristics

Undertemperature:	up to 8 K
Overtemperature:	not applicable
Capacity:	up to approx. 0.055 m ³ /s

Version

Displacement diffuser

material:	polycarbonate ABS
colour:	black or grey

Available types

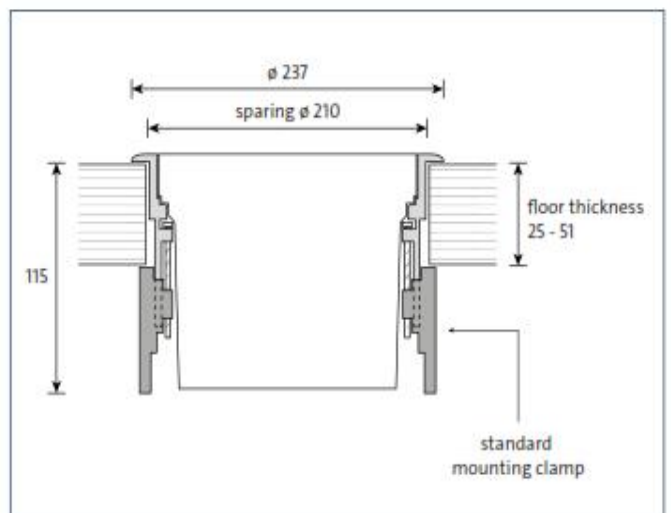
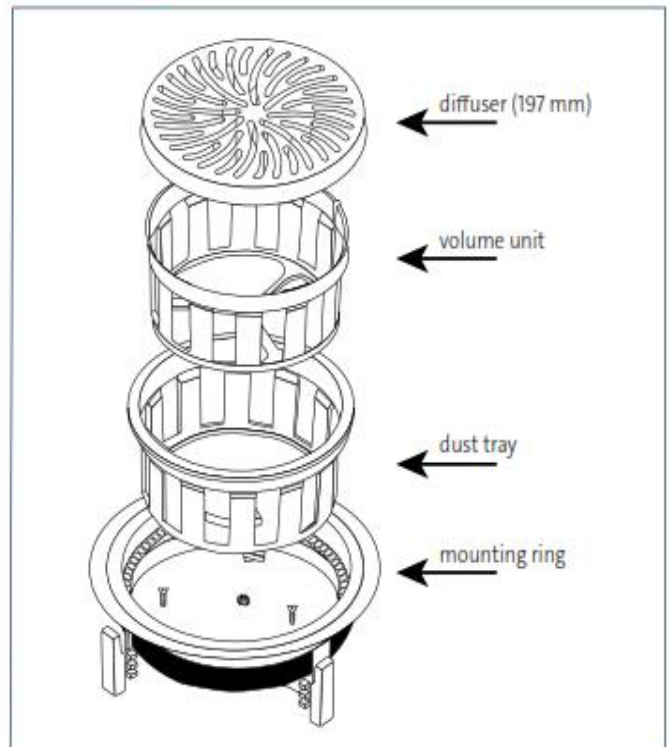
RFBTFC

- R displacement diffuser
- F supply, round, floor-mounted
- B rotating discharge pattern
- T mounting ring
- F fixed volume unit + dust tray
- C mounting clip

Note

The listed dimensions are in mm.

Dimensions

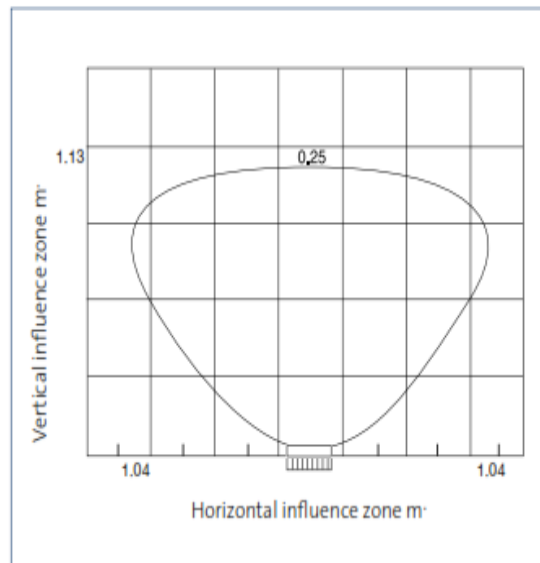


Selection details

PTVI

m³/s	m³/h	velocity isovel m/s	discharge pattern		p _s	L _p
			vertical m	horizontal m		
0.030	108	0.75	0.33	-	9	-
		0.50	0.43	-	9	-
		0.25	0.86	0.64	9	-
0.035	126	0.75	0.40	-	12	-
		0.50	0.52	-	12	-
		0.25	1.07	0.95	12	-
0.040	144	0.75	0.43	-	15	18
		0.50	0.55	-	15	18
		0.25	1.13	1.04	15	18
0.045	162	0.75	0.49	-	20	20
		0.50	0.64	-	20	20
		0.25	1.34	1.13	20	20
0.050	180	0.75	0.61	-	25	23
		0.50	0.77	-	25	23
		0.25	1.53	1.22	25	23
0.055	198	0.75	0.61	-	30	26
		0.50	0.80	-	30	26
		0.25	1.65	1.31	30	26

Velocity profile



The velocity profile is given for an air velocity of 0.25 m/s at 144 m³/h and a ΔT of 5 °C.

General

- The influence zone details are based on a room that is 2.7 m high, with a ΔT of 5 °C between room and supply air.
- The values apply to a diffuser including a fully-opened volume unit and a dust tray.
- Static pressure loss P_s in Pa.
- The assumed room attenuation is 10 dB.
- Sound pressure L_p in dB(A).
- It is permitted to interpolate the interim values.

Correction factor for different ΔT

ΔT	3	4	5	6	7	8
Vertical influence zone	x 1.33	x 1.11	x 1.00	x 0.96	x 0.92	x 0.91
Horizontal influence zone	x 0.87	x 0.94	x 1.00	x 1.06	x 1.11	x 1.16