



AEROGRAMMI S.A.
DESIGN AND MANUFACTURE OF GRILLES AND SPECIAL AIR CONDITINING COMPONENTS



DRUM JET DIFFUSER

TPA





TPA



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GENERAL: The drum jet diffuser TPA is suitable for heating and cooling applications, for use in big rooms like airports, theatres, hospitals, shopping centers, factories etc. Also due to its large free surface it can be used when we have large air supply.

DESCRIPTION: It consists of rectangular frame in which there is a cylinder with rectangular opening that rotates. Turning the cylinder you can adjust the direction of air upwards or downwards. The rotation of the cylinder is done manually or by actuator. Between the frame and cylinder a seal is placed in order to avoid air leakage from that point.

In the cylinder there are manually rotated blades with aerodynamic shape. With these we can turn the air sideways or open-close the air throw. When you open the air throw there is better mixing of the supply air with the room air. Thus, the air velocity decreases rapidly and simultaneously balances the supply air temperature to the temperature of the ambient air.

TYPES: TPA is available in the following executions:

- **TPA:** With one row of adjustable blades.
- **TPA-D:** With one row of adjustable blades and aluminum made, multiple leaf, air volume control damper with simultaneously opposite rotated blades.
- **TPA-SV:** With two rows of adjustable blades (up and down).
- **TPA-SV-D:** With two rows of adjustable blades (up and down) and aluminum made, multiple leaf, air volume control damper with simultaneously opposite rotated blades.

All the types above are also available with electric actuator on-off 220V or analogue 24V for the drum position control.

MATERIALS: The frame and the blades of TPA are manufactured by aluminium. The drum is made by steel electrostatically painted in RAL color.

INSTALLATION AND FIXING: The TPA diffuser installation is usually in a wall (for heating and cooling purposes). Installation in ceiling is recommended only for heating. Installation in visible air ducts is also possible.

The fixing is with visible screws, which are mounted in countersunk holes in the frame of the diffuser.



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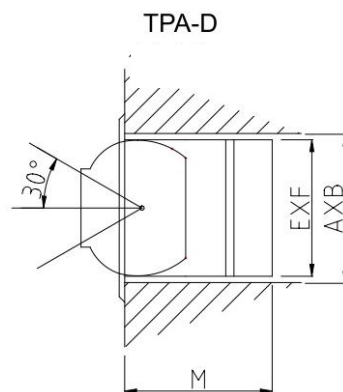
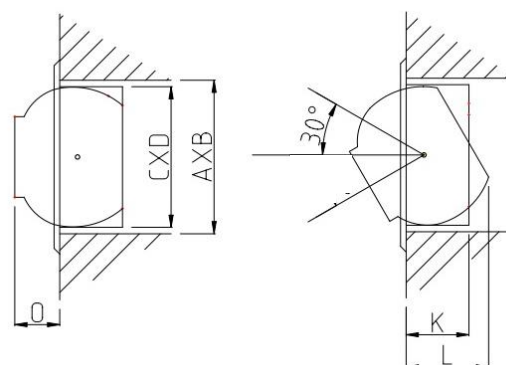
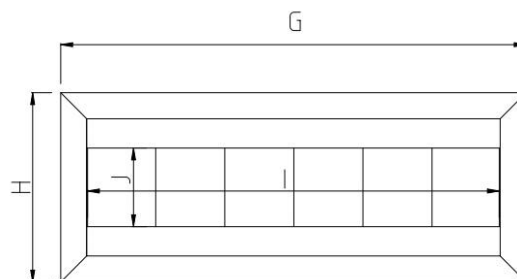
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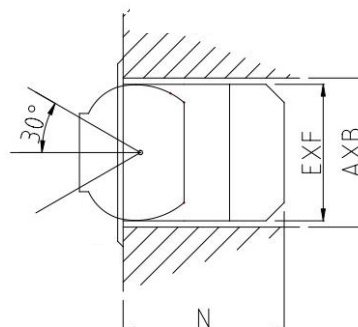
DIMENSIONS: TPA diffuser is manufactured in the nominal dimensions (dimensions of hole in the wall or duct), **AXB** which can be seen to the following table. The drum of the diffuser is rotated 60° totally (30° up and 30° down from the basic line of diffuser) in all produced dimensions.

No	NOMINAL SIZE (AXB)	K	L	M	N	O
1	252X165	70	92	140	160	51
2	328X165					
3	480X165					
4	632X165					
5	786X165					
6	936X165					
7	1240X165					
8	1548X165					
9	532X217	80	115	165	185	58
10	659X217					
11	786X217					
12	913X217					
13	1040X217					
14	1294X217					
15	1548X217					
16	1802X217					
17	532X242	80	125	170	190	63
18	659X242					
19	786X242					
20	913X242					
21	1040X242					
22	1294X242					
23	1548X242					
24	1802X242					
25	405X334	110	165	205	225	79
26	532X334					
27	659X334					
28	786X334					
29	913X334					
30	1040X334					
31	1294X334					
32	1548X334					
33	1802X334					

C=A-17mm	D=B-12mm
E=A-15mm	F=B-10mm
G=A+40mm	H=B+45mm
I=A-24mm	J=B-80mm



TPA-ACTUATOR





NOTES:

- * The items No 8,15, 16, 23, 24, 32, 33 are manufacured with two independently rotating cylinders side by side (see foto A), they are not manufactured with electric actuator.
- * The type of TPA-SV is only manufactured in heights B: 217, 242, 334 mm.
- * The height of duct should not be smaller than the dimension H, when the diffuser is installed in a visible air duct.
- * All dimensions are in mm.
- * For dimension $A < 600\text{mm}$ the electric actuator is installed in the edge of the grille. For dimension $A > 600\text{mm}$ the electric actuator is installed in the middle of the grille.

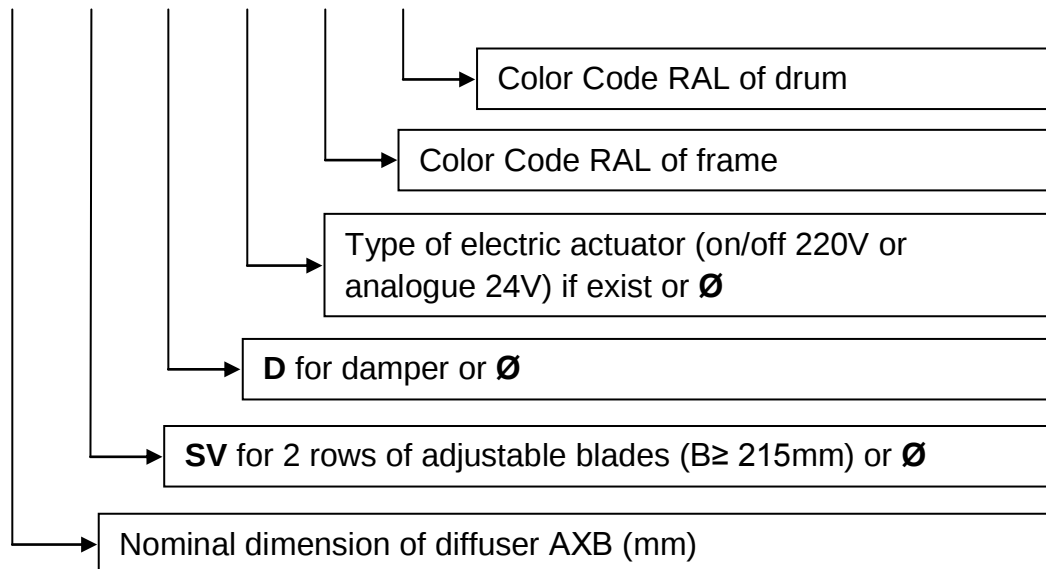


Photo-A

WAY OF ORDER

For the order of the diffusers TPA we use the following string of numbers and letters.

TPA--.....-.....-.....-.....



EXAMPLE: TPA-781X245-SV-D-RAL9010