

- QUICKGUIDE -



Version with flange



Version with female thread

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## 1. Intended use / product description

**Medium:** potable water  
**Operating range:** 0,2 - 25 bar  
**Material:** see parts list

**Possible connections** flange DN50, DN80  
female thread 2"

The HaVent® air valve featuring the patented valve mechanism is perfectly suitable for taking in and releasing high amounts of air during filling or draining of pipelines and for releasing major amounts of air under operating pressure. With integrated ball valve for pressure relief and sample taking. Due to the high air intake capacity, the AV is additionally provided with effective vacuum protection.

Max. air release capacity: 1150 m<sup>3</sup>/h (on filling the pipeline)  
Max. release cross section: 1,500 mm<sup>2</sup>  
Max. cross section for in-service venting: 3.15 mm<sup>2</sup>

## Product identification:

**Nennweite / Size**  
Flansch DNxx/IG 2"  
Flange 2"/female thread 2"  
**Druckstufe:**  
**max. pressure**  
PN25  
360 psi  
**Gehäuse/Body:**  
Edelstahl  
stainless steel  
**European standard:**  
EN1074-4  
DVGW - W  
**Herstelljar:**  
**Year of manufacture:**  
xxx  
**Seriennummer:**  
**Serial No.:**  
xxxxxxx  
Made in Germany

During installation, assembly, and maintenance, the applicable standards and regulations, accident prevention regulations, as well as the trade associations' provisions shall be observed and complied with. Installation, assembly, and maintenance may be performed by skilled personnel only.

## 2. Assembly



2x open-ended wrench A/F 24 (version with flange) and A/F 70 (version with female thread)

Air valves are installed at high points, at points of change in pipe inclination, in descending line sections, in case of slightly descending or horizontal pipe runs, upstream and downstream of control valves, as well as downstream of pumps.

The outgoing outlet must be in a direct connection with the atmosphere. Any downstream line parts, e.g. for draining off splash water, must be dimensioned sufficiently large to ensure the atmospheric connection.

For detailed planning specifications for new construction and retrofitting, please refer to the technical information for planners regarding air valves and air valve sets, as well as the current DVGW sheet W 334.

The air valve / air valve set has to be installed on a vertical outlet directly on the pressure pipe. The need for an air release dome as specified in DVGW sheet W 334 has to be checked. A laterally displaced arrangement of air valves / air valve sets must be avoided.

Before installation, it must be ensured that the pressure line is free from dirt, drilling chips, or other foreign matter. If necessary, the pressure line must be flushed.

Installation shall be performed in unpressurized condition. To this end, the line must be depressurized if necessary. In a pressurized line, a shut-off element below the AV shall be closed before installation.

For installing the AV in the pipeline, the respective DVGW provisions for establishing a flanged or threaded connection shall be observed.

If exhaust air pipes are installed from the valve, care shall be taken that no water accumulating in the exhaust air pipe is able to flow back into the valve (e.g. elbows pointing downward with water drain hole at the lowest point). The exhaust air pipes must not allow any water retention caused by reduced cross sections, either.

If there is a risk of frost, the air valve must be provided on site with frost-proof insulation.

## 3. Commissioning and pressure testing

### 3.1 Commissioning

For commissioning, the unpressurized line must be filled and repressurized if required, and/or the shut-off element below the AV must be opened.



**Important:** Acc. to DVGW W 334, the maximum filling rate must be limited to 0.25 m/s to avoid pressure surges. Before filling the pipeline, it has to be checked if the air release devices of the manholes are able to discharge the air volume.

**Note:** During start-up ventilation, a minor quantity of splash water is blown off via the valve.

## 3.2 Pressure testing

### 3.2.1 Pressure testing of the installed AV

After successful maintenance or subsequent installation of the AV, pressure testing must be performed considering the maximum operating pressures as specified in the DVGW regulations.

After the leakage test, a function check has to be performed.

### 3.2.2 Pressure testing of the pipeline

Before the pipeline is subjected to a pressure test, AVs shall be put out of service. To this end, the shut-off valve below the valve must be closed.

After the successful pressure test, the shut-off valve below the AV has to be opened slowly, and the AV must be subjected to a function test and visual inspection under operating pressure.

## 4. Servicing and maintenance



Allen key A/F 6, socket wrench A/F 17

Flat-tip screwdriver blade width e.g. 3 mm, lubricant approved for potable water applications

As specified in the DVGW regulations W400-3, AVs must be maintained at least once a year. Depending on the composition of the water, it may be necessary to reduce the maintenance intervals. Regular inspection will increase the functional reliability of the AV.

For cleaning, we recommend using lukewarm water. Before reinstallation, all components shall be disinfected by means of disinfectants approved for potable water applications observing the manufacturer's instructions.

Foreign matter washed into the valve body (e.g. PE chips left over from drilling, wood, polystyrene, ...) as well as deposits (e.g. in case of ferrous or manganiferous water qualities) may impair the proper sealing function.



**Important:** Before maintenance, AVs shall be put out of service. Maintenance shall be performed in unpressurized condition.

For detailed instructions on servicing and maintenance with a detailed maintenance procedure and spare parts, see the complete version of the Air valve HaVent® for potable water PN 25, order no. 987-03.



## 5. Special functions

The following special functions are available for the Air Valve HaVent® for Potable Water PN25.

5.1 Special function "Air intake only" or "Air release only" Ord. No. 987 999 2000

5.2 Special function with outlet elbow 2" MTHR Ord. No. 987 800 1310

All special functions are available ex factory or can be retrofitted on site, if required.

For a detailed description of the special functions, see the complete version of the operating and maintenance instructions.

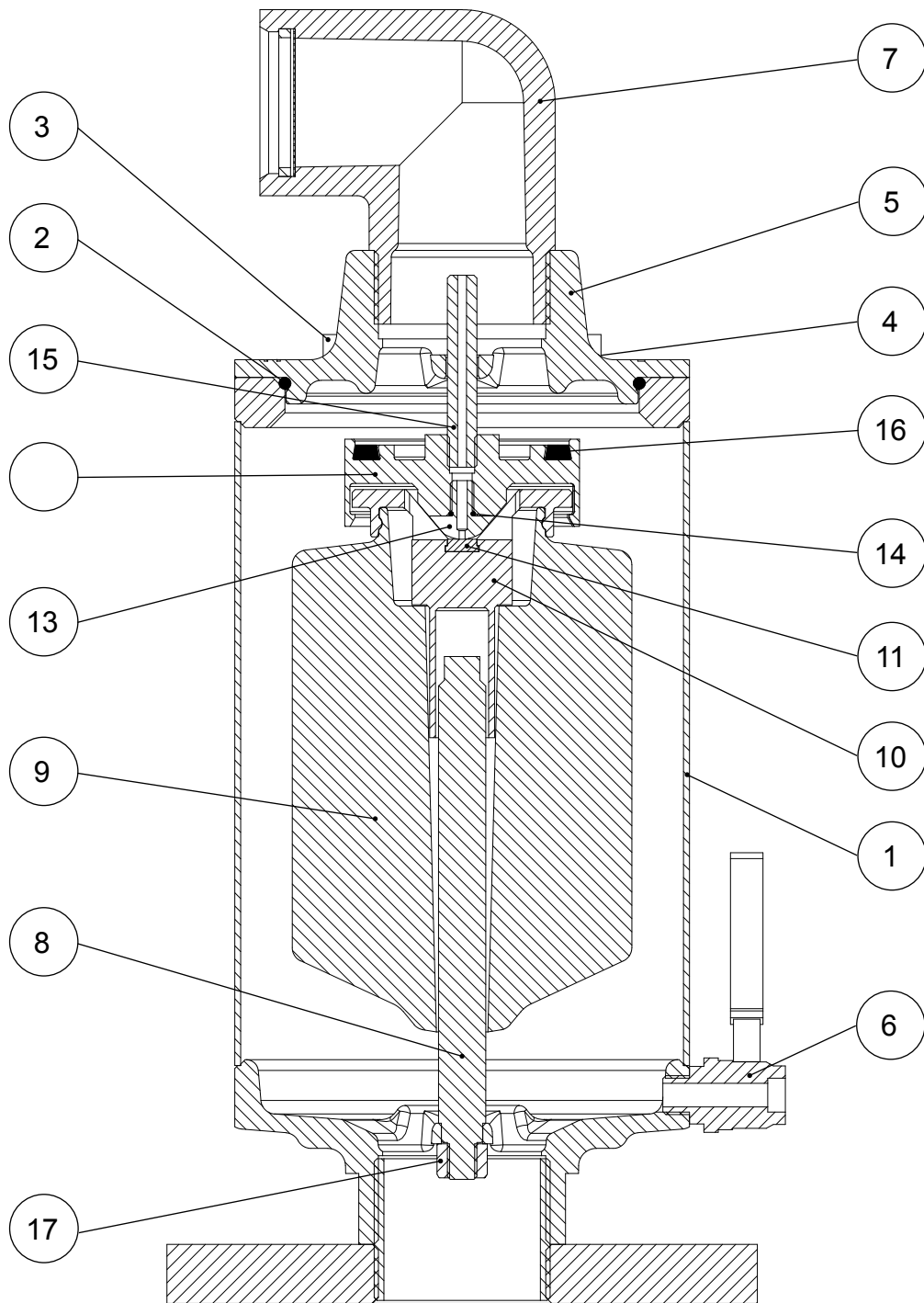


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# HaVent® Air valve for potable water PN 25

## Parts list



No	Qty.	Short description	Material
1	1	Housing	Stainless steel
2	1	O-ring	EPDM
3	5	Hexagon socket screw	Stainless steel
4	5	Shim ring	Stainless steel
5	1	Housing upper part	Stainless steel
6	1	Ball valve 1/4" FTMR-MTHR	Ms
7	1	Outlet elbow d63 mm with MTHR 2" and screen	PE
8	1	Guide rod PN25	Stainless steel
9	1	Float	PP
10	1	Gasket seat	POM
11	1	Small Gasket	EPDM
12	1	Valve basket PN25	POM
13	1	Nozzle PN 25	Stainless steel
14	1	O-ring 6x1,5	EPDM
15	1	Nozzle screw	POM
16	1	Flat gasket	EPDM
17	1	Nut M10	Stainless steel