

# EDRFB - EDRFQB Fixed geometry diffusers



## Description

High induction swirl diffusers with fixed deflector blades.

## Characteristics

Material: steel plate.  
Finish: painted white RAL 9010.  
Installation: fastening by means of M6 central screws.

## Use

Diffuser suitable for installation heights between 2.5 and 4 m.

## Models

EDRFB: high induction swirl diffusers with fixed deflector blades on rounded circular panel;  
EDRFQB: high induction swirl diffusers with fixed deflector blades on rounded square panel or on 595x595 panel suitable for installation on 600x600 square false ceilings.

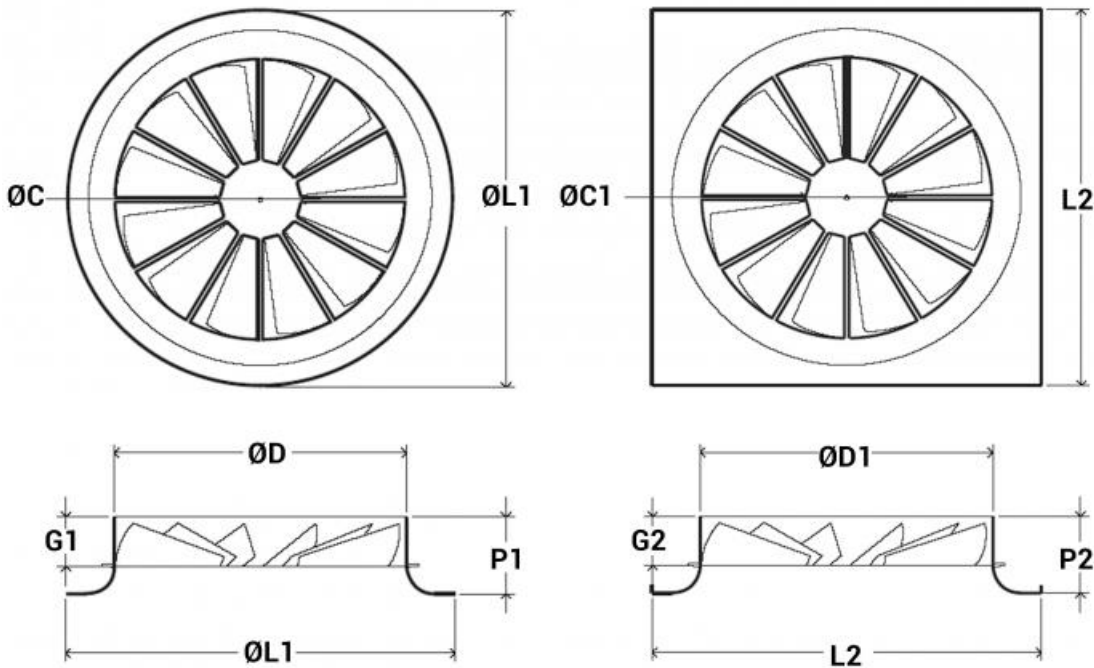
## Accessories

- EPZ-DC galvanised plenum;
- EPI-DC insulated plenum;
- EPZ-DCS galvanised plenum with damper;
- EPI-DCS insulated plenum with damper;
- EDRF-EQ fitting with equaliser;

## Notes

Rounded exit cone.

## Dimensions



All dimensions are expressed in mm.

All sizes of the EDRFQB diffuser can be supplied with the L2xL2 dimension equal to 595x595 mm suitable for installation in a square false ceiling.

| model | EDRFB |     |    |    |    | EDRFQB |         |     |    |    |
|-------|-------|-----|----|----|----|--------|---------|-----|----|----|
|       | ØD    | ØL1 | ØC | G1 | P1 | ØD1    | L2xL2   | ØC1 | G2 | P2 |
| 125   | 122   | 225 | 28 | 55 | 82 | 122    | 225x225 | 28  | 55 | 82 |
| 160   | 157   | 250 | 50 | 55 | 82 | 157    | 250x250 | 50  | 55 | 82 |
| 200   | 197   | 300 | 50 | 55 | 82 | 197    | 300x300 | 50  | 55 | 82 |
| 250   | 247   | 350 | 65 | 55 | 85 | 247    | 350x350 | 65  | 55 | 85 |
| 315   | 312   | 415 | 87 | 55 | 85 | 312    | 415x415 | 87  | 55 | 85 |

## Operating data

Vk: effective speed (m/s)

m<sup>3</sup>/h: flow rate

Pa: pressure drops in Pascal

L(m): air throw in metres calculated on ceiling installation, terminal velocity 0.25 m/s

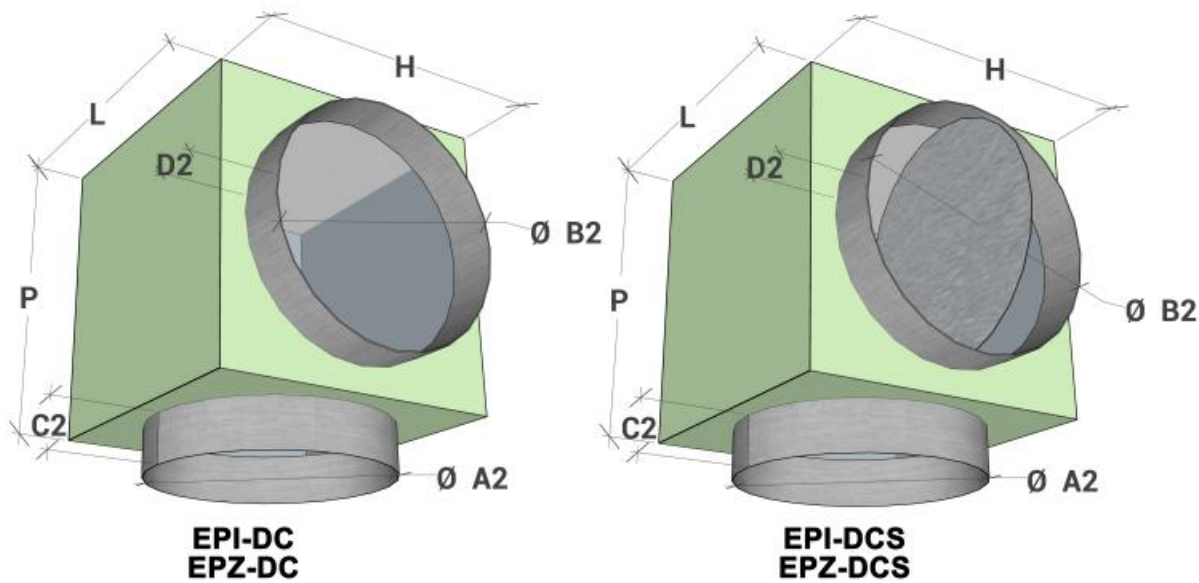
dB(A): noise level (without equaliser)

| model | effective cross-section<br>m <sup>2</sup> | Vk m/s                 |     |     |     |     |     |     |     |     |     |     |     | recommended air flow rate m <sup>3</sup> /h |     |
|-------|---|------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|
|       |   |                        | 1,0 | 1,2 | 1,4 | 1,6 | 1,8 | 2,0 | 2,4 | 2,8 | 3,2 | 3,6 | 4,0 | MIN   | MAX |
| 125   | 0,0091                                    | m <sup>3</sup> /h      | 32  | 39  | 45  | 52  | 58  | 65  | 78  | 91  | 104 | 117 | 130 | 40  | 90  |
|       |   | Pa (with equalizer)    | 5   | 7   | 9   | 12  | 15  | 19  | 27  | 37  | 48  | 61  | 75  |   |     |
|       |   | Pa (without equalizer) | 7   | 10  | 13  | 18  | 22  | 28  | 40  | 55  | 72  | 92  | 114 |   |     |
|       |   | L(m)                   | 1,5 | 1,6 | 1,7 | 1,8 | 1,9 | 2   | 2,3 | 2,4 | 2,6 | 2,7 | 2,9 |   |     |
|       |   | dB(A)                  | <20 | <20 | 23  | 28  | 31  | 34  | 40  | 45  | 49  | 52  | 75  |   |     |
| 160   | 0,0146                                    | m <sup>3</sup> /h      | 54  | 65  | 76  | 86  | 97  | 108 | 130 | 151 | 173 | 194 | 216 | 50  | 120 |
|       |   | Pa (with equalizer)    | 5   | 7   | 10  | 13  | 16  | 20  | 29  | 40  | 52  | 65  | 81  |   |     |
|       |   | Pa (without equalizer) | 7   | 10  | 14  | 19  | 23  | 29  | 42  | 59  | 77  | 97  | 120 |   |     |
|       |   | L(m)                   | 1,6 | 1,8 | 1,9 | 2   | 2,1 | 2,2 | 2,5 | 2,7 | 2,8 | 3   | 3,1 |   |     |
|       |   | dB(A)                  | <20 | 25  | 30  | 34  | 38  | 42  | 48  | 53  | 57  | 64  | 66  |   |     |
| 200   | 0,0225                                    | m <sup>3</sup> /h      | 79  | 95  | 111 | 127 | 143 | 158 | 190 | 222 | 253 | 285 | 317 | 90  | 210 |
|       |   | Pa (with equalizer)    | 5   | 6   | 9   | 11  | 15  | 17  | 25  | 35  | 45  | 57  | 71  |   |     |
|       |   | Pa (without equalizer) | 7   | 9   | 13  | 16  | 21  | 25  | 37  | 51  | 66  | 84  | 105 |   |     |
|       |   | L(m)                   | 1,6 | 1,8 | 1,9 | 2   | 2,2 | 2,3 | 2,5 | 2,7 | 2,8 | 3   | 3,2 |   |     |
|       |   | dB(A)                  | <20 | 22  | 26  | 30  | 34  | 37  | 42  | 47  | 51  | 54  | 57  |   |     |
| 250   | 0,0345                                    | m <sup>3</sup> /h      | 122 | 147 | 171 | 196 | 220 | 245 | 294 | 343 | 392 | 441 | 490 | 130   | 310 |
|       |   | Pa (with equalizer)    | 5   | 5   | 6   | 8   | 10  | 13  | 19  | 25  | 33  | 42  | 52  |   |     |
|       |   | Pa (without equalizer) | 7   | 8   | 10  | 13  | 16  | 21  | 30  | 40  | 53  | 68  | 85  |   |     |
|       |   | L(m)                   | 1,9 | 2,1 | 2,3 | 2,5 | 2,6 | 2,7 | 3   | 3,2 | 3,4 | 3,6 | 3,8 |   |     |
|       |   | dB(A)                  | <20 | 23  | 27  | 31  | 35  | 38  | 43  | 48  | 51  | 55  | 58  |   |     |
| 315   | 0,0536                                    | m <sup>3</sup> /h      | 194 | 233 | 272 | 311 | 350 | 389 | 467 | 544 | 622 | 700 | 778 | 250   | 520 |
|       |   | Pa (with equalizer)    | 5   | 5   | 7   | 9   | 11  | 14  | 21  | 28  | 37  | 47  | 58  |   |     |
|       |   | Pa (without equalizer) | 7   | 8   | 11  | 14  | 17  | 22  | 32  | 43  | 57  | 73  | 90  |   |     |
|       |   | L(m)                   | 2   | 2,3 | 2,4 | 2,6 | 2,7 | 2,9 | 3,1 | 3,3 | 3,6 | 3,7 | 3,9 |   |     |
|       |   | dB(A)                  | <20 | <20 | 22  | 27  | 31  | 35  | 41  | 47  | 51  | 55  | 59  |   |     |

### EDRF-EQ: equalizer



### Plenum



All measurements are expressed in mm.

| model | L   | H   | P   | ØA2 Diffuser | ØB2 duct - flexible or rigid | C2 | D2  |
|-------|-----|-----|-----|--------------|------------------------------|----|-----|
| 125   | 200 | 200 | 200 | 127          | 125                          | 70 | 100 |
| 160   | 250 | 250 | 250 | 162          | 155                          | 70 | 100 |
| 200   | 300 | 300 | 300 | 202          | 195                          | 70 | 100 |
| 250   | 350 | 350 | 350 | 252          | 245                          | 70 | 100 |
| 315   | 400 | 400 | 400 | 317          | 310                          | 70 | 100 |

### Price list

| model | diffusor EDRFB | diffusor EDRFQB on square panel | diffusor EDRFQB on square panel 595x595 | EDRF-EQ fitting with equaliser | Galvanised plenum | insulated plenum | Galvanised PLENUM with damper | Insulated PLENUM with damper |
|-------|----------------|---------------------------------|---|--------------------------------|-------------------|------------------|-------------------------------|------------------------------|
|       |                |                                 |   |                                | EPZ-DC            | EPI-DC           | EPZ-DCS                       | EPI-DCS                      |
|       | euro           | euro                            | euro                                    | euro                           | euro              | euro             | euro                          | euro                         |
| 125   | ∨              | ∨                               | ∨                                       | ∨                              | ∨                 | ∨                | ∨                             | ∨                            |
| 160   | ∨              | ∨                               | ∨                                       | ∨                              | ∨                 | ∨                | ∨                             | ∨                            |
| 200   | ∨              | ∨                               | ∨                                       | ∨                              | ∨                 | ∨                | ∨                             | ∨                            |
| 250   | ∨              | ∨                               | ∨                                       | ∨                              | ∨                 | ∨                | ∨                             | ∨                            |
| 315   | ∨              | ∨                               | ∨                                       | ∨                              | ∨                 | ∨                | ∨                             | ∨                            |