

FIXED CIRCULAR DIFFUSER

TYPE: DR160 • DR170 • DE170S • DS170P

Installation dimensions



Application

The diffuser type DR160 is used for the supply and exhaust of cooled or heated air in facilities such as offices, shopping centres, ... The diffuser can be used for ceiling or exposed duct mounting and has a fixed horizontal air pattern.

DS170P FALSE CEILING



- Circular diffuser with fixed air pattern
- Damper as possible accessory
- Steel, painted white (RAL 9010)
- Dimensions and selection
- DS170P: diffuser up to and including size 315 mm with false ceiling plate 594 x 594 mm
- Plenum to be ordered separately

Technical information

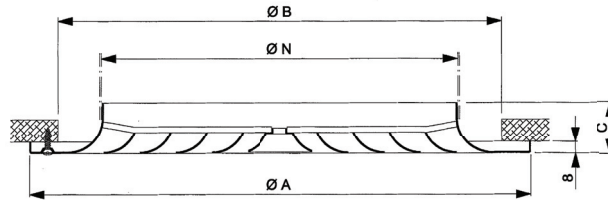
Characteristics :

- fixed horizontal air pattern, flat mounted rings
- available with side entry plenum, with or without damper in side entry

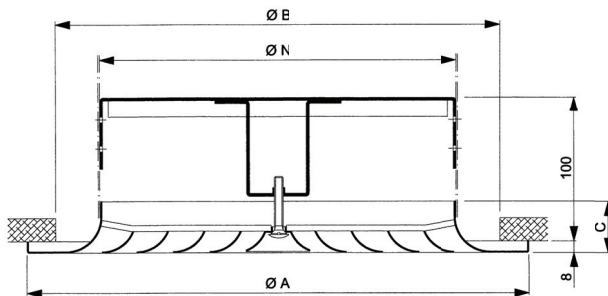
Construction:

- steel; painted white (RAL 9010)
- plenum with or without insulation; galvanised steel sheet

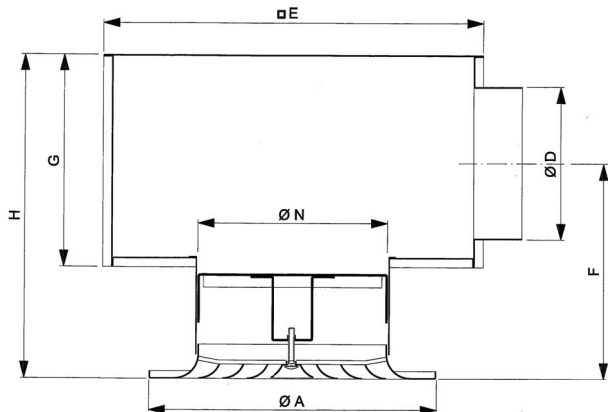
DR160



DR170



DR170S



| Size | A | B | C | D | □E | F | G | H | N |
|------------|-----|-----|----|-----|-----|-----|-----|-----|-----|
| 160 | 248 | 190 | 36 | 123 | 345 | 216 | 185 | 305 | 158 |
| 200 | 298 | 230 | 36 | 158 | 395 | 234 | 220 | 340 | 198 |
| 250 | 363 | 280 | 36 | 198 | 470 | 264 | 270 | 390 | 248 |
| 315 | 448 | 350 | 36 | 248 | 520 | 289 | 310 | 440 | 313 |

All dimensions in mm.

FIXED CIRCULAR DIFFUSER

TYPE: DR160 • DR170 • DE170S • DS170P

Specifications description

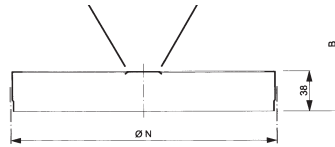
Example:

Steel circular diffuser with flat mounted rings. Central screw fixing with steel mounting support GR003.

Type: DR170 + GR003
size ...mm

Accessories

- **GR003** : steel mounting support with central screw fixing; only for DR170
- **DT012** : V-shaped damper sheet steel, painted black (RAL 9005). The damper can be mounted on the diffuser and can be adjusted through the diffuser face (central hole). Only with DR160.



Type DT012

| Size | Ø N | B |
|------|-----|-----|
| 160 | 160 | 106 |
| 200 | 200 | 126 |
| 250 | 250 | 151 |
| 315 | 315 | 183 |

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

Fixing

- **DR160** : by three screws in the outer ring of the diffuser
- **DR170** : central screw fixing (screw delivered together with diffuser) and steel mounting support GR003.

How to order

DR160 size 250 mm with insulated plenum DP170SG.

a) Diffuser

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | R | 1 | 6 | 0 | S | G | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Size

- : non insulated plenum
- G: insulated plenum
- : without plenum
- S: with plenum with side entry
- 0 : without damper
- 1: damper in inlet spigot
- 6: fixing with screws in outer ring
- 7: central screw fixing
- S: square flange (ceiling plate)
- R: round flange with a stand-up edge

b) Plenum box (when separately)

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | P | 1 | 7 | 0 | S | G | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

- : non insulated plenum
- G: insulated plenum
- 0: without damper in inlet spigot
- 1: with damper in inlet spigot

c) Damper

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| D | T | 0 | 1 | 2 | - | - | 0 | 2 | 5 | 0 | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

7: plenum for diffuser DR160 and DR170

Possible options

- **DR160** : circular diffuser with screw holes in mounting frame
- **DR160S** : DR160 with plenum with side entry
- **DR161S** : DR160 with plenum with damper in side entry
- **DR160SG/DR161SG**: DR160S/DR161S with insulated plenum
- **DR170** : circular diffuser with central screw fixing
- **DR170S** : DR170 with plenum with side entry
- **DR171S** : DR170 with plenum with damper in side entry
- **DR170SG/DR171SG** : DR170S/DR171S with insulated plenum
- **DS170P** : DR170 integrated in false ceiling plate 594 x 594 mm. (For further details, please contact sales)

FIXED CIRCULAR DIFFUSER

TYPE: DR160 • DR170 SELECTION TABLES

| SIZE DIA | VOLUME L/S | THROW | PA | F/A | OUTLET VEL M/S | NR |
|----------|------------|-------|----|-------|----------------|----|
| 160 | 50 | 0.9 | 10 | 0.019 | 2.6 | 20 |
| 160 | 70 | 1.2 | 20 | 0.019 | 3.7 | 25 |
| 160 | 80 | 1.4 | 26 | 0.019 | 4.2 | 30 |
| 160 | 100 | 1.7 | 41 | 0.019 | 5.2 | 35 |
| 160 | 110 | 1.9 | 50 | 0.019 | 5.8 | 40 |
| 160 | 130 | 2.3 | 69 | 0.019 | 6.8 | 45 |

| SIZE DIA | VOLUME L/S | THROW | PA | F/A | OUTLET VEL M/S | NR |
|----------|------------|-------|----|--------|----------------|----|
| 200 | 65 | 0.9 | 8 | 0.0277 | 2.3 | 20 |
| 200 | 80 | 1.2 | 12 | 0.0277 | 2.9 | 25 |
| 200 | 100 | 1.4 | 19 | 0.0277 | 3.6 | 30 |
| 200 | 120 | 1.7 | 28 | 0.0277 | 4.3 | 35 |
| 200 | 140 | 2.0 | 38 | 0.0277 | 5.0 | 40 |
| 200 | 160 | 2.3 | 50 | 0.0277 | 5.8 | 45 |

| SIZE DIA | VOLUME L/S | THROW | PA | F/A | OUTLET VEL M/S | NR |
|----------|------------|-------|----|-------|----------------|----|
| 250 | 90 | 1.1 | 7 | 0.040 | 2.2 | 20 |
| 250 | 110 | 1.3 | 11 | 0.040 | 2.7 | 25 |
| 250 | 130 | 1.6 | 16 | 0.040 | 3.2 | 30 |
| 250 | 160 | 1.9 | 24 | 0.040 | 4.0 | 35 |
| 250 | 180 | 2.2 | 30 | 0.040 | 4.5 | 40 |
| 250 | 225 | 2.7 | 47 | 0.040 | 5.6 | 45 |

| SIZE DIA | VOLUME L/S | THROW | PA | F/A | OUTLET VEL M/S | NR |
|----------|------------|-------|----|-------|----------------|----|
| 315 | 120 | 1.2 | 7 | 0.057 | 2.1 | 20 |
| 315 | 160 | 1.6 | 12 | 0.057 | 2.8 | 25 |
| 315 | 180 | 1.8 | 15 | 0.057 | 3.2 | 30 |
| 315 | 225 | 2.3 | 23 | 0.057 | 4.0 | 35 |
| 315 | 275 | 2.8 | 35 | 0.057 | 4.8 | 50 |
| 315 | 325 | 3.3 | 49 | 0.057 | 5.7 | 45 |