

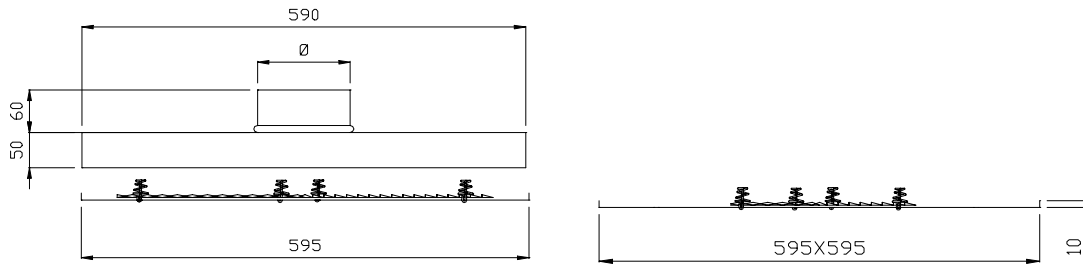
**MULTIDIRECTIONAL PERFORATED  
SCREEN DIFFUSERS**

**KT - KR  
SERIES**

**TECHNICAL CHARACTERISTICS**

**KT**

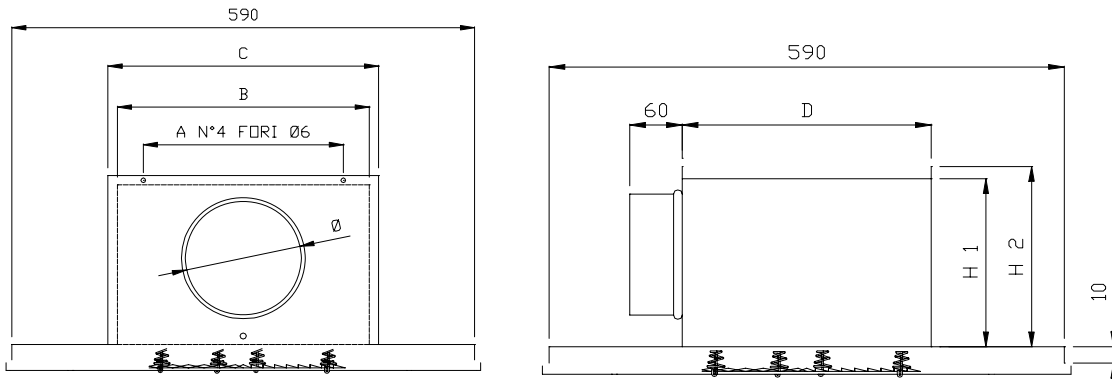
Diffusers with plenum and 595x595 panel.



**KT4-127** with 4 throws and top coupling nominal diameter of 127.  
Other diameters available 152-203-254-315.

**KR**

Diffusers with plenum and 595x595 panel .



**KR4225-127** with 4 throws and side coupling nominal diameter of 127.  
Other diameters available 152-203-254.

**DIMENSIONS**

**TECHNICAL DATA**

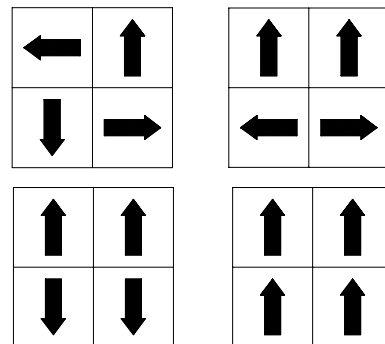
**THROW COMBINATIONS**

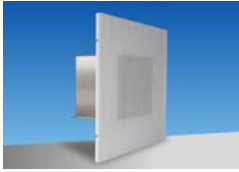
KT . 127  
KT . 152  
KT . 203  
KT . 254  
KT . 305

| A | B | C | D | Ø   | H1 | H2 |
|---|---|---|---|-----|----|----|
|   |   |   |   | 123 |    |    |
|   |   |   |   | 148 |    |    |
|   |   |   |   | 199 |    |    |
|   |   |   |   | 250 |    |    |
|   |   |   |   | 301 |    |    |

KR . 225-127  
KR . 300-152  
KR . 375-203  
KR . 525-254

|     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|
| 180 | 240 | 270 | 210 | 123 | 170 | 185 |
| 255 | 315 | 345 | 285 | 152 | 205 | 220 |
| 315 | 390 | 420 | 360 | 199 | 250 | 265 |
| 365 | 540 | 570 | 510 | 250 | 300 | 315 |



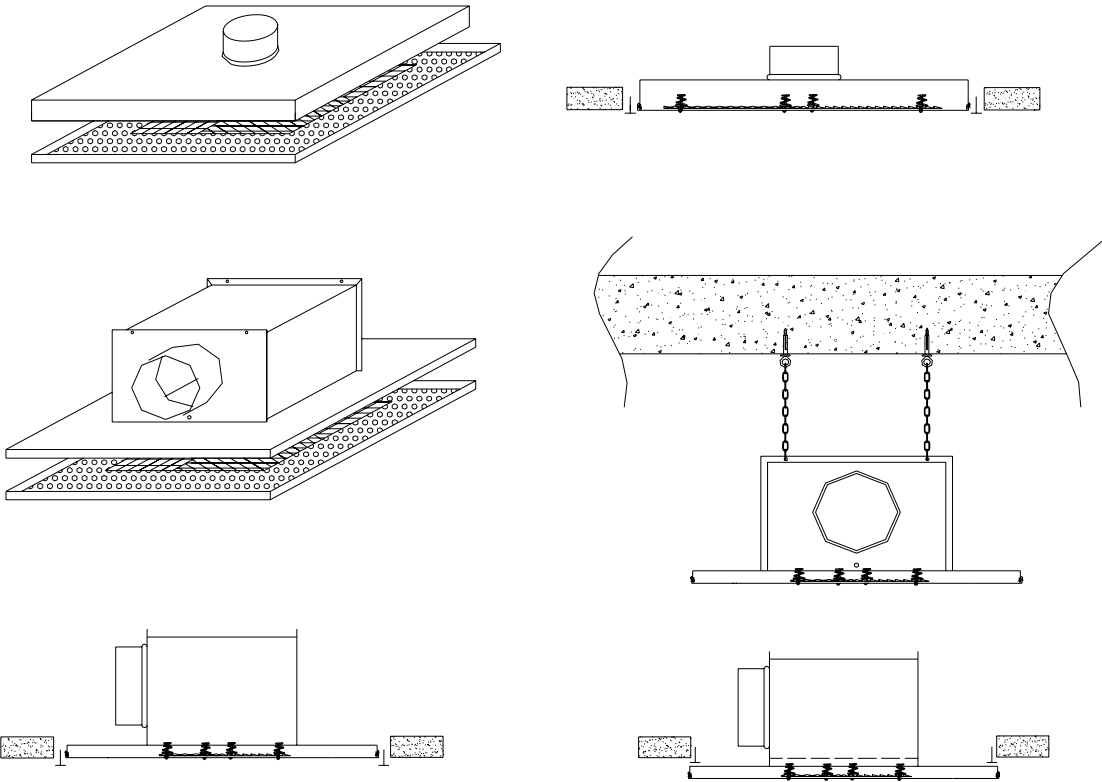


## MULTIDIRECTIONAL PERFORATED SCREEN DIFFUSERS

KT - KR  
SERIES

### MOUNTING EXAMPLE

### MOUNTING EXAMPLES

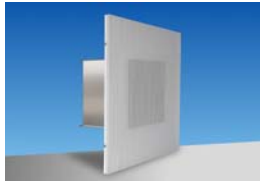


**TECHNICAL DATA :** The KT and KR series diffusers consist of a removable perforated outer screen and a plenum connected by means of top or side fitting. The inside houses removable deflectors which can be adjusted to modify the air direction, obtaining combined or single air flows.

The front screen and the plenum have been designed without any shutter sector in order to guarantee 100% use of the Ak surface, maintaining the same air flow rate, sound level and pressure loss. This air treatment component is therefore suitable for all applications requiring heating and cooling. Obviously it can also be used in the same way in ceiling air extraction, removing the directional components. The anemometer has an operating range from a minimum of 2.6 m to a maximum of 4 m in height.

**MATERIALS :** The panel is made of steel sheet in white colour RAL 9010 (epoxy powder treatment), the plenum is made from galvanized steel sheet.

**FITTING :** The plenum is fitted directly to the ceiling by means of supporting rods.

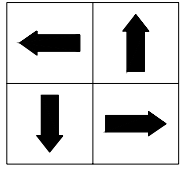


## MULTIDIRECTIONAL PERFORATED SCREEN DIFFUSERS

KT - KR  
SERIES

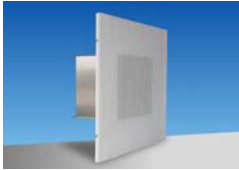
### PERFORMANCE

| Air flow<br>m <sup>3</sup> /h | DIFFUSERS WITH 4 DEFLECTORS |                                          |                              |                              |          | Air flow<br>m <sup>3</sup> /h | DIFFUSERS WITH 0 DEFLECTORS |                                          |                              |                              |          |
|-------------------------------|-----------------------------|------------------------------------------|------------------------------|------------------------------|----------|-------------------------------|-----------------------------|------------------------------------------|------------------------------|------------------------------|----------|
|                               | ↓                           | KT 4 127<br>KT 4 152<br>KR 4 225-<br>127 | KT 4 203<br>KR 4 375-<br>203 | KT 4 254<br>KR 4 525-<br>254 | KT 4 305 |                               | ↓                           | KT 0 127<br>KT 0 152<br>KR 0 225-<br>127 | KT 0 203<br>KR 0 375-<br>203 | KT 0 254<br>KR 0 525-<br>254 | KT 0 305 |
| 100                           | Vk                          | 0,9                                      | 0,5                          | 0,3                          |          | Vk                            | 0,9                         | 0,5                                      | 0,3                          |                              |          |
|                               | X                           | 0,6                                      | 0,4                          | 0,3                          |          | X                             | 1,0                         | 0,7                                      | 0,5                          |                              |          |
|                               | Pt                          | 3,5                                      | 0,9                          | 0,3                          |          | Pt                            | 3,0                         | 0,8                                      | 0,3                          |                              |          |
|                               | NR                          | 8,0                                      |                              |                              |          | NR                            |                             |                                          |                              |                              |          |
| 160                           | Vk                          | 1,5                                      | 0,8                          | 0,5                          | 0,3      | Vk                            | 1,5                         | 0,8                                      | 0,5                          | 0,3                          |          |
|                               | X                           | 0,9                                      | 0,6                          | 0,5                          | 0,4      | X                             | 1,5                         | 1,1                                      | 0,9                          | 0,7                          |          |
|                               | Pt                          | 8,9                                      | 2,3                          | 0,9                          | 0,4      | Pt                            | 7,7                         | 2,0                                      | 0,7                          | 0,3                          |          |
|                               | NR                          | 24,0                                     |                              |                              |          | NR                            | 7,0                         |                                          |                              |                              |          |
| 200                           | Vk                          | 1,8                                      | 0,9                          | 0,6                          | 0,4      | Vk                            | 1,8                         | 0,9                                      | 0,6                          | 0,4                          |          |
|                               | X                           | 1,1                                      | 0,8                          | 0,6                          | 0,5      | X                             | 1,9                         | 1,4                                      | 1,1                          | 0,9                          |          |
|                               | Pt                          | 13,9                                     | 3,6                          | 1,3                          | 0,6      | Pt                            | 12,0                        | 3,1                                      | 1,2                          | 0,5                          |          |
|                               | NR                          | 31,0                                     | 12,0                         |                              |          | NR                            | 14,0                        |                                          |                              |                              |          |
| 250                           | Vk                          | 2,3                                      | 1,2                          | 0,7                          | 0,5      | Vk                            | 2,3                         | 1,2                                      | 0,7                          | 0,5                          |          |
|                               | X                           | 1,4                                      | 1,0                          | 0,8                          | 0,6      | X                             | 2,4                         | 1,7                                      | 1,3                          | 1,1                          |          |
|                               | Pt                          | 21,8                                     | 5,7                          | 2,1                          | 0,9      | Pt                            | 18,8                        | 4,9                                      | 1,8                          | 0,8                          |          |
|                               | NR                          | 39,0                                     | 19,0                         | 5,0                          |          | NR                            | 22,0                        |                                          |                              |                              |          |
| 300                           | Vk                          | 2,8                                      | 1,4                          | 0,9                          | 0,6      | Vk                            | 2,8                         | 1,4                                      | 0,9                          | 0,6                          |          |
|                               | X                           | 1,7                                      | 1,2                          | 0,9                          | 0,8      | X                             | 2,9                         | 2,1                                      | 1,6                          | 1,3                          |          |
|                               | Pt                          | 31,4                                     | 8,2                          | 3,0                          | 1,3      | Pt                            | 27,1                        | 7,1                                      | 2,6                          | 1,2                          |          |
|                               | NR                          | 44,0                                     | 25,0                         | 11,0                         |          | NR                            | 28,0                        | 8,0                                      |                              |                              |          |
| 350                           | Vk                          |                                          | 1,6                          | 1,0                          | 0,7      | Vk                            | 3,2                         | 1,6                                      | 1,0                          | 0,7                          |          |
|                               | X                           |                                          | 1,4                          | 1,1                          | 0,9      | X                             | 3,4                         | 2,4                                      | 1,9                          | 1,5                          |          |
|                               | Pt                          |                                          | 11,1                         | 4,1                          | 1,8      | Pt                            | 36,9                        | 9,6                                      | 3,5                          | 1,6                          |          |
|                               | NR                          |                                          | 30,0                         | 16,0                         |          | NR                            | 33,0                        | 13,0                                     |                              |                              |          |
| 400                           | Vk                          |                                          | 1,9                          | 1,1                          | 0,8      | Vk                            | 3,7                         | 1,9                                      | 1,1                          | 0,8                          |          |
|                               | X                           |                                          | 1,6                          | 1,3                          | 1,0      | X                             | 3,8                         | 2,7                                      | 2,1                          | 1,7                          |          |
|                               | Pt                          |                                          | 14,6                         | 5,3                          | 2,4      | Pt                            | 48,2                        | 12,6                                     | 4,6                          | 2,1                          |          |
|                               | NR                          |                                          | 35,0                         | 20,0                         | 9        | NR                            | 37,0                        | 18,0                                     |                              |                              |          |
| 500                           | Vk                          |                                          | 2,4                          | 1,4                          | 1,0      | Vk                            | 4,6                         | 2,4                                      | 1,4                          | 1,0                          |          |
|                               | X                           |                                          | 2,0                          | 1,6                          | 1,3      | X                             | 4,8                         | 3,4                                      | 2,7                          | 2,2                          |          |
|                               | Pt                          |                                          | 22,8                         | 8,3                          | 3,7      | Pt                            | 75,3                        | 19,7                                     | 7,2                          | 3,2                          |          |
|                               | NR                          |                                          | 42,0                         | 27,0                         | 16       | NR                            | 44,0                        | 25,0                                     | 11,0                         |                              |          |
| 600                           | Vk                          |                                          |                              | 1,7                          | 1,1      | Vk                            |                             | 2,8                                      | 1,7                          | 1,1                          |          |
|                               | X                           |                                          |                              | 1,9                          | 1,5      | X                             |                             | 4,1                                      | 3,2                          | 2,6                          |          |
|                               | Pt                          |                                          |                              | 12,0                         | 5,4      | Pt                            |                             | 28,3                                     | 10,4                         | 4,7                          |          |
|                               | NR                          |                                          |                              | 33,0                         | 22       | NR                            |                             | 31,0                                     | 17,0                         | 5                            |          |
| 800                           | Vk                          |                                          |                              | 2,3                          | 1,5      | Vk                            |                             | 3,8                                      | 2,3                          | 1,5                          |          |
|                               | X                           |                                          |                              | 2,5                          | 2,1      | X                             |                             | 5,5                                      | 4,3                          | 3,5                          |          |
|                               | Pt                          |                                          |                              | 21,4                         | 9,6      | Pt                            |                             | 50,3                                     | 18,5                         | 8,3                          |          |
|                               | NR                          |                                          |                              | 43,0                         | 31       | NR                            |                             | 41,0                                     | 26,0                         | 15                           |          |
| 1000                          | Vk                          |                                          |                              |                              | 1,9      | Vk                            |                             |                                          | 2,8                          | 1,9                          |          |
|                               | X                           |                                          |                              |                              | 2,6      | X                             |                             |                                          | 5,3                          | 4,4                          |          |
|                               | Pt                          |                                          |                              |                              | 15,0     | Pt                            |                             |                                          | 28,8                         | 12,9                         |          |
|                               | NR                          |                                          |                              |                              | 39       | NR                            |                             |                                          | 33,0                         | 22                           |          |
| 1200                          | Vk                          |                                          |                              |                              | 2,3      | Vk                            |                             |                                          | 3,4                          | 2,3                          |          |
|                               | X                           |                                          |                              |                              | 3,1      | X                             |                             |                                          | 6,4                          | 5,2                          |          |
|                               | Pt                          |                                          |                              |                              | 21,6     | Pt                            |                             |                                          | 41,5                         | 18,6                         |          |
|                               | NR                          |                                          |                              |                              | 45       | NR                            |                             |                                          | 39,0                         | 28                           |          |



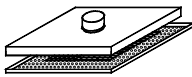
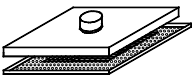
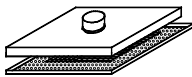

= Actual Velocity m/s  
 = Throw in m.  
 = Total pressure in Pa  
 = Acoustic level

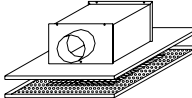
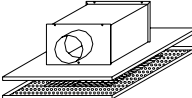
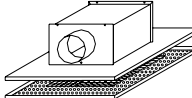

Terminal velocity 0,25 m/s



**MULTIDIRECTIONAL PERFORATED  
SCREEN DIFFUSERS**

**KT - KR  
SERIES**

|               | Perforated diffuser with 4 throws and plenum without deflectors                   | Perforated diffuser with 4 throws, plenum and deflectors                          | Perforated diffuser with 4 throws, insulated plenum and deflectors                 | Perforated panel 595x595 RAL 9010 with deflectors                                   |
|---------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Nominal sizes | KT 0 - ???                                                                        | KT 4 - ???                                                                        | KT I 4 - ???                                                                       | KE                                                                                  |
|               |  |  |  |  |
| 127           | X                                                                                 | X                                                                                 | X                                                                                  | X                                                                                   |
| 152           | X                                                                                 | X                                                                                 | X                                                                                  |                                                                                     |
| 203           | X                                                                                 | X                                                                                 | X                                                                                  |                                                                                     |
| 254           | X                                                                                 | X                                                                                 | X                                                                                  |                                                                                     |
| 305           | X                                                                                 | X                                                                                 | X                                                                                  |                                                                                     |

|               | Perforated diffuser with 4 throws and plenum without deflectors                     | Perforated diffuser with 4 throws, plenum and deflectors                            | Perforated diffuser with 4 throws, insulated plenum and deflectors                   | Perforated panel 595x595 RAL 9010 without deflectors                                  |
|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Nominal sizes | KR 0 ??? - ???                                                                      | KR 4 ??? - ???                                                                      | KR I 4 ??? - ???                                                                     | KF                                                                                    |
|               |  |  |  |  |
| 225-127       | X                                                                                   | X                                                                                   | X                                                                                    | X                                                                                     |
| 300-152       | X                                                                                   | X                                                                                   | X                                                                                    |                                                                                       |
| 375-203       | X                                                                                   | X                                                                                   | X                                                                                    |                                                                                       |
| 525-254       | X                                                                                   | X                                                                                   | X                                                                                    |                                                                                       |

KT Diffuser  
 KR Diffuser  
 4 Number of throws  
 0 Without deflectors  
 225 Plenum's dimensions  
 127 Coupling diameter

Example: KT 4 300 152  
 Diffuser model KT with 4 throws and coupling diameter 152 mm.