AIRFLOW®

ø125mm Ceiling Integrated Valves

Instruction Manual

AIRFLOW®

1. INTRODUCTION

1.1 What is in the box?



This box includes the following:

– x1 ø125mm Ceiling integrated supply/extract valve

– x1 Cardboard template

– x2 Metal flange

– x4 Screws

– x1 Installation manual

– x1 Airflow regulator

1.2. Product description

The ceiling integrated valves can be used for both supply and extract air. They are made of high density, eco-friendly foam and are seamlessly integrated into plasterboard ceilings with no visible framing. This is an advantage over standard valves, which protrude from the ceiling and disrupt the interior decor. Unlike the plastic valves, ceiling integrated valves retain their original colour and finish over time. The design prevents dust build-up, ensuring that the system remains unobtrusive and effective.

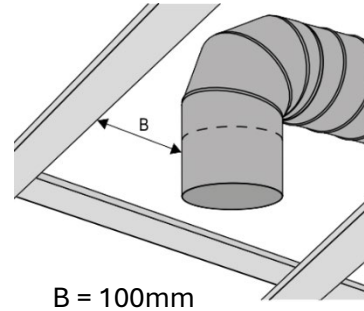
These valves offer a fully adjustable airflow, controlled by inserting or removing airflow regulator slots. This allows for efficient and adaptable air distribution, providing optimal comfort. The ceiling valves improve indoor air distribution without obscuring the design and aesthetics of the space. Moreover, the valves can be painted and match any interior decor and the aerodynamic design minimises resistance and noise, making the valves both effective and quiet.

1.3 General safety instructions

This product is designed for continuously running ventilation. Continuous ventilation is necessary to ensure a healthy indoor air quality and to always maintain the building fabric in good condition.

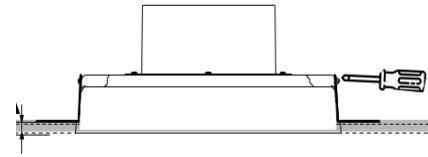
This valve must only be used and installed according to the installation, user and maintenance manual. (Otherwise, all guarantees and warranties will be void.)

Note: During the ducting ventilation design, ensure a minimum distance (B) exists between
the ceiling valve's flange to the ceiling elements.



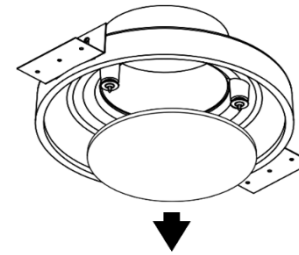
B = 100mm

To attach the mounting brackets to plasterboard, use screws at least 3.9 mm in diameter. These are included in the box.



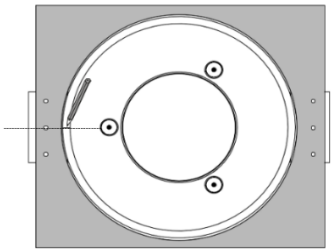
Before starting the installation, secure the mounting brackets in pre-made holes on the ceiling valve's casing. Adjust the position of the mounting brackets based on the ceiling thickness.

Remove the front panel fixed with magnet holders.



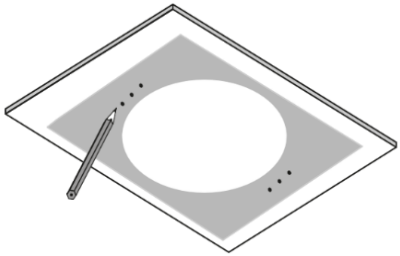
2. INSTALLATION

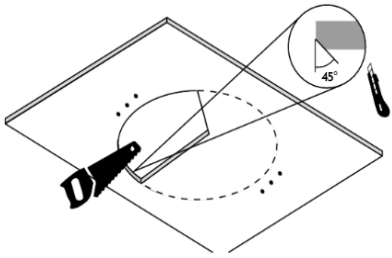
2.1 Mounting



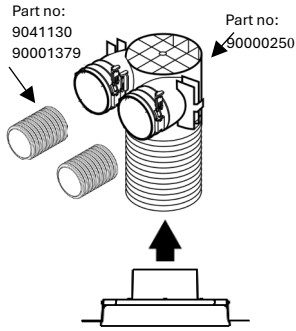
Step 1. For comfortable mounting, locate the mounting template on the internal packing attachment. Align the template with the ceiling valve and mark the centre hole on the template.

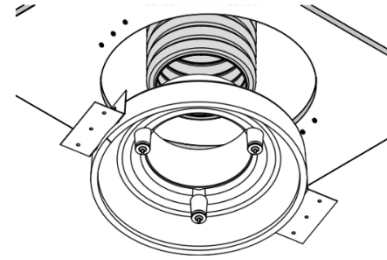
Step 2. Align the template with the ceiling and mark up the places to install the ceiling valve and make holes for mounting. Make a hole in the plasterboard. Cut the chamfer at a 45° angle up to 1/3 plasterboard thickness.



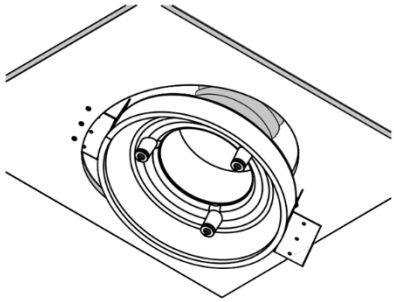


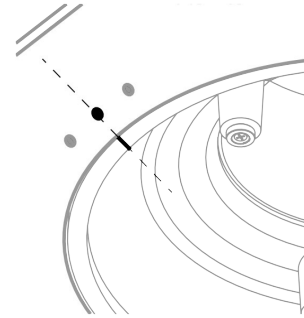
Step 3. Install the plenum onto the ceiling valve's flange.



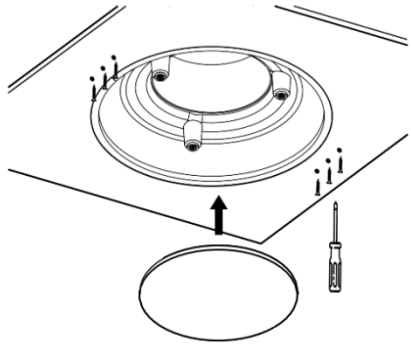


Step 4. Install the ceiling valve into the hole in the ceiling. The mounting brackets must be supported with the back side of the plasterboard.
Align the mark on the ceiling valve with the centre of the hole in the middle.





Step 5. Secure the ceiling valve with screws. Install the front panel fixed with magnet holders.

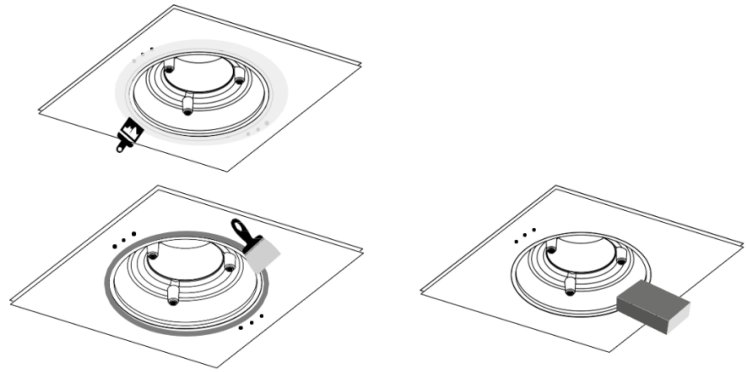


2.2. Decoration

Note: When marking holes and decorating, it is recommended to use the technology, tools and materials approved by the plasterboard manufacturer or local standards applicable in the country of installation.

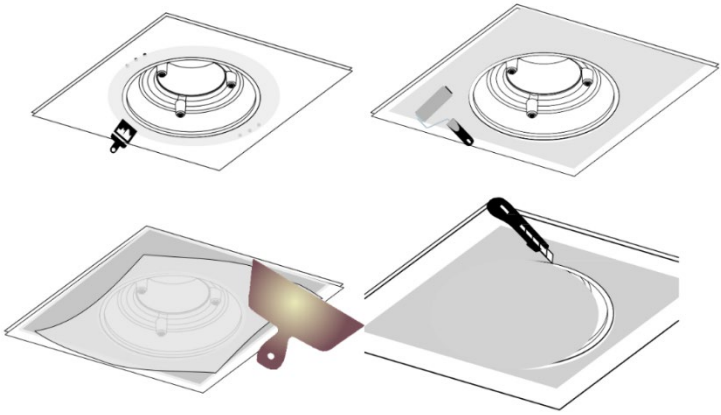
Example applications

1.
Step 1. Remove dust from surfaces and crevices. Apply a water based primer.
Step 2. When dry, fill the gap between the air valve and the plasterboard with filler.
Step 3. After the filler has dried, sand the surface.



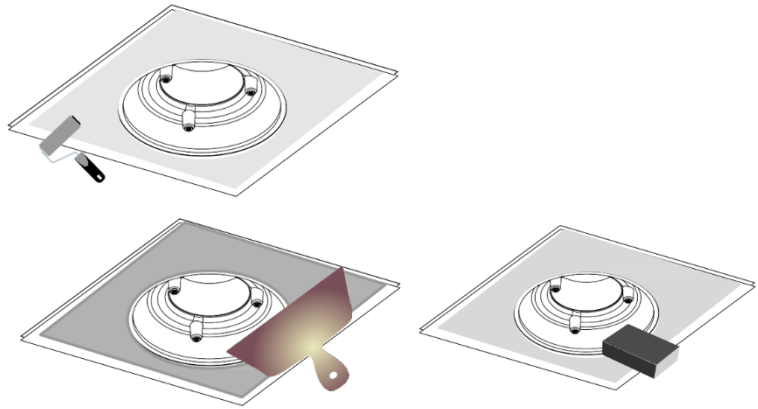
2.

Step 1. Apply the water based primer.
Step 2. After the primer has dried, apply the filler to the plasterboard.
Step 3. Attach the glass fibre mesh and gently press it into the filler with a spatula. Then apply a covering coat of filler over the glass fibre mesh.
Step 4. After drying, cut the fibreglass cloth to the inner contour of the air valve.
Step 5. Sand the surface.



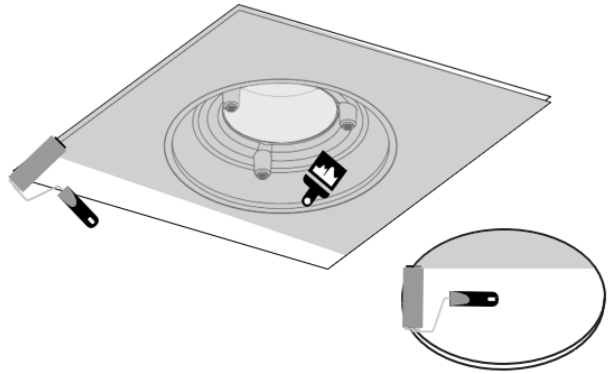
3.

Step 1. Apply the water based primer.
Step 2. When dry, apply filler and sand the surface.

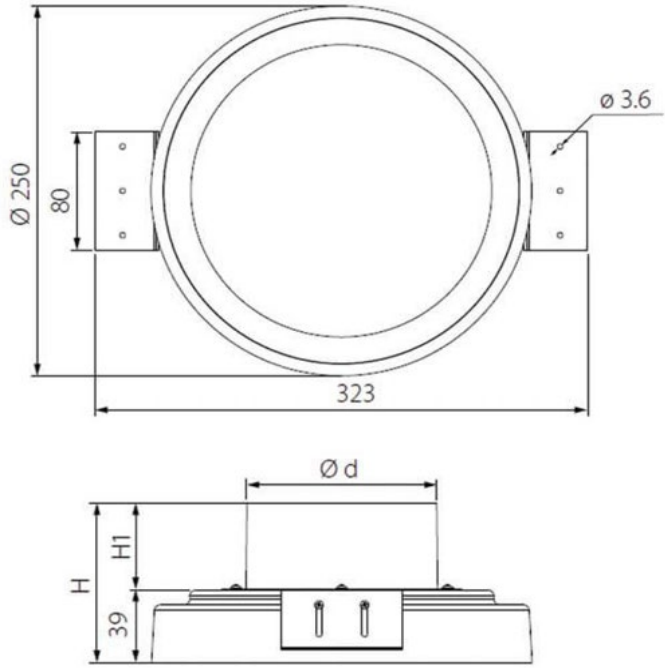


4.

Step 1. Apply a primer (the one recommended by the paint's manufacturer).
Step 2. Paint the air valve and the plasterboard.
Step 3. For highly humid rooms, use the appropriate high-humidity primer and paint.



2.3 Dimensions



H = 88mm
H1 = 49mm
d = 125mm

3. TECHNICAL SPECIFICATION

3.1 Product technical information

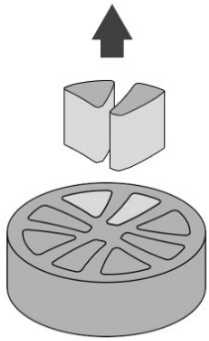
Specification	Ø125mm Ceiling Integrated Valve
Max airflow (m³/h / l/s)	90/25
Material	Polyurethane foam
Ceiling type	Plasterboard
Sound pressure (dB) at 90m3/h	25
Max Equivalent area (mm²)	6,000
Connection diameter (mm)	Ø125
Dimensions L x D x H (mm)	330 x 250 x 88
Weight (kg)	4.5
Part number	90002245
EAN barcode	5019009338132

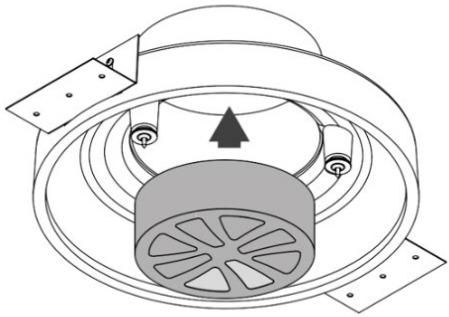
3.2 Airflow regulator

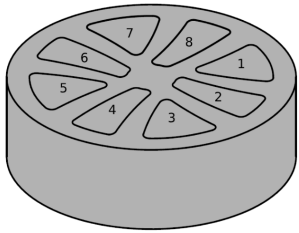
The airflow rate is adjusted using the round airflow regulator.
Begin by removing any necessary inserts from the airflow regulator, then insert the airflow regulator into the spigot connection of the ceiling integrated valve. Ensure it is seated securely to maintain airflow control.

Each insert removed results in a different flow rate. Remove as many inserts as necessary, depending on the required flow rate per room.

Please see the performance graphs in the section 3.2 Performance.





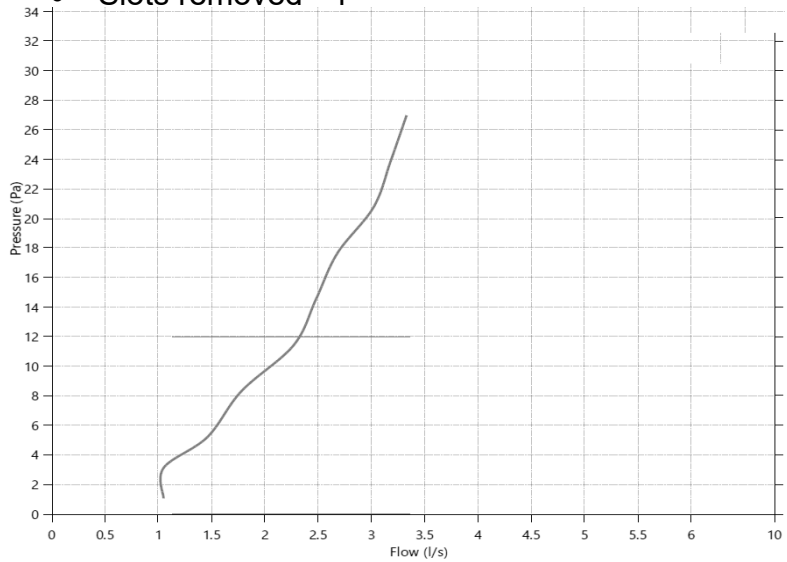


SELECTair (Selection Software) example calculation for 2-bed terraced house (78.2m²) with one floor.

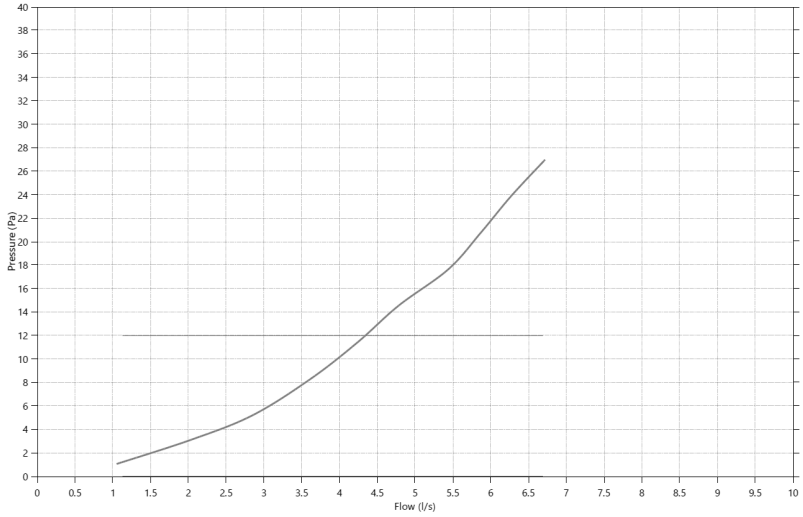
Room description	Floor	Floor space [m²]	Room volume [m³]	Extract air [m³/h]	Supply air [m³/h]
Kitchen	Ground Floor	7.9	18.86	48	-
Living / Dining	Ground Floor	20.5	49.3	-	48
Hall / Cupboard	Ground Floor	8.8	21.19	-	-
W.C.	Ground Floor	2.2	5.21	25	-
Bathroom	Ground Floor	4.2	10.08	25	-
Bed 1	First Floor	13.4	32.23	-	25
Hall, Cupboard	First Floor	7.7	18.41	-	-
Bed 2	First Floor	13.5	32.33	-	25
Total:		**78.2**	**187.61**	**98**	**98**

3.2. Performance

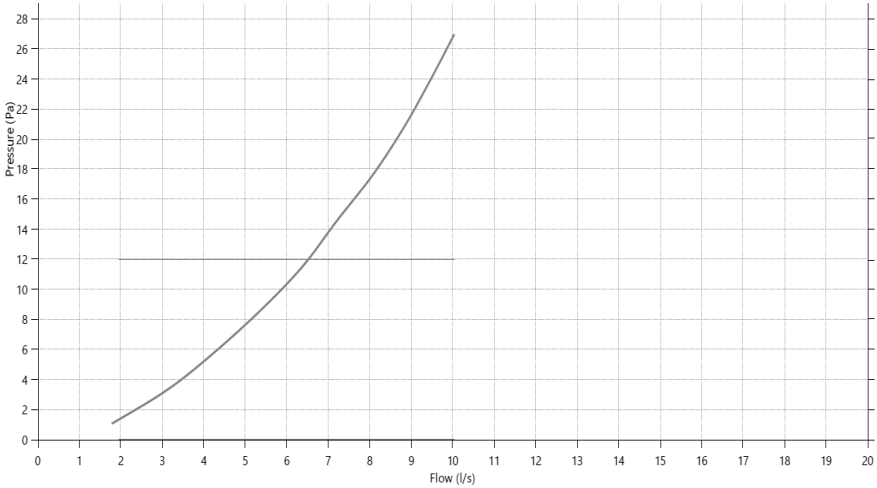
- Slots removed - 1



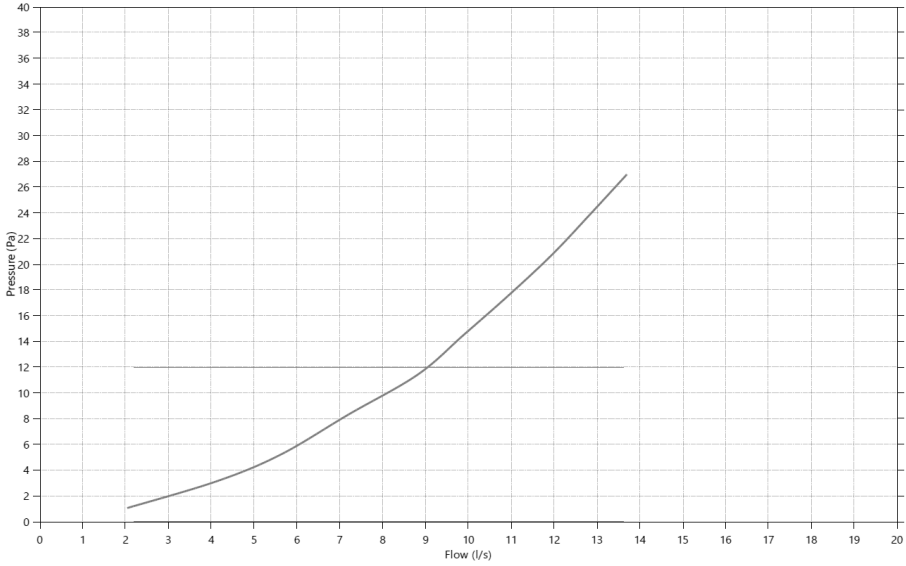
- Slots removed - 1 and 2



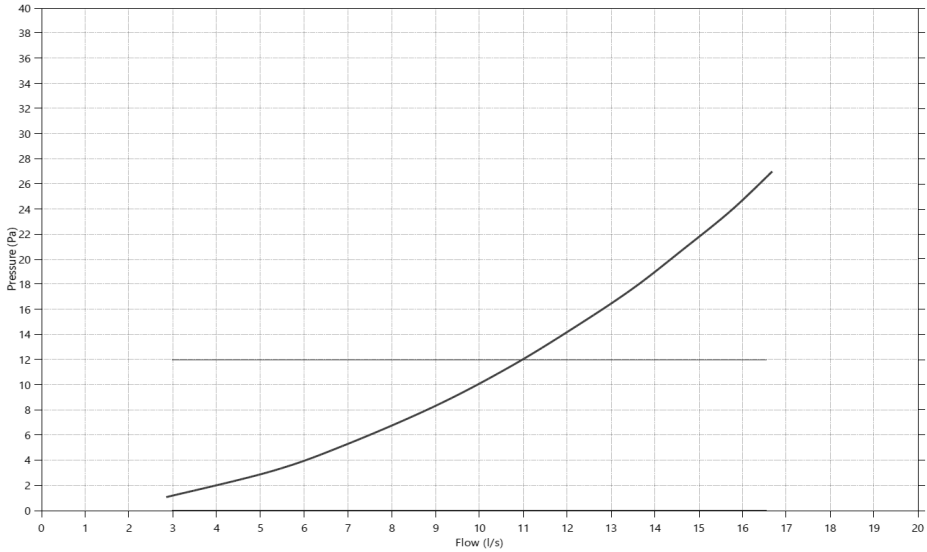
- Slots removed - 1,2 and 3



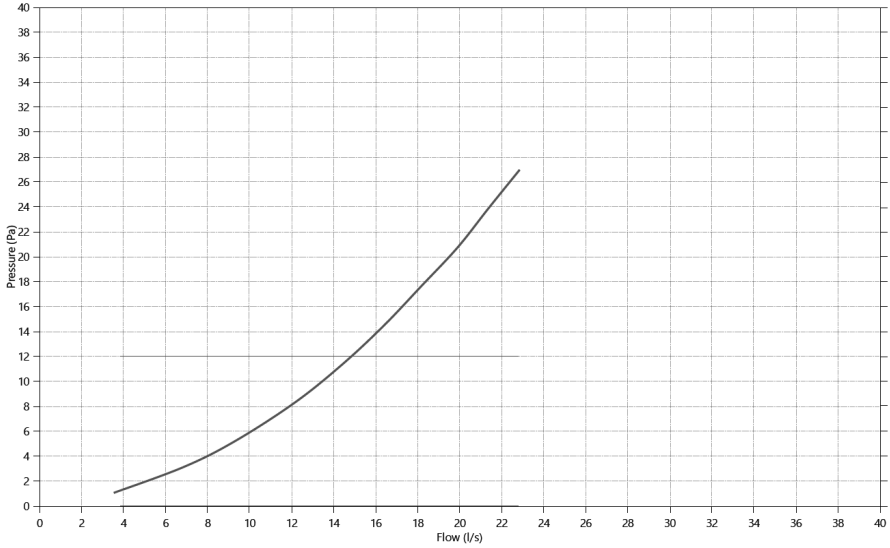
- Slots removed - 1, 2, 3 and 4



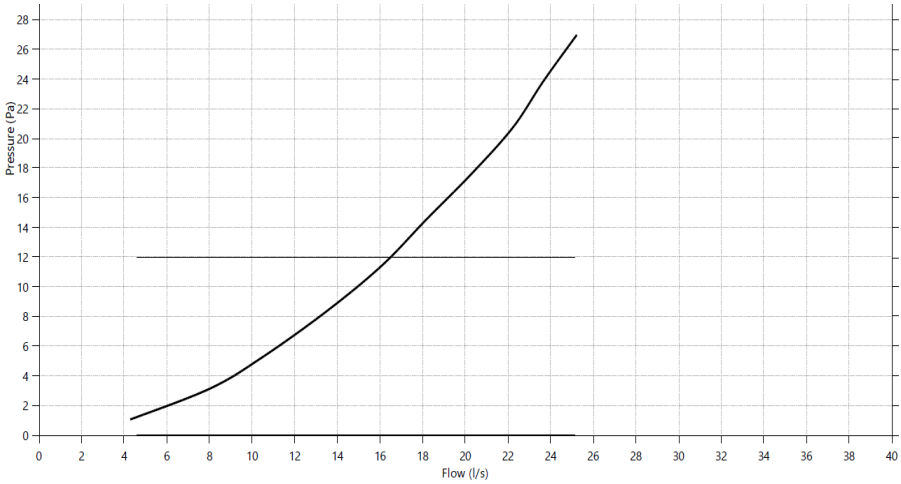
- Slots removed - 1, 2, 3, 4 and 5



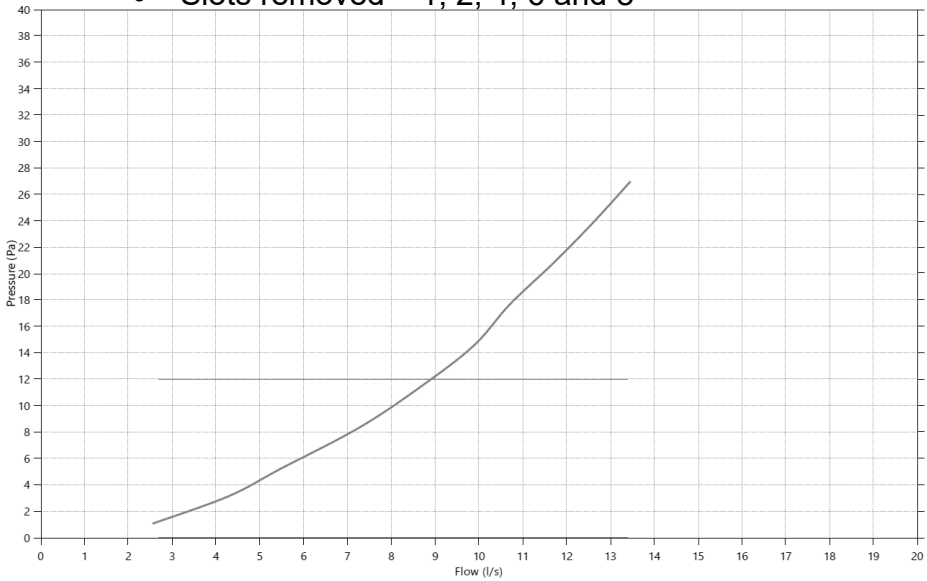
- Slots removed - 1, 2, 3, 4, 5, 6 and 7



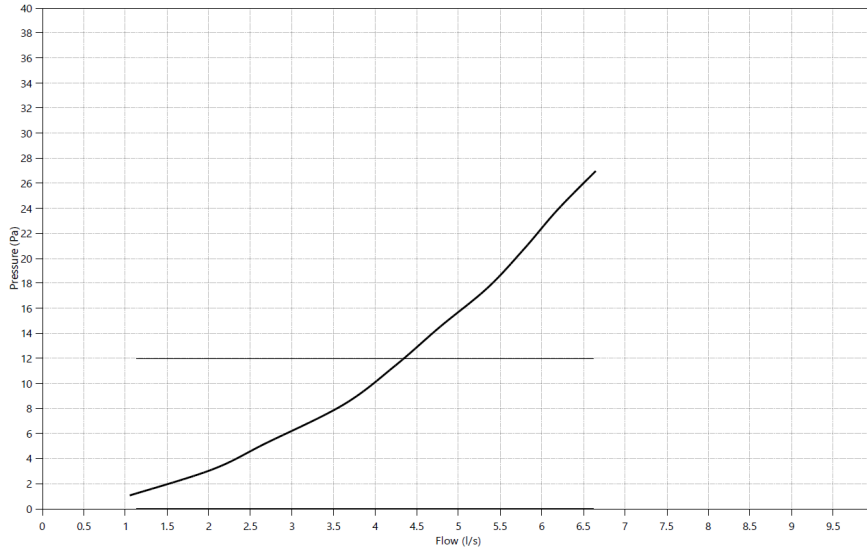
- Slots removed - 1, 2, 3, 4, 5, 6, 7 and 8



- Slots removed – 1, 2, 4, 6 and 8



- Slots removed – 1 and 3



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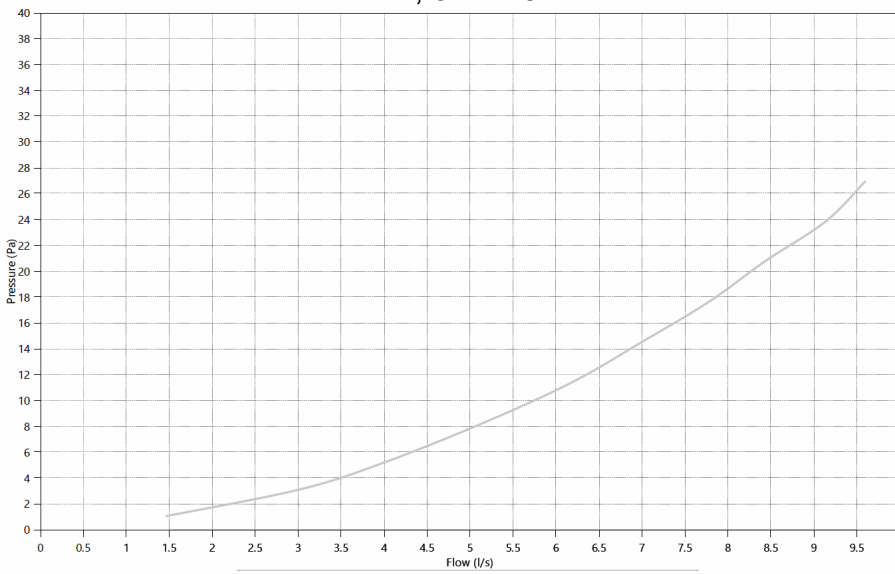
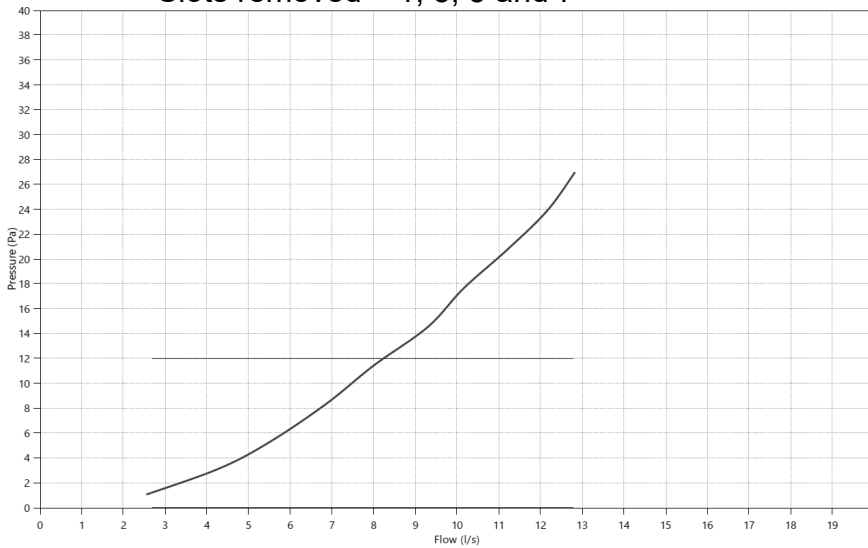
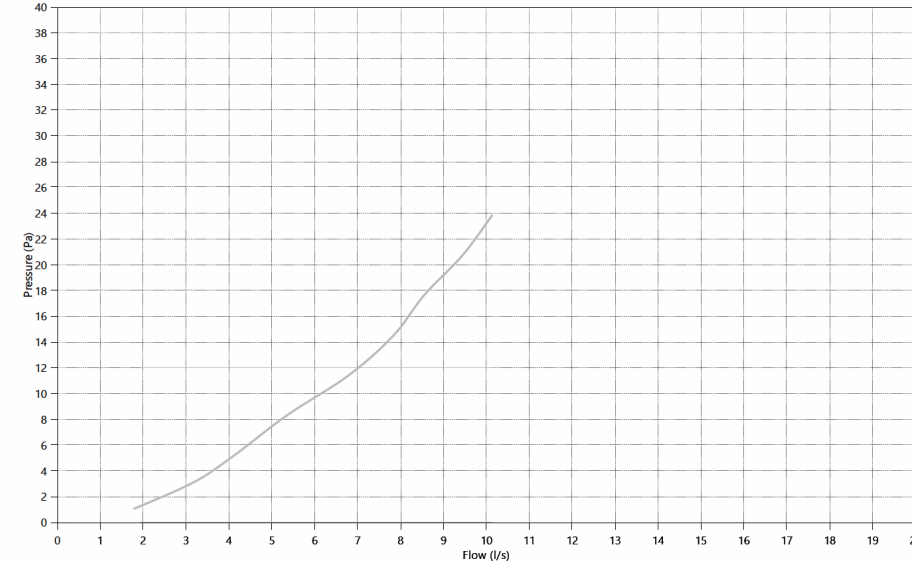


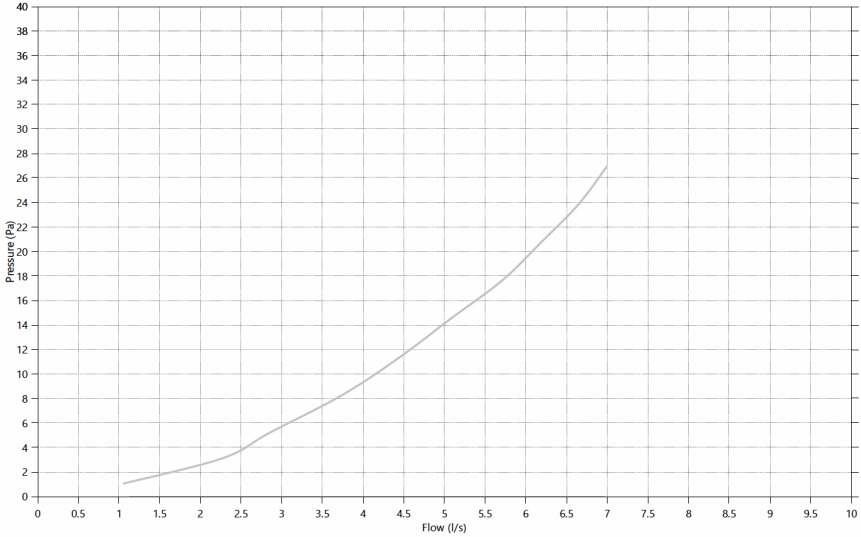
- Slots removed – 1, 3, 5 and 7



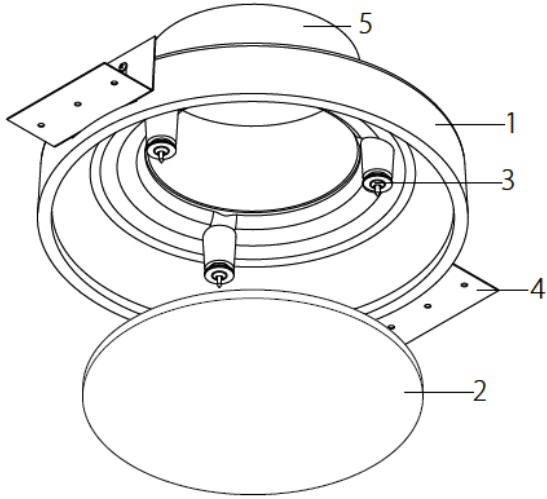
- Slots removed – 2, 4 and 6



- Slots removed – 4



4. EXPLODED VIEW AND PARTS LIST



1 — casing
2 — front panel
3 — magnet holder
4 — mounting bracket
5 — flange

5. MAINTENANCE

Regular maintenance of the ceiling integrated valve is essential to ensure optimal performance and longevity. To clean the air valve, remove the front cover and use a soft brush to remove dust and debris build-up. Re-attach the front cover by aligning it to the magnets.

6. DECOMISSIONING AND DISPOSAL

This product must be disposed of as construction waste. Parts that are at end of life due to wear and tear, corrosion, fatigue and or other effects that cannot be identified must be disposed of in the correct manner conforming to local guidelines and regulations. Intended or unintended further use of worn parts can result in danger to persons and the environment.

Packaging materials should be disposed of in the correct manner conforming to local guidelines and regulations. Some packaging can be re-cycled. For further details please seek advice from a qualified waste management company.

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