



A.04

Ceiling diffusers and grilles

ASR

Slot diffusers Aluminium White, RAL 9016

Linear drum slot diffusers type ASR

Linear slot diffusers with adjustable drum deflector

Brand

Cairox

Application

• For air supply or exhaust in ventilation and air conditioning systems.

Material

Aluminium

Colour

- Anodized extruded aluminium, deflector RAL 9005 black polypropylene Standard colour white, RAL 9016, deflector standard colour black polypropylene
- Other colours available upon request

Mounting

Ceiling mounted

Accessories

- Non-insulated plenum box, type PR-ASR
 2-sides insulated plenum box, type PRI-ASR
- Connection piece, type ASR-CON for in-line mounting

Order example

ASR-2 RAL9016, 1500 + PR-ASR 2 1500 + ASR-CON

Explanation

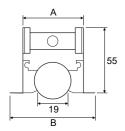
ASR RAL9016 = Diffuser type in white finish

2 = Slot quantity

1500 = Length of diffuser Accessories (optional)

PR-ASR 2 1500 = Not-insulated plenum box for diffuser of 2 slots with a length of

ASR-CON = Connection piece to mount several diffusers in line





Ceiling diffusers and grilles

| | | Dimensions | | | |
|-------|--------|------------|--------|--------|--|
| | L [mm] | ØD [mm] | A [mm] | B [mm] | |
| | 800 | 1 x 100 | | | |
| ASR 1 | 1000 | 1 x 100 | 39 | 56 | |
| ASK I | 1500 | 2 x 100 | 33 | | |
| | 2000 | 3 x 100 | | | |
| | 800 | 1 x 150 | | | |
| ASR 2 | 1000 | 2 x 150 | 77 | 94 | |
| ASR 2 | 1500 | 3 x 150 | ′′ | | |
| | 2000 | 4 x 150 | | | |
| | 800 | 1 x 200 | | | |
| ASR 3 | 1000 | 2 x 200 | 115 | 132 | |
| ASK 5 | 1500 | 3 x 200 | 113 | 132 | |
| | 2000 | 4 x 200 | | | |
| | 800 | 2 x 200 | | | |
| ASR 4 | 1000 | 2 x 200 | 153 | 170 | |
| ASK 4 | 1500 | 3 x 200 | 133 | | |
| | 2000 | 4 x 200 | | | |

| Column C | 2000 - 3 1500 - 4 0.0372 0.0496 | | | 800 -4 | 1500 - 2 | | | | | | | | |
|--|---------------------------------------|--------|--------|---------|----------|---------|--------|---------|----|----|-----|-------|-----|
| Q | | | | 800 -4 | | | | | | | | ASR | |
| Vk | 0.0372 0.0496 | 0.0279 | | | | | | | | | | | |
| X0,25 | | | 0.0248 | 0.01984 | 0.0186 | 0.01488 | 0.0124 | 0.00992 | | | | | Q |
| Ps 9 6 3 | | | | | | | | | | | | | |
| Lw(A) <20 <20 <20 <20 | | | | | | | | | | | | | 50 |
| Vk 4.5 3 2.8 2.2 1.9 1.5 | | | | | | | | | | | | | |
| 100 X0,25 | | | | | | | | | | | <20 | | |
| Ps | | | | | | | | | | | | | |
| Lw(A) 33 24 23 <20 <20 <20 | | | | | | | | | | | | | 100 |
| Vk 4.5 4.2 3.4 2.8 2.2 2.1 1.7 1.5 X0,25 6.5 6.2 5.4 4.9 4.2 4.1 3.5 3.3 Ps 27 24 17 12 8 7 5 4 Lw(A) 35 34 30 26 21 <20 | | | | | | | | | | | | | |
| X0,25 6.5 6.2 5.4 4.9 4.2 4.1 3.5 3.3 Ps 27 24 17 12 8 7 5 4 Lw(A) 35 34 30 26 21 <20 <20 <20 Vk 4.5 3.7 3 2.8 2.2 2 | | | | | | | | | | 33 | | | |
| 150 Ps | | | | | | | | | | | | | |
| PS | | 3.3 | | | | | | | | | | | 150 |
| Vk 4.5 3.7 3 2.8 2.2 2 | | | | | | | | | | | | | 130 |
| | | | | | 21 | 26 | | 34 | 35 | | | | |
| | 1.5 | | | | | | | | | | | | |
| | 3.7 | 4.4 | 4.7 | 5.4 | 5.6 | 6.5 | 7.2 | | | | | X0,25 | 200 |
| Ps 30 22 15 13 9 / | 4 | 7 | | 13 | | | 30 | | | | | Ps | 200 |
| Lw(A) 37 34 29 28 23 20 | <20 | | | | | | 37 | | | | | | |
| Vk 4.7 3.7 3.5 2.8 2.5 | 1.9 | | | | | | | | | | | | |
| X0,25 8.1 7 6.8 5.9 5.5 | 4.6 | 5.5 | 5.9 | 6.8 | 7 | 8.1 | | | | | | X0,25 | 250 |
| 250 NJ, 25 NJ, 2 | 7 | 11 | 14 | 21 | 23 | 34 | | | | | | Ps | 250 |
| Lw(A) 40 35 34 29 27 | 21 | 27 | 29 | 34 | 35 | 40 | | | | | | Lw(A) | |
| Vk 4.5 4.2 3.4 3 | 2.2 1.7 | 3 | 3.4 | 4.2 | 4.5 | | | | | | | Vk | |
| 300 X0,25 8.5 8.1 7.1 6.6 | 5.5 4.6 | 6.6 | 7.1 | 8.1 | 8.5 | | | | | | | X0,25 | 200 |
| 900 Ps 33 30 20 16 | 10 6 | 16 | 20 | 30 | 33 | | | | | | | Ps | 300 |
| Lw(A) 40 39 34 31 | 26 <20 | | | | | | | | | | | | |
| Vk 4.9 3.9 3.5 | 2.6 2 | 3.5 | 3.9 | | | | | | | | | | |
| VA 25 | 6.4 5.4 | | | 9.5 | | | | | | | | X0.25 | 200 |
| 350 AU,29 9.5 0.5 7.7 Ps 40 27 22 | 14 8 | | | | | | | | | | | | 350 |
| Lw(A) 43 38 36 | 30 24 | | | | | | | | | | | | |
| Vk 4.5 4 | 3 2.2 | | | | | | | | | | | | |
| V0.25 | 7.4 6.2 | 8.8 | | | | | | | | | | X0.25 | |
| 400 AU,29 9.4 0.6 29 36 29 | 18 11 | | | | | | | | | | | | 400 |
| Lw(A) 42 39 | 33 27 | | | | | | | | | | | | |
| Vk 5 | 3.7 2.8 | | | | | | | | | | | | |
| V0.25 | 9.2 7.7 | | | | | | | | | | | | |
| 500 AU,29 PS | 28 17 | | | | | | | | | | | | 500 |
| Lw(A) 45 | 39 33 | | | | | | | | | | | | |
| Vk | 4.5 3.4 | ., | | | | | | | | | | | |
| V0.25 | 11 9.2 | | | | | | | | | | | | |
| 600 AU,29 PS | | | | | | | | | | | | | 600 |
| Lw(A) | 40 24 | | | | | | | | | | | | |

Symbols and specifications

- Q = Air Volume in m³/h
- Ak = Effective surface (free area) in m²
- Vk = Average effective velocity through the grill in m/s
 X0.25 = Throw length in m at an endvelocity Vt of 0,25m/s
- Ps = Static pressure loss given in Pa
- Lw(A) = Acoustic power in dB(A)
- The horizontal throw X0.25 is given at an end velocity of 0.25m/s with all deflectors positioned for a maximal horizontal
- one-way throw installed in smooth ceiling without any obstacles.

 The values are given for isothermal supply air. Throw distances for cooling conditions at -11K can be calculated by deviding the X0.25 values with factor 1.1. For heating purposes at Dt of +11K a multiplier of 1.1 should be applied to the given X0.25 value.
- The pressure losses Ps are given for grilles without damper.
 The acoustic power Lw(A) are given for grilles without damper without room attenuation. Acoustic powers below 20dB (A) are mentioned as "<20" in the tables.
- For all special requirements, please contact our engineering office.



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Placement instruction

