



### E-DC75

Square diffuser with fixed cones.



## **Description E-DC75**

Square diffuser with fixed cones made with extruded anodized aluminium profiles. Diffuser with four ways of discharge.

### **Fixtures:**

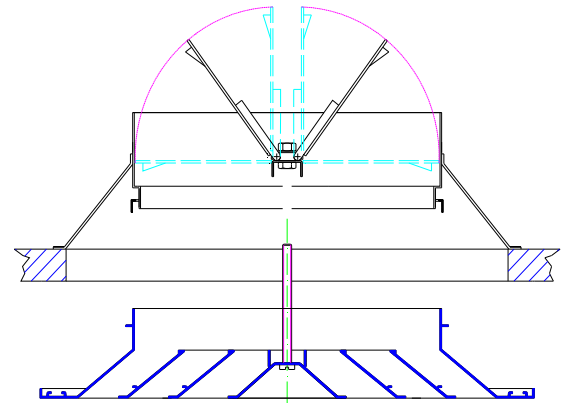
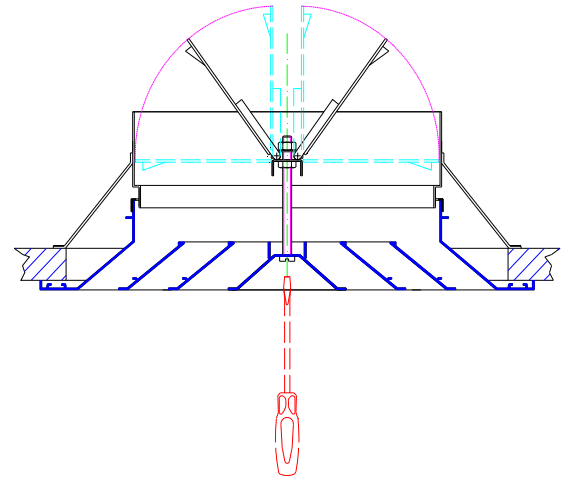
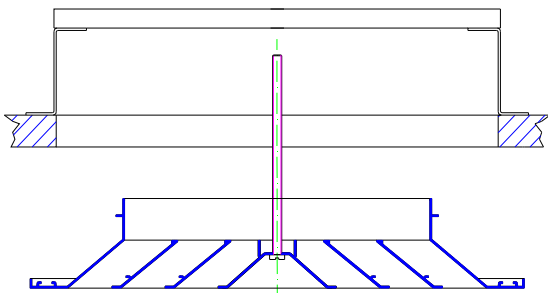
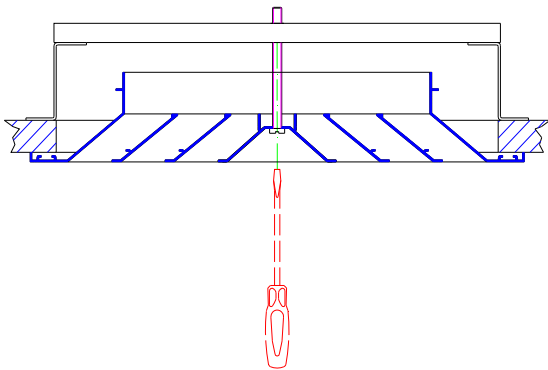
- ✓ Mounting bridge E-PM
- ✓ Neck-bridge E-XAPO with circular intake.

**Finish:** Anodized or white lacquered aluminium. It can be supplied in other colours on request.

**Applications:** Diffuser used to blow cold air from the ceiling. The E-DR75 is the diffuser used to achieve certain induction, with a good reach and little penetration. It is advisable to place them on ceilings lower than 3.5 m high.



## Fixtures E-DC75



### **Mounting bridge:**

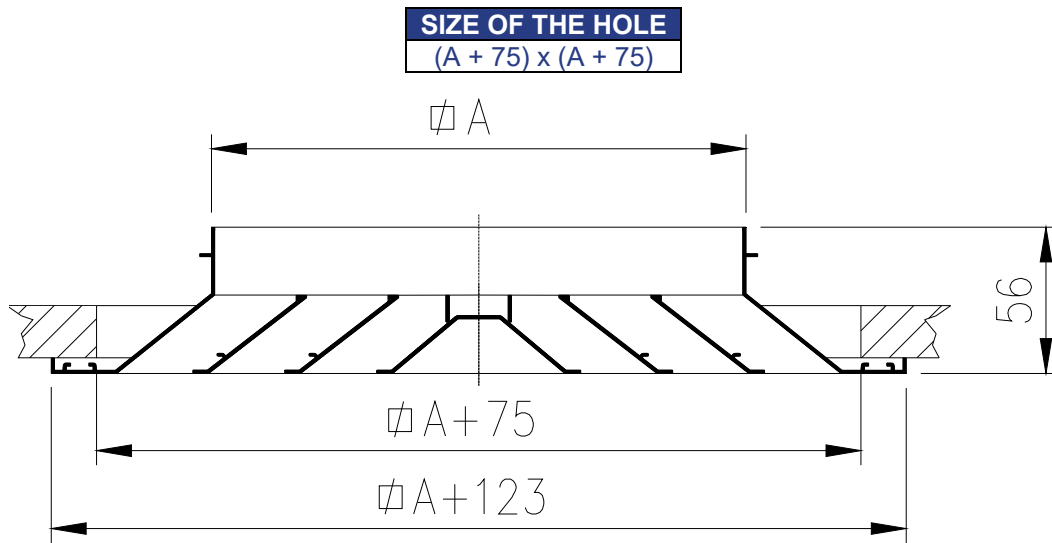
1. Place the mounting bridge on the ceiling.
2. Place the diffuser so that the central screw fits in the hole on the mounting bridge.
3. Screw the diffuser to the bridge so that they both make sandwich with the ceiling.

### **Xapo:**

1. Place the Xapo resting on three legs on the ceiling.
2. Place the diffuser so that the central screw fits in the hole on the Xapo.
3. Screw the diffuser to the Xapo so that they both make sandwich with the ceiling.



## Dimensions E-DC75

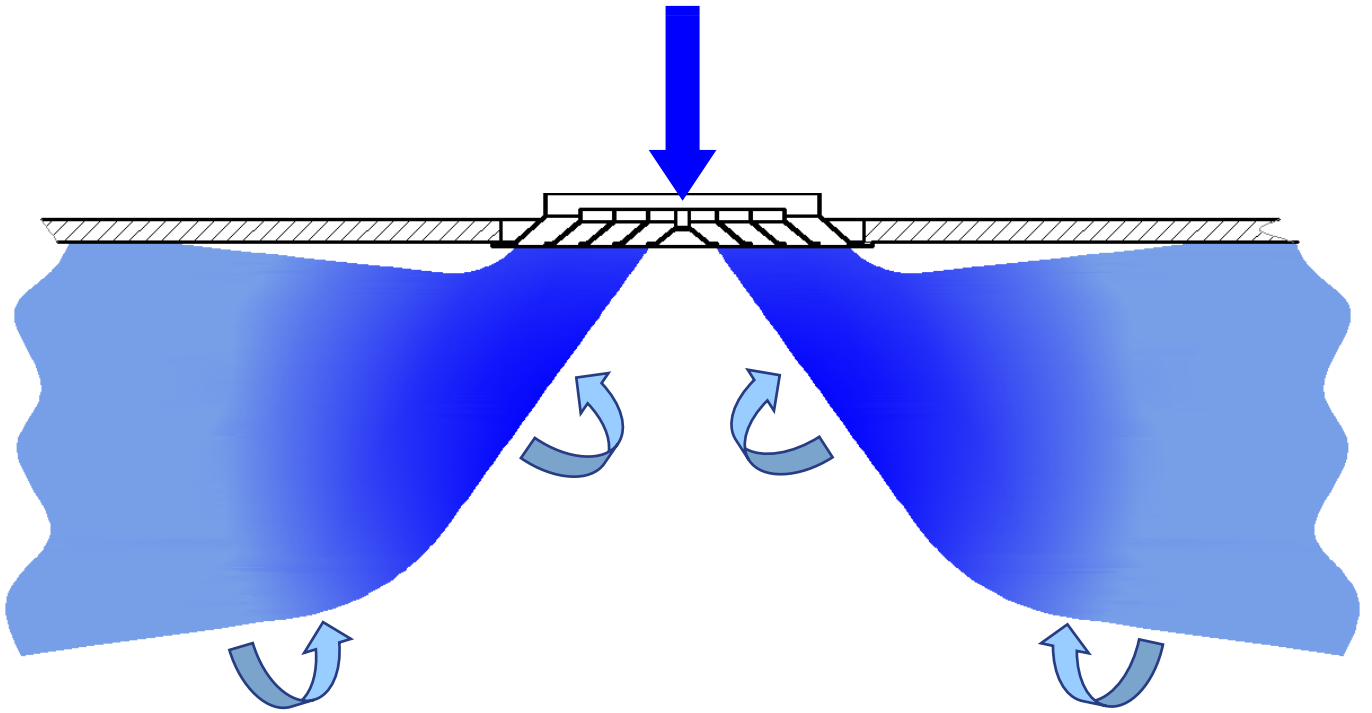


| SIZES & DIMENSIONS |     |      |       |
|--------------------|-----|------|-------|
| Size               | A   | A+75 | A+123 |
| 6"                 | 150 | 225  | 273   |
| 9"                 | 225 | 300  | 348   |
| 12"                | 300 | 375  | 423   |
| 15"                | 375 | 450  | 498   |
| 18"                | 450 | 525  | 573   |
| MODULAR C.         | 466 | 540  | 589   |
| 21"                | 525 | 600  | 648   |

| MODELO       | D         |           |            |            |            |                |            |
|--------------|-----------|-----------|------------|------------|------------|----------------|------------|
|              | 6"<br>150 | 9"<br>225 | 12"<br>300 | 15"<br>375 | 18"<br>450 | MODULAR<br>466 | 21"<br>525 |
| E-DC75       | *         | *         | *          | *          | *          | *              | *          |
| E-DC75+CC    | *         | *         | *          | *          | *          | *              | *          |
| E-DC75+CC+PM | *         | *         | *          | *          | *          | *              | *          |
| PM           | *         | *         | *          | *          | *          | *              | *          |
| E-DC75+XAPO  | *         | *         | *          | *          | *          | *              | *          |
| E-DC75+R     | *         | *         | *          | *          | *          | *              | *          |

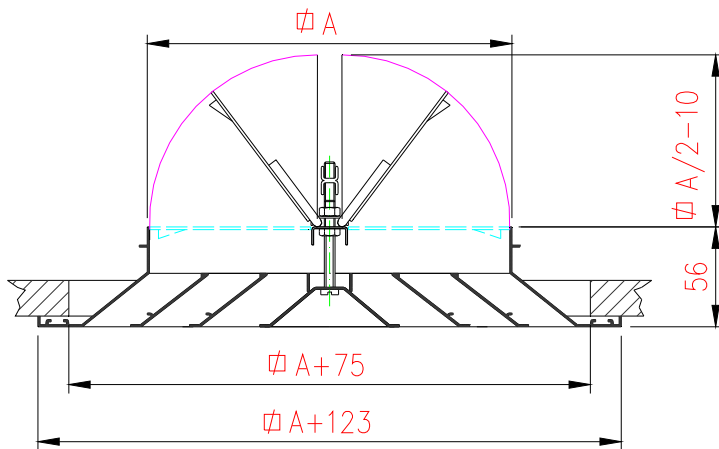


**Air diffusion E-DC75**



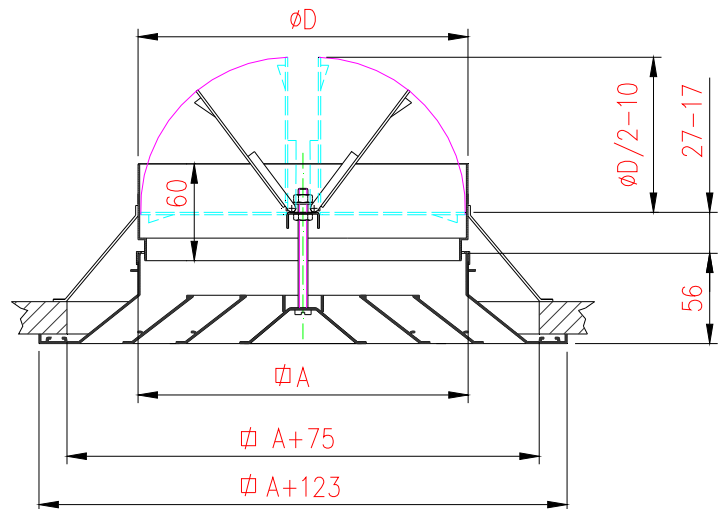


## Accessories E-DC75



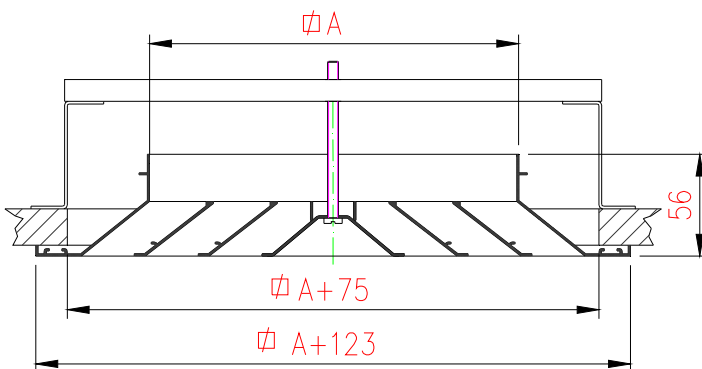
**E-CR:** Butterfly type flow regulation valve. Made in galvanised sheet.

**E-CR**



**E-XAPO:** Neck-bridge with regulator, special to adapt directly to a flexible tube.

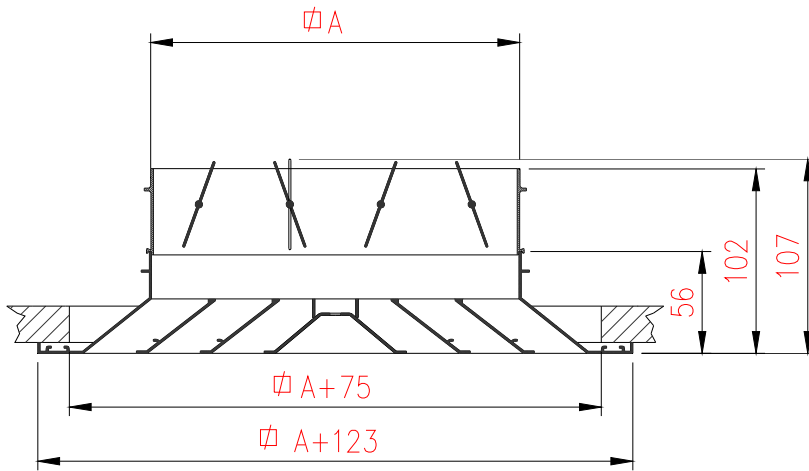
**E-XAPO**



**E-PM:** Mounting bridge.



## Accessories E-DC75

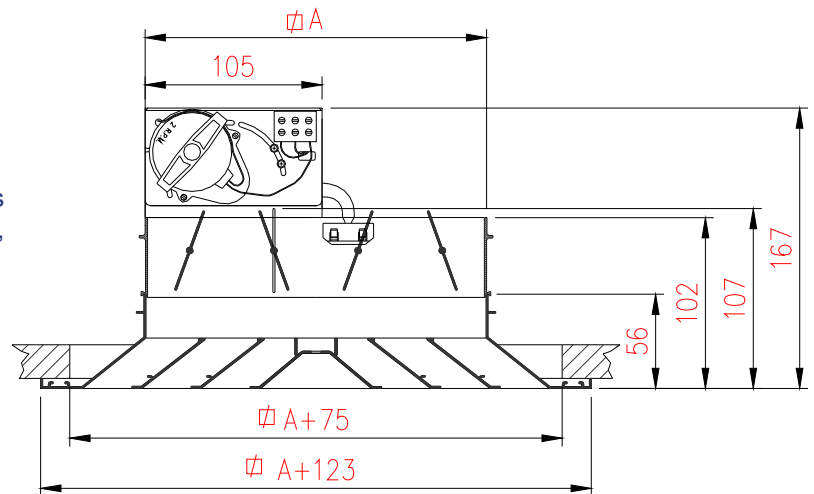


**E-R:** Opposed blades flow regulation valve, made with aluminium profiles. In this closing position the blades are totally flat, while when in open position the blades are parallel to the air flow.

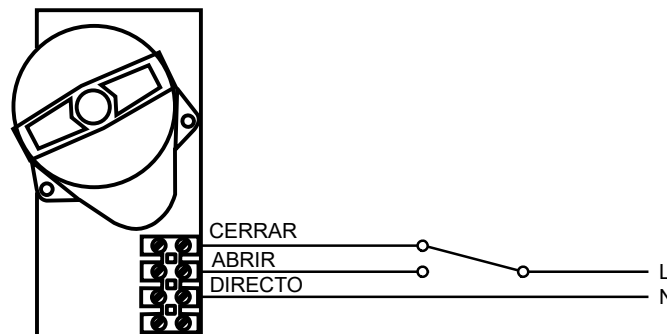
The opening and closing of the flow regulation is performed through a manually operated crown wheel.

**E-R**

**E-RM:** Motorization of the opposing blades regulation valve. It can be 24 V or 220 V, according to that specified on the order.



**E-RM**



**Connection scheme**



## Selection table E-DC75

| Size           | Duct speed (m/s) | 1,5         | 2           | 2,5         | 3           | 3,5         | 4            | 4,5          | 5            |
|----------------|------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|
| 6"<br>150      | Q [m³/h]         | 110         | 150         | 185         | 220         | 260         | 295          | 330          | 365          |
|                | Range [m]        | 1,20 - 1,76 | 1,48 - 2,17 | 1,73 - 2,54 | 1,98 - 2,90 | 2,26 - 3,32 | 2,50 - 3,68  | 2,75 - 4,05  | 3 - 4,41     |
|                | P [mm.c.a.]      | 0,32        | 0,59        | 0,88        | 1,24        | 1,73        | 2,22         | 2,78         | 3,4          |
|                | Sound L. [dB(A)] | <15         | <15         | 15          | 20          | 25          | 28           | 31           | 34           |
| 9"<br>225      | Q [m³/h]         | 240         | 320         | 400         | 480         | 560         | 640          | 720          | 800          |
|                | Range [m]        | 1,57 - 2,30 | 1,95 - 2,87 | 2,33 - 3,43 | 2,71 - 3,99 | 3,09 - 4,55 | 3,47 - 5,12  | 3,85 - 5,68  | 4,23 - 6,24  |
|                | P [mm.c.a.]      | 0,32        | 0,56        | 0,87        | 1,24        | 1,68        | 2,19         | 2,77         | 3,42         |
|                | Sound L. [dB(A)] | <15         | <15         | 19          | 24          | 28          | 32           | 35           | 38           |
| 12"<br>300     | Q [m³/h]         | 395         | 525         | 655         | 785         | 920         | 1055         | 1180         | 1315         |
|                | Range [m]        | 1,89 - 2,78 | 2,38 - 3,49 | 2,86 - 4,20 | 3,34 - 4,92 | 3,84 - 5,66 | 4,34 - 6,40  | 4,80 - 7,08  | 5,30 - 7,82  |
|                | P [mm.c.a.]      | 0,32        | 0,56        | 0,86        | 1,22        | 1,67        | 2,2          | 2,74         | 3,4          |
|                | Sound L. [dB(A)] | <15         | <15         | 19          | 24          | 29          | 33           | 36           | 39           |
| 15"<br>375     | Q [m³/h]         | 585         | 780         | 980         | 1170        | 1365        | 1560         | 1755         | 1950         |
|                | Range [m]        | 2,21 - 3,25 | 2,80 - 4,12 | 3,41 - 5,02 | 3,99 - 5,88 | 4,58 - 6,75 | 5,17 - 7,63  | 5,77 - 8,51  | 6,36 - 9,38  |
|                | P [mm.c.a.]      | 0,32        | 0,56        | 0,87        | 1,23        | 1,67        | 2,18         | 2,75         | 3,39         |
|                | Sound L. [dB(A)] | <15         | <15         | 21          | 26          | 30          | 34           | 37           | 40           |
| 18"<br>450     | Q [m³/h]         | 800         | 1070        | 1330        | 1600        | 1865        | 2130         | 2395         | 2665         |
|                | Range [m]        | 2,51 - 3,69 | 3,22 - 4,73 | 3,89 - 5,73 | 4,60 - 6,77 | 5,29 - 7,79 | 5,98 - 8,81  | 6,67 - 9,83  | 7,37 - 10,87 |
|                | P [mm.c.a.]      | 0,32        | 0,56        | 0,86        | 1,24        | 1,68        | 2,18         | 2,75         | 3,41         |
|                | Sound L. [dB(A)] | <15         | 15          | 21          | 26          | 30          | 34           | 37           | 40           |
| MODULAR<br>466 | Q [m³/h]         | 843         | 1127        | 1402        | 1686        | 1965        | 2245         | 2524         | 2807         |
|                | Range [m]        | 2,56 - 3,76 | 3,28 - 4,83 | 3,97 - 5,86 | 4,70 - 6,92 | 5,41 - 7,96 | 6,11 - 9,01  | 6,8 - 10     | 7,54 - 11,12 |
|                | P [mm.c.a.]      | 0,32        | 0,56        | 0,86        | 1,24        | 1,68        | 2,18         | 2,75         | 3,41         |
|                | Sound L. [dB(A)] | <15         | 15          | 21          | 26          | 30          | 34           | 37           | 40           |
| 21"<br>525     | Q [m³/h]         | 1080        | 1440        | 1800        | 2160        | 2520        | 2880         | 3235         | 3595         |
|                | Range [m]        | 2,85 - 4,19 | 3,66 - 5,39 | 4,46 - 6,58 | 5,27 - 7,77 | 6,08 - 8,96 | 6,88 - 10,15 | 7,68 - 11,33 | 8,49 - 12,52 |
|                | P [mm.c.a.]      | 0,32        | 0,56        | 0,86        | 1,24        | 1,68        | 2,19         | 2,76         | 3,4          |
|                | Sound L. [dB(A)] | <15         | 16          | 23          | 28          | 32          | 36           | 39           | 42           |

Q = Air flow rate in m³/h Range = Range at air speed of 0,25 m/s P = pressure loss Sound L. = Sound Level





## Effective surface (m<sup>2</sup>) E-DC75

| Size              | 150 – 6" | 225 – 9" | 300 – 12" | 375 – 15" | 450 – 18" | 525 – 21" |
|-------------------|----------|----------|-----------|-----------|-----------|-----------|
| Effective surface | 0,012    | 0,023    | 0,038     | 0,055     | 0,076     | 0,101     |

### EXAMPLE OF SELECTION

Data:           Supply air flow rate Q = 500 m<sup>3</sup>/h  
                   Sound Level = 30 dB(A)

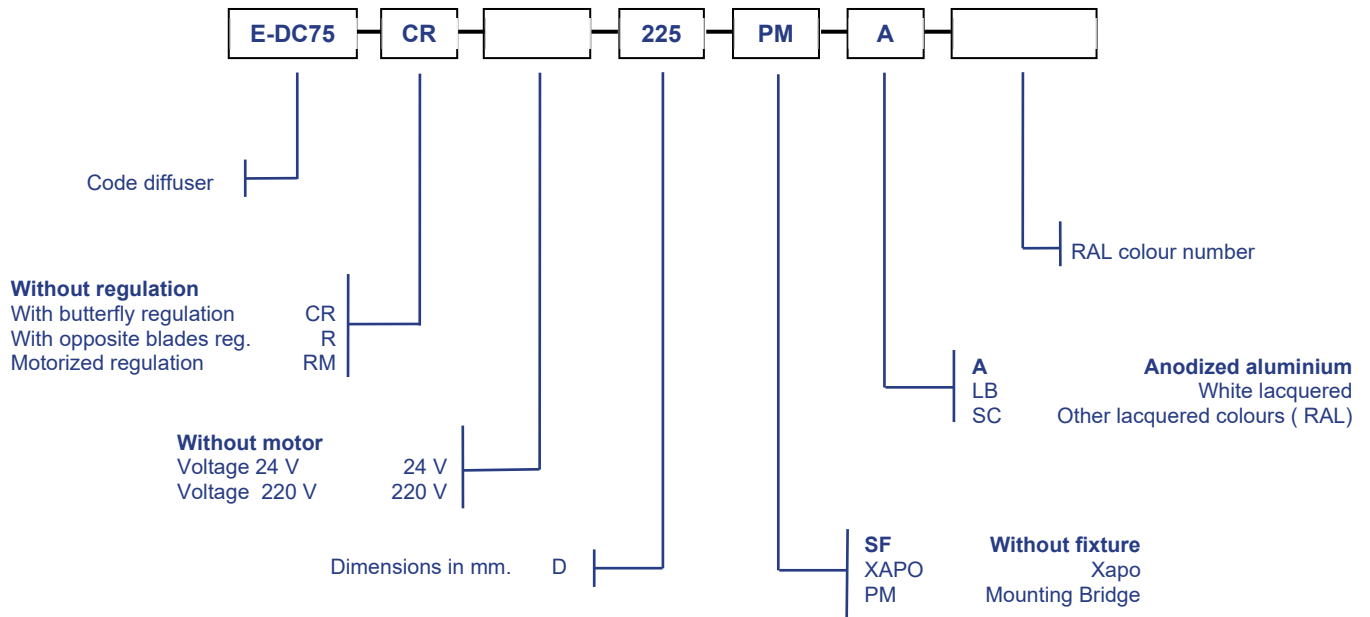
| Size | Duct air speed (m/s) | 1,5 | 2 | 2,5 | 3 | 3,5 | 4 | 4,5 | 5 |
|------|----------------------|-----|---|-----|---|-----|---|-----|---|
|------|----------------------|-----|---|-----|---|-----|---|-----|---|

| 9"<br>225 | Q [m <sup>3</sup> /h] | 240         | 320         | 400         | 480         | 560         | 640         | 720         | 800         |
|-----------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|           | Range [m]             | 1,57 - 2,30 | 1,95 - 2,87 | 2,33 - 3,43 | 2,71 - 3,99 | 3,09 - 4,55 | 3,47 - 5,12 | 3,85 - 5,68 | 4,23 - 6,24 |
|           | P [mm.c.a.]           | 0,32        | 0,56        | 0,87        | 1,24        | 1,68        | 2,19        | 2,77        | 3,42        |
|           | Sound L. [dB(A)]      | <15         | <15         | 19          | 24          | 28          | 32          | 35          | 38          |

Result:           Dimensions: 9" (225mm)  
                   Air duct speed V = 3 m/s  
                   Air flow rate Q = 480 m<sup>3</sup>/h  
                   Range = 2,71 – 3,99 m  
                   Pressure loss P = 1,24 mm.c.a  
                   Sound Level = 24 dB(A)



## Order reference E-DC75:



**Note1:** The options marked in bold will be used in the case no specification by the client is made. The motorized diffusers will always have E-R opposing blades regulation.

**Note2:** The E-XAPO neck-bridge is always supplied with flow regulation, therefore when using this type of fixtures it is not necessary to state CR in the code.

EXAMPLE: E-DC75-CR-225-PM-LB: Diffuser DC75 with butterfly-neck type regulation of 225 x 225 with mounting bridge fixture and lacquered in white.