

CIRCULAR DIFFUSER WITH ADJUSTABLE PATTERN

TYPE: CE100 • DE100



Application

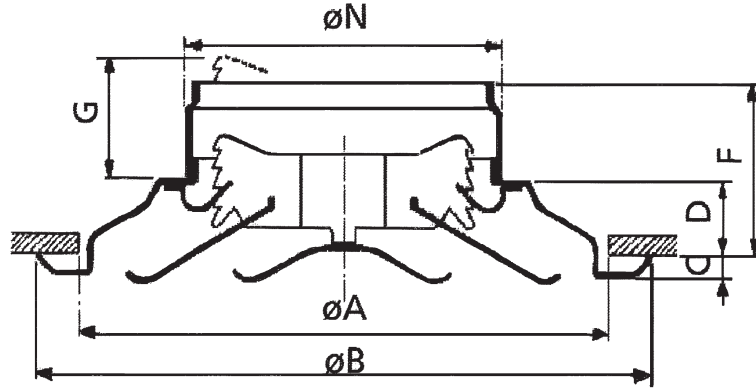
The diffuser type CE100 / DE100 is used for the supply and exhaust of cooled or heated air in facilities such as offices, shopping centres, workshops, factory halls, ...

The diffuser can be used for ceiling or exposed duct mounting, especially in installations when an adjustable pattern is required (horizontally-vertically).

Suitable for mounting at higher altitudes because of its adjustable pattern.

Installation dimensions

CE100 • DE100



CE100	DE100	ØN	A	B	C	D	F	G
160	160	160	279	323	12	35	85	46
200	200	200	375	428	10	51	101	55
250	250	250	467	538	14	67	117	68
315	315	315	557	635	10	85	135	80
355	355	355	648	743	18	96	146	86
400	400	400	740	856	14	116	166	92
450	450	450	832	970	14	135	185	110
500	500	500	924	1081	17	149	199	116
...	630	630	1103	1286	18	182	232	116

G = Clearance for removal of centre core.

N = Nominal size = duct size. All dimensions in mm.

Same dimensions for CE120/DE120, except dimension G.

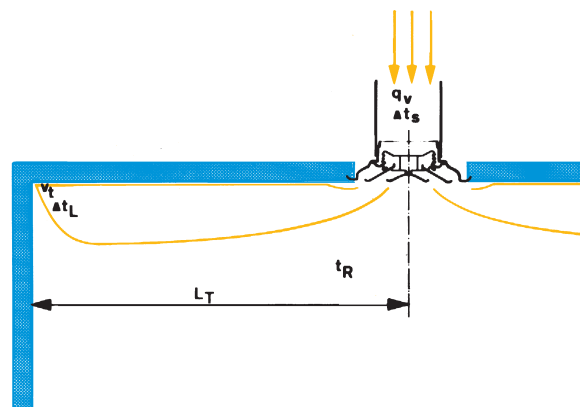


Vertical air pattern



Horizontal air pattern

Example



Technical information

Characteristics :

- **CE100/DE100 :**
 - air pattern adjustable in 5 positions (vertically-horizontally)
 - removable centre core
- **CE120/DE120 :**
 - continuously adjustable (vertically-horizontally)
 - centre core not removable
 - available up to size 315 mm

Selection data:

- Airflow rate $q_v = 0,25 \text{ m}^3/\text{s}$
- Throw $L_T = 2,5 \text{ m}$ at $v_T = 0,50 \text{ m/s}$

Solution:

- Size 315 mm
- Supply air velocity $v_k = 4 \text{ m/s}$
- Noise level NR 35
- Total pressure loss with damper DT003 100% open : $\Delta p_T = 14 \text{ Pa}$.

CIRCULAR DIFFUSER WITH ADJUSTABLE PATTERN

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Technical Information

- diffuser with several inner cones:
 - up to size 400: 2 inner rings
 - from size 450: 3 inner rings
- available dimensions: 160, 200, 250, 315, 355, 400, 450 and 500 mm. (DE100: also available in 630 mm, DE120 and CE120: 355, 400, 450 and 500 mm not available)

Possible options

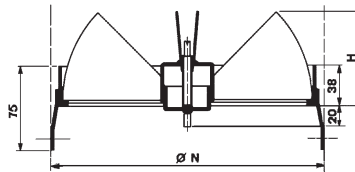
- **CE100:** aluminium construction, painted white (RAL 9010)
- **DE100:** steel construction, painted white (RAL 9010)
- **CE120:** continuously adjustable. Aluminium construction, painted white (RAL 9010)
- **DE120:** continuously adjustable. Steel galvanised construction, painted white (RAL 9010)
- **CE120P:** like CE120, integrated in false ceiling plate 594 x 594 mm (For further details, please contact sales).
- **DE120P:** Like DE120, integrated in false ceiling plate 594 x 594 mm (For further details, please contact sales).

Accessories

Damper Type DT003:

Radial, opposed blade damper. Adjustable through the diffuser face. Construction out of sheet steel, painted black (RAL 9005).

DT003

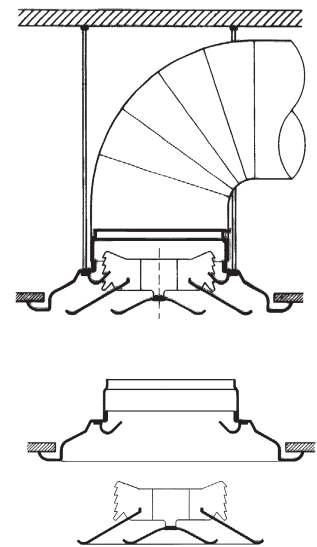


Size	ØN	H
160	160	55
200	200	69
250	250	89
315	315	109
355	355	124
400	400	139
450	450	157
500	500	175
630	630	221

N = duct size
H = expected height in duct

Fixing

- Mount damper in duct or diffuser neck
- Take out inner rings by pushing the rings inward, turn around and pull down.
- Mount external cone by means of screws through diffuser neck.
- Push inner rings again in external cone in one of the 5 positions required.



Option - False Ceiling Application CE100P • DE100P



- Circular diffuser with adjustable air pattern
- Removable core with 2 inner cones, adjustable in 5 positions
- Damper as possible accessory
- Dimensions and selection,
- CE100P: aluminium / DE100P: steel diffuser up to and including size 315 mm, integrated in a false ceiling plate 594 x 594 mm; painted white (RAL 9010)

CIRCULAR DIFFUSER WITH ADJUSTBALE PATTERN

TYPE: CE100 • DE100 SELECTION TABLE

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
160	50	1.0	13	0.014	3.6	25
160	60	1.2	18	0.014	4.3	30
160	75	1.5	28	0.014	5.3	35
160	85	1.7	36	0.014	6.0	40
160	100	2.0	50	0.014	7.1	45
160	120	2.4	73	0.014	8.5	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
200	80	1.2	10	0.026	3.1	25
200	100	1.5	15	0.026	3.9	30
200	120	1.8	22	0.026	4.7	35
200	160	2.4	39	0.026	6.2	40
200	180	2.7	49	0.026	7.0	45
200	200	3.0	60	0.026	7.8	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
250	120	1.4	8	0.042	2.8	25
250	150	1.8	13	0.042	3.6	30
250	180	2.1	18	0.042	4.3	35
250	225	2.6	28	0.042	5.3	40
250	275	3.2	42	0.042	6.5	45
250	325	3.8	59	0.042	7.7	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
315	180	1.7	9	0.062	2.9	25
315	225	2.2	13	0.062	3.7	30
315	250	2.4	16	0.062	4.1	35
315	325	3.1	28	0.062	5.3	40
315	375	3.6	37	0.062	6.1	45
315	450	4.4	53	0.062	7.3	50

CIRCULAR DIFFUSER WITH ADJUSTABLE PATTERN**TYPE: CE100 • DE100 SELECTION TABLE**

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
355	225	1.9	7	0.085	2.6	25
355	300	2.5	12	0.085	3.5	30
355	350	2.9	17	0.085	4.1	35
355	400	3.3	22	0.085	4.7	40
355	500	4.1	34	0.085	5.9	45
355	600	4.9	50	0.085	7.0	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
400	300	2.2	7	0.012	2.7	25
400	350	2.5	10	0.012	3.1	30
400	425	3.0	14	0.012	3.8	35
400	550	3.9	24	0.012	4.9	40
400	625	4.5	31	0.012	5.6	45
400	800	5.7	51	0.012	7.2	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
450	350	2.2	6	0.143	2.4	25
450	425	2.7	9	0.143	3.0	30
450	525	3.3	13	0.143	3.7	35
450	625	4.0	19	0.143	4.4	40
450	775	4.9	29	0.143	5.4	45
450	900	5.7	40	0.143	6.3	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
500	400	2.3	5	0.177	2.3	25
500	500	2.9	8	0.177	2.8	30
500	600	3.4	12	0.177	3.4	35
500	800	4.6	20	0.177	4.5	40
500	900	5.1	26	0.177	5.1	45
500	1000	5.7	32	0.177	5.7	50

SIZE DIA	VOLUME L/S	THROW	PA	F/A	OUTLET VEL M/S	NR
630	550	2.6	5	0.257	2.1	25
630	700	3.3	7	0.257	2.7	30
630	800	3.8	10	0.257	3.1	35
630	1000	4.7	15	0.257	3.9	40
630	1200	5.7	22	0.257	4.7	45
630	1400	6.6	30	0.257	5.5	50