SERIES 'T', 'OK', 'E12/17' 'AMB-AP' GRILLES FOR INSTALLATION IN ROUND DUCT (-SR)

A) T1P, T2P, TEP, E12/17 OK1, OK2-SR

T2P-SR

T1P-SR

OK2-SR

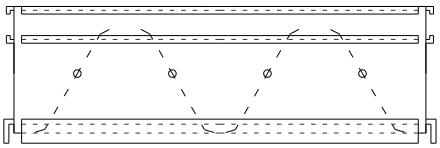
The air grilles series T and OK, type SR, has a curved frame which allows them to be fixed on the surface of a visible round air duct. They are manufactured with the same curvature as the duct, so that a perfect fit and a high design are achieved.

The manufactured types are as below:

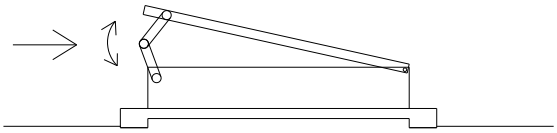
- **T1P-SR:** With one row of adjustable blades parallel to their larger dimension.
- **T2P-SR:** With two rows of adjustable blades, the front row is parallel to their larger dimension.
- **TEP-SR:** With one row of fixed blades parallel to their larger dimension.
- **E12/17-SR:** Linear with one row of fixed blades with step 12 or 17mm.
- **OK1-SR:** With curved adjustable blades and one-way throw pattern.
- **OK2-SR:** With curved adjustable blades and two-way throw pattern.
  In the OK type grilles the blades are parallel to their larger dimension.
- **AMB-AP-SR-Ø22:** See Chapter B.
- **AMB-AP-SR-Ø42:** See Chapter B.
- **AMB-KSR:** See AMB brochure.

All the grilles of this series (except of AMB-KSR) can be equiped with damper for regulation of the air flow. There are two types of dampers:

D: With opposed blades, adjusted from the front side, i.e.: OK2-SR-D.
DK: Flap type, adjusted with a bar from the front side, i.e.: T2P-SR-DK.



D



DK

The fixing of all of the types is possible with screws in the front side.

The frame is manufactured by galvanized steel sheet or by steel sheet electrostatically painted in RAL color. The blades are made by anodized aluminium or aluminium electrostatically painted in RAL color. The damper is manufactured by aluminium (D) or steel sheet (DK).

For the order, the following combination of letters and numbers is used:

<GRILLE TYPE> - <WIDTH> X <HEIGHT> ∅ <DUCT DIAMETER> - <CONSTRUCTION MATERIAL OR COLOUR>
i.e.: T2P -SR-D 400X150 ∅500 ALUMINIUM

DIMENSIONS

The SR type grilles are manufactured in certain dimensions as the below table. These dimensions are the width (G) and the height (E) of the hole.

WIDTH (G) \ HEIGHT (E)	100	125	150	200	250	300
300	X	X	X			
350	X	X	X			
400	X	X	X	X		
450	X	X	X	X		
500	X	X	X	X	X	
550	X	X	X	X	X	
600	X	X	X	X	X	X
650	X	X	X	X	X	X
700	X	X	X	X	X	X
750	X	X	X	X	X	X
800	X	X	X	X	X	X

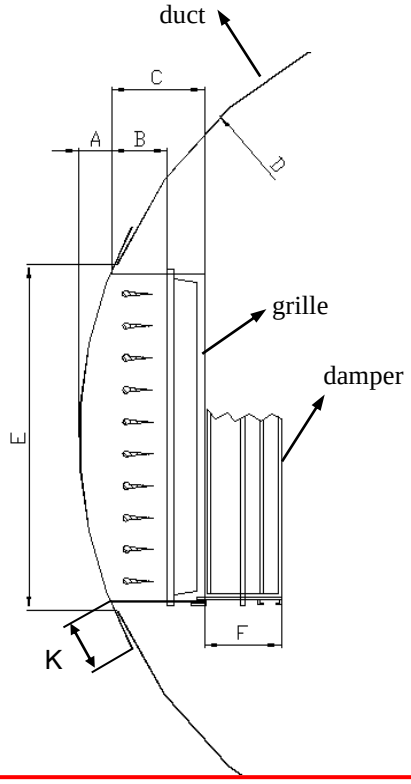
The diameters for which the grilles are manufactured are the below:

Ø: 200, 250, 300, 350, 400, 450, 500,550, 600, 650, 700, 750, 800, 850, 900, 950, 1000mm

The **minimum diameter** in which a grille with certain height can be manufactured appears in the below table:

	GRILLE HEIGHT 100	125	150	200	250	300
T1P/T2P/TEP/OK1/OK2 without D ή DK	200	250	300	400	500	600
T1P/T2P/TEP/OK1/OK2 with D ή DK	250	300	350	450	550	650

As we can see the minimum air duct diameter increases for grilles with damper because the grille depth increases.



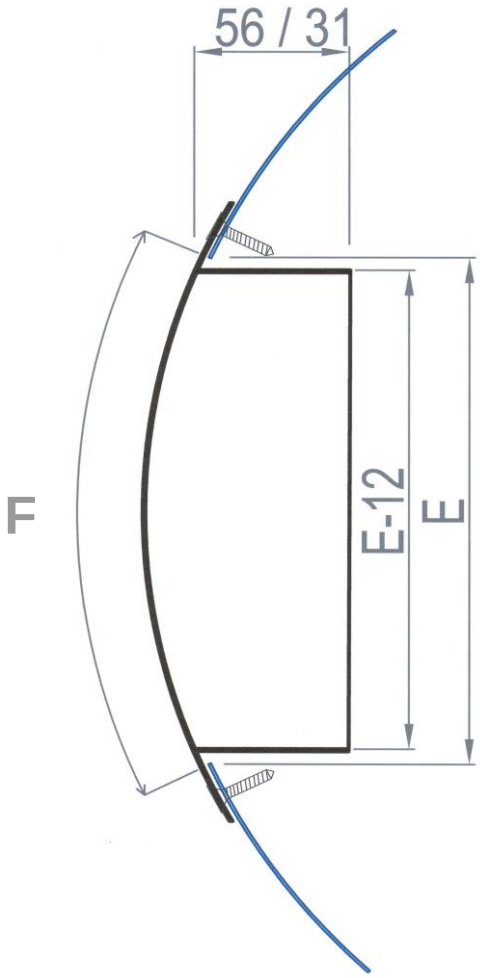
In the grilles OK1, OK2, E12/17, T1P and TEP the grille depth is equal to A+B. The A depends on the grille height (E) and the air duct diameter (D). The dimension B is equal to 31mm.

In the grilles T2P the grille depth is equal to A+C. The A depends on the grille height (E) and the air duct diameter (D). The dimension C is equal to 56mm.

In the case where the grille is equipped with damper for regulation of air flow, type D, the grille depth increases by 46mm (dimension F).

In the case where the grille is equipped with damper for regulation of air flow, type DK, the grille depth depends on DK angle.

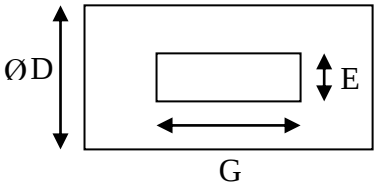
AIR DUCT HOLE CONSTRUCTION



If we want to make a hole on a round air duct with diameter D, in order to install a -SR type grille with **G x E** dimensions, we must make a hole with width G, then we will measure a distance F on the air duct and we will cut by height. The dimension F can be found into the table below in function of the E and D dimensions. As result, a hole G x E is made on the air duct.

F

ØD \ E	100	125	150	200	250	300
200	104,7					
250	102,9	130,9				
300	102,0	128,9	157,1			
350	101,4	127,8	155,0			
400	101,1	127,1	153,8	209,4		
450	100,8	126,7	152,9	207,2		
500	100,7	126,3	152,3	205,8	261,8	
550	100,6	126,1	151,9	204,7	259,5	
600	100,5	125,9	151,6	203,9	257,9	314,2
650	100,4	125,8	151,4	203,3	256,6	311,8
700	100,3	125,7	151,2	202,8	255,6	310,0
750	100,3	125,6	151,0	202,4	254,9	308,6
800	100,3	125,5	150,9	202,1	254,3	307,5
850	100,2	125,5	150,8	201,9	253,8	306,6
900	100,2	125,4	150,7	201,7	253,3	305,9
950	100,2	125,4	150,6	201,5	253,0	305,2
1000	100,2	125,3	150,6	201,4	252,7	304,7



GRILLES PERFORMANCE

The aerodynamic characteristics of the above mentioned grilles are exactly same as the corresponding wall T, E and ceiling OK AEROGRAMMI grilles. So, the corresponding diagrams or the, free of charge, SELAIR selection software can be used for the calculation of the air jet characteristics.


Ø22


Ø42

B) AMB-AP-SR-Ø22 & AMB-AP-SR-Ø42

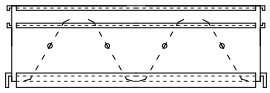
The jet diffusers AMB-AP-SR series have a curved frame manufactured by galvanized steel sheet or steel sheet electrostatically painted in RAL color, which allow them to be installed in the side of visible round air ducts. They are manufactured with a curvature same as the air duct curvature, so a perfect fit and a high design are achieved. The nozzles are installed in a fixed subframe.

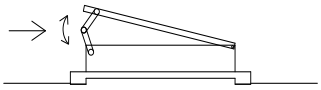
The following types are manufactured:

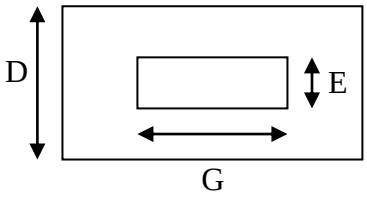
AMB-AP-SR-Ø22: With set of jet diffusers with active diameter 22mm.
AMB-AP-SR-Ø42: With set of jet diffusers with active diameter 42mm.

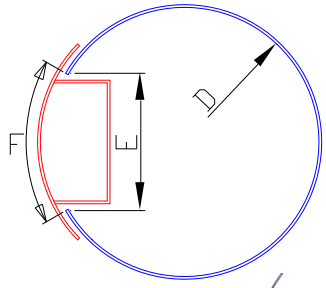
In both cases the jet diffusers have adjustable head towards all the directions and are made by plastic in some colors (see page 4).

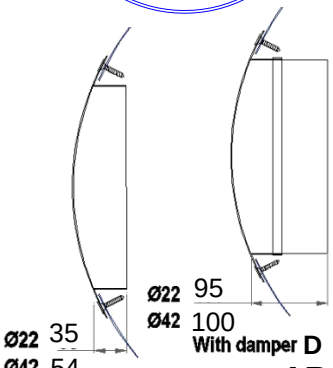
They can be equipped with damper **D** or **DK**.


D


DK







DIMENSIONS TABLE

TYPE	JET DIFFUSERS BY LENGTH	G	JET DIFFUSERS BY HEIGHT	E	MINIMUM DIAMETER WITHOUT DAMPER	MINIMUM DIAMETER WITHDAMPER (D or DK)
AMB-AP-SR-Ø22	5	415	1	98	200	250
	7	575	2	178	350	400
	10	815	3	258	500	550
	13	1055				
AMB-AP-SR- Ø 42	4	415	1	118	250	300
	5	515				
	6	615				
	7	715	2	218	450	500
	8	815				
	9	915				

Any combination of jet diffusers by length and by height is possible.

DIAMETERS FOR WHICH THE DIFFUSERS ARE MANUFACTURED (ØD):
200, 250, 300, 350, 400, 450, 500, 550, 600, 650, 700, 750, 800, 850, 900, 950, 1000

ARC LENGTH F FOR THE CONSTRUCTION OF A HOLE ON AIR DUCT

D	AMB-AP-SR- Ø22 1	2	3	AMB-AP-SR- Ø42 1	2
200	102,4	-	-	-	-
250	100,7	-	-	122,9	-
300	99,8	-	-	121,3	-
350	99,3	186,7	-	120,4	-
400	99,0	184,5	-	119,8	-
450	98,8	183,0	-	119,4	227,6
500	98,6	182,0	271,1	119,1	225,6
550	98,5	181,3	268,5	118,9	224,2
600	98,4	180,7	266,7	118,8	223,1

D	AMB-AP-SR- Ø 22 1	2	3	AMB-AP-SR- Ø42 1	2
650	98,4	180,3	265,3	118,7	222,3
700	98,3	180,0	264,2	118,6	221,7
750	98,3	179,7	263,4	118,5	221,2
800	98,2	179,5	262,7	118,4	220,8
850	98,2	179,3	262,1	118,4	220,5
900	98,2	179,2	261,7	118,3	220,2
950	98,2	179,1	261,3	118,3	220,0
1000	98,2	179,0	261,0	118,3	219,8

No of Jet diffusers per height

: In these cases the damper D or DK is not installed.