



Air-admittance valves

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01

Introduction

Page 05



“We are an innovative company – but we’re also one big family.”

Harry Bauermeister,
Managing Director

The Dallmer family business is now in its fourth generation. And even if over the decades times have changed drastically, and along with it the production processes, one thing has remained the same: All Dallmer products are developed, designed and manufactured using state-of-the-art technology in Germany – more specifically, in Arnsberg. The “Made in Germany” seal of quality applies without reservations.

Investing in the future. Dallmer does not only invest money in state-of-the-art machine technology, but also in training and further education for its employees. This ensures that there is specialist know-how at the location.

Bringing together strengths. In order to produce drainage solutions which set standards, you need a genuine innovative spirit and a high degree of experience – and state-of-the-art technology.

Every detail counts. Quality is our top priority. If we all work towards this same goal, we are capable of meeting even the highest demands.



Headquarters in
Arnsberg

Production and
storage rooms



1913

DallVent air-admittance valve: Advanced technology, compact design

No chance of
unpleasant odours

If you hear gurgling under the washbasin or shower and then notice an unpleasant smell, it's happened: Sudden negative pressure in the wastewater pipe has sucked the trap dry and sewer gases have been dispersed into the room. For a quick and standards-compliant solution to this problem, Dallmer air-admittance valves are mechanical valves that compensate for the pressure in the pipe system: So in the event of negative pressure, the ventilation valve opens and pulls fresh air into the pipe until the pressure is equalised again. In this way, the air-admittance valve effectively prevents odours from the sewer system being able to surface.

DallVent as an
effective problem-solver

DallVent air-admittance valves guarantee many years of trouble-free functionality without maintenance. They noticeably improve drainage by the wastewater system and ensure the necessary ventilation of pipes even when problems arise. In particular for renovations, extension or conversion of the drainage system, DallVent is an effective and simple supplement to the main ventilation system that always needs to be routed through the roof. Anywhere the installation of ancillary ventilation systems would be difficult and complex, DallVent air-admittance valves are the effective and cost-effective alternative. Our DallVent Mini and Maxi air-admittance valves are suitable for pipe ventilation and offer many options for the ventilation of connecting pipes. DallVent WE facilitates wall-mounted installation without an additional installation kit and can also be perfectly aesthetically integrated into the bathroom design. That's because for us it's not only about technical quality, but also design – and that's true of all our products.

Discover DallVent air-admittance valves:
dallmer.com/dallvent



What else might interest you: Shower drains and traps from Dallmer as innovative solutions for building drainage. Easy assembly, flexible installation and reliable seals – drainage technology at the cutting edge.

Discover our shower drains and traps:
dallmer.com/traps

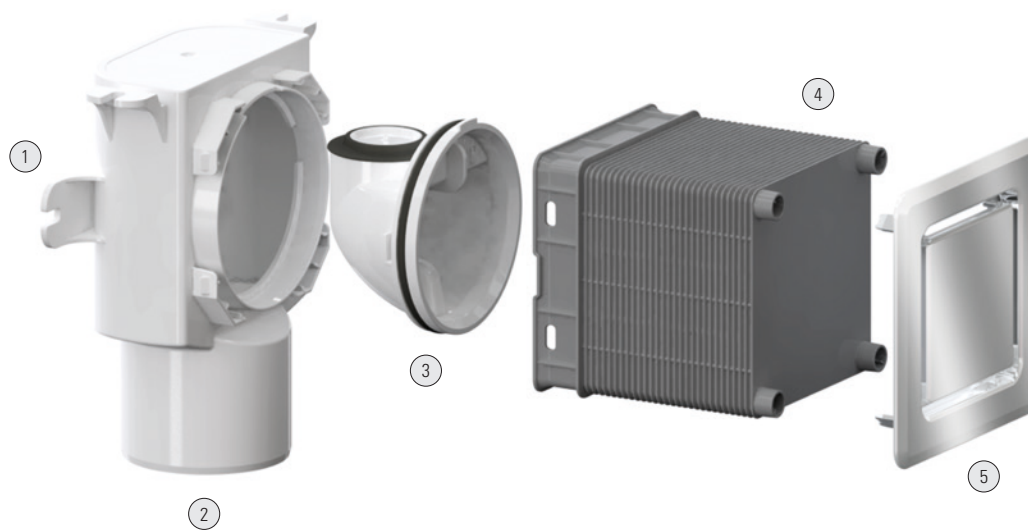


DallVent WE
Chrome-plated

02

Air-admittance valves

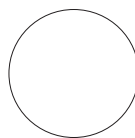
Page 11



New range of colours
(Cover plate)



Chrome-plated



White

Cover plate dimensions	125 × 125 mm
Use locations	For wall mounting in brick and drywall constructions (from profile widths of 75 mm)
Appropriate for wastewater pipes	DN 50 / DN 70
Flow rate	13.0 l/s
Area of use	0 °C to +60 °C (type class A II – table 1, EN 12380)



- ① Flaps for attachment to the rear wall or to horizontal upright profiles
- ② Housing for brick and dry wall constructions
- ③ Removable valve insert for inspection and simple revision of the connecting pipe
- ④ Cut-to-length protection box / formwork housing
- ⑤ Cover plate with integrated openings ensures adequate ventilation of the system; white or chrome-plated design available

Advantages

The compact wall-mounted DallVent WE air-admittance valve is suitable for ventilation of secondary downpipes, individual and collective connecting pipes and as a replacement for recirculation of connecting pipes that are at a distance of more than 4 m from the downpipe. It therefore offers the ideal solution to ensure the ventilation necessary in complex pipe systems. DallVent WE offers universal use for wall mounting in brick and drywall construction, and is also a perfect aesthetic choice for harmonious bathroom design.

- Compact component for space-saving installation without an additional installation box
- Protection box can be cut to suit and remains as wall lining
- Elegant cover plate with integrated ventilation openings
- Very easy inspection / maintenance of the connecting pipe thanks to removable valve insert

Product information:
dallmer.com/850140/int





Installation depth	63 mm or 120 mm*
Use locations	Attics and unheated areas, front wall installations
Appropriate for wastewater pipes	DN 40 / DN 50 / DN 70 / DN 90 / DN 100 and 1 1/2"*
Flow rates	8.0 l/s or 32.7 l/s*
Area of use	-20 °C to +60 °C (type class A1 – table 1, EN 12380)

*Depending on the model version



- ① Integrated thermal insulation (frost-proof down to -20 °C)
- ② Removable inspection insect screen
- ③ Seal for direct connection to wastewater pipes
- ④ DallVent Mini design

Advantages

Thanks to their integrated thermal insulation, the DallVent vents are frost-proof and will function in temperatures of -20 °C to +60 °C without any additional insulation. This makes them ideal for use in attics and unheated areas.

Thanks to its practical flat design, the DallVent Maxi is ideal for installation in front plumbing walls.

Product information:
dallmer.com/850409/int



03

Mode of operation
and operating conditions

Mode of operation: Effective pipe ventilation made simple

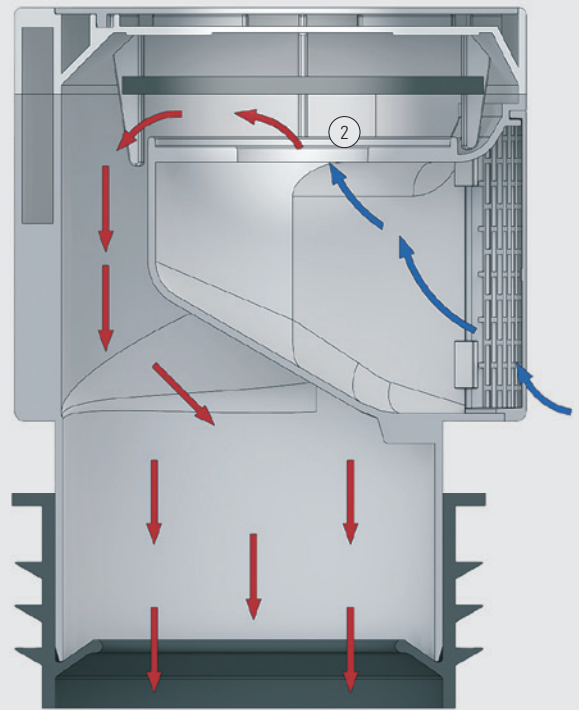
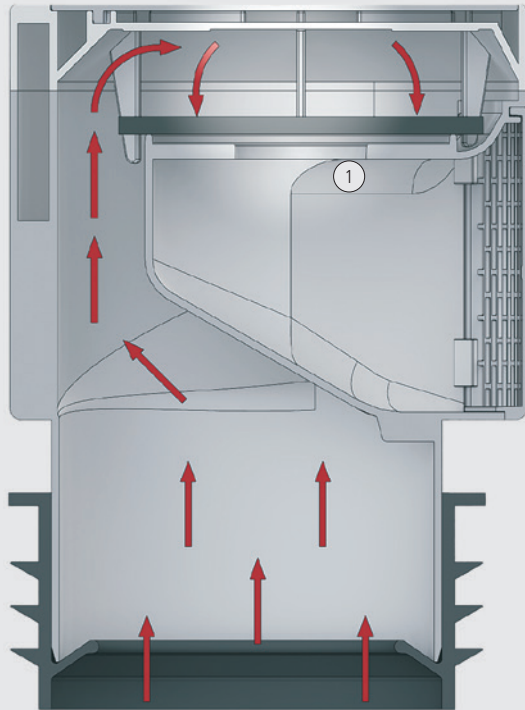
The right ventilation valve for every pipe

Sufficient ventilation is essential for drainage systems and civic sewerage to work correctly. Ventilation valves such as DallVent unobtrusively ensure this, and do so in such a way that complex use of ventilation ducts is not necessary. This saves a great deal of expended work, material and mounting effort.

Always the right fit. DallVent Mini and Maxi air-admittance valves and DallVent WE can be used on downpipes, connecting pipes, in direct and indirect ancillary ventilation ducts, and secondary ventilation ducts as well as recirculation ducts.



Example
DallVent WE



DallVent Maxi cross-section

- ① If there is excess pressure in the system, the ventilation valve provides a seal and prevents the trap from being sucked dry and sewer smells escaping.
- ② In the case of negative pressure in the pipe system, the ventilation valve opens and the incoming air compensates the pressure.

Advantages

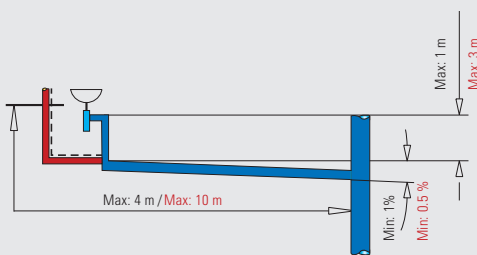
- DallVent air-admittance valves contain sophisticated technology in their mechanical valves, which immediately respond to pressure changes in the pipe.
- There is no chance of negative pressure, as air can flow through even if the pipe is full
 - DallVent operates using gravity, which guarantees many years of trouble-free function

Operating conditions and specifications

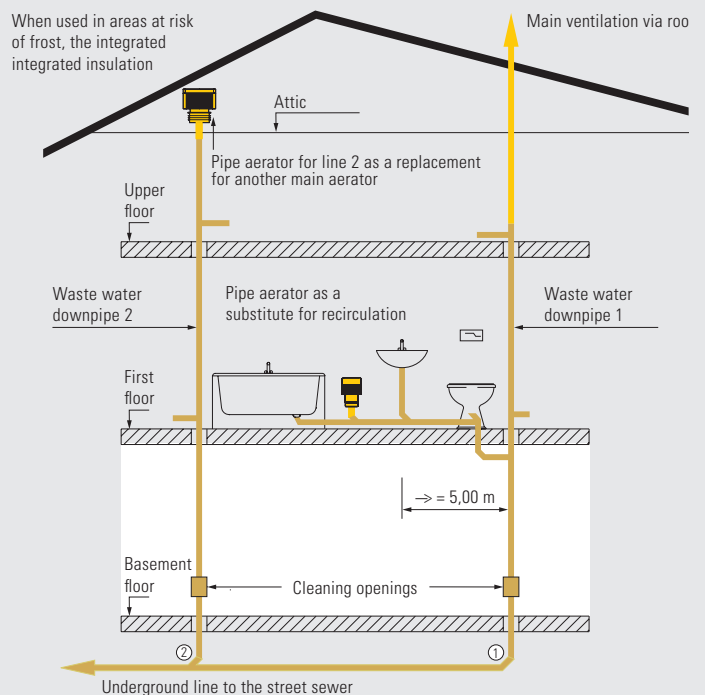
Operating conditions and designations of ventilation valves (table 1 – EN 12380)

Ventilation valves are identified and classified in table 1 according to their operating temperature range and site, taking into account the connected drainage objects. According to CE marking requirements, the designation must be clearly visible on the valves or, at the very least, on the labels.

Determining factor	Area / position	Designation
Can be installed beneath the back-flow level of the connected drainage objects	Yes	A
	No	B
Temperature	-20 °C to +60 °C	I
	0 °C to +60 °C	II
	0 °C to +20 °C	III



- Application limits for unventilated connection lines
max. 90° bends: 3
- Application limits for ventilated connection lines
max. 90° bends: no limit



Changes to the use limits when using air-admittance valves

Areas of use of air-admittance valves in building wiring

Installation specifications

Ventilation valves acc. to EN 12380 for ventilation of wastewater pipes made of PP, PE-HD and SML pipes (with transition piece). Prior to installation of the air-admittance valve, please note the following:

1. The air-admittance valve must be installed vertically.
2. A supply of fresh air must be ensured at all times.
3. The air-admittance valve must always be accessible.
4. Air-admittance valves must be installed at least 10 cm above the pipe for connecting pipes; and for downpipes at least 60 cm above the highest junction.
5. Protect the air-admittance valve from contamination during the construction phase.
6. Air-admittance valves can be installed below the backflow level of the connected drainage objects if the drain pipe is protected against backflow (flow level as per "backflow level" acc. to DIN EN 12380).
7. Lifting systems must not be ventilated using air-admittance valves.

Normative specifications as per DIN 1986-100

DIN 1986-100 specifies the requirements for the installation of ventilation valves in Germany. Paragraph 6.5.5 specifies the following mandatory conditions:

- "... air-admittance valves can be installed in drainage systems with a main ventilation system as a substitute for recirculation ventilation or indirect secondary ventilation systems, which serve to reduce negative pressure in the pipeline system."
- In detached and semi-detached houses, ventilation valves can be used instead of downpipes if at least one downpipe is routed over the roof.
- The use of ventilation valves is not permitted in areas prone to backflow and for the ventilation of containers, such as lifting systems.
- Only ventilation valves that comply with the European product standard EN 12380 can be used.

Normative specifications as per DIN EN 12056

Paragraph 5.7 "Ventilation valves" of DIN EN 12056-2 (sanitary pipework, layout and calculation) specifies the following: "Where ventilation valves are used to ventilate a drainage system, these valves must comply with EN 12380. They must be calculated according to table 10 for connecting pipes and with table 11 for wastewater downpipes." According to table 10, for System I, the minimum air volume for ventilation valves in connecting pipes must be: $Q_a^* \text{ (l/s)} = 1 \times Q_{\text{tot}}^{**}$.

* Q_a = minimum air quantity in l/s

** Q_{tot} = total wastewater discharge in l/s

04

Product range

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Air-admittance valves

DALLMER air-admittance valve DallVent WE

conforming to EN 12380
for internal venting of soil and waste systems.

SPECIFICATION

- for concealed installation in brick wall and dry lining (profile width 75 mm and more)
- spacer, cut to suit on site
- flush mounted cover plate 125 x 125 mm with integrated air inlet
- valve insert removable for inspection
- direct connection to plastic coupling DN 50 and DN 70 (DN 70 not in case of minimum installation depth of 75 mm)

MATERIAL

ABS/polypropylen
air flow capacity 13.0 l/s
classification A II (table 1, EN 12380)

- ▶ **air-admittance valve DallVent WE, white**
with white cover plate made of ABS
- ▶ **air-admittance valve DallVent WE, chromed**
with chromed cover plate made of ABS

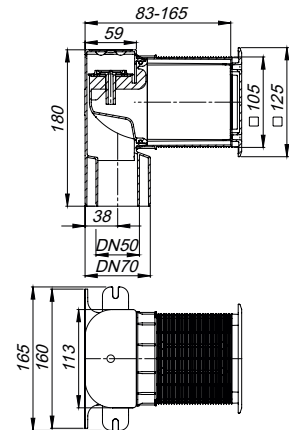
ITEM	DN	PART NO.
Air-admittance valve DallVent WE, white	DN 50/DN 70	850140
Air-admittance valve DallVent WE, chromed	DN 50/DN 70	850157



Air-admittance valve DallVent WE, white



Air-admittance valve DallVent WE, chromed



DALLMER air-admittance valve DallVent Maxi

conforming to EN 12380
for internal venting of soil and waste systems.

SPECIFICATION

- removable insect screen
- integral thermal insulation (frost proof to -20°)
- lip seal for connection to DN 70, DN 90 and DN 100 vent pipes

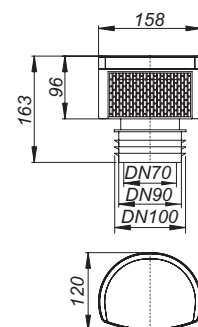
MATERIAL

ABS/PP
air flow capacity 32.7 l/s
classification A I (table 1, EN 12380)

ITEM	DN	PART NO.
Air-admittance valve DallVent Maxi	DN 70/DN 90/DN 100	850409



Air-admittance valve DallVent Maxi



Air-admittance valves

DALLMER air-admittance valve DallVent Mini

conforming to EN 12380

for internal venting of soil and waste systems.

SPECIFICATION

- removable insect screen
- integral thermal insulation (frost proof to -20°)
- seal and ring nut 1 1/2" for connection to DN 40, DN 50 and 1 1/2" vent pipes

MATERIAL

ABS/PP

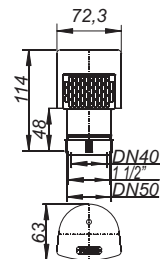
air flow capacity 8.0 l/s

classification A1 (table 1, EN 12380)

ITEM	DN	PART NO.
Air-admittance valve DallVent Mini	DN 40/DN 50, 1 1/2"	850416



Air-admittance valve DallVent Mini



Service

Our products at a glance

Help for planning and installation

Discover our diverse drainage systems and get an overview of our product categories on our website dallmer.com

Planners, architects and installation technicians can visit dallmer.com/service for useful tools and documents which provide them with support during the entire process, from planning to installation.



Installation instructions



DXF drawings



Data sheets



BIM – building information modelling



System sections



Configurator

The Dallmer Sessions online. video. live.



If you are abreast of the state-of-the-art of drainage technologies, changes to standards and directives, and current bathroom trends, you have a clear advantage which you can pass on to your customers. Dallmer's training opportunities now make it even easier to keep up to date.

For more information and current scheduled events, visit dallmer.com/sessions

10-year warranty*

A promise which we are happy for you to pass on to your customers.

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