

1. Intended use:

The Hawle air release valve set is suitable for potable water up to a max. operating pressure of 16 bar. Please note the different operating ranges of the valves.

The air release valve set is used in place of expensive and time-consuming aeration and ventilation chambers. The air release valve sets eliminate the usual dangers of entering such chambers.

Please note that according to DVGW W 392, valves must be serviced at least once a year, and possibly even more frequently depending on local conditions. Please also note the applicable standards and regulations, in particular the notes and specifications from DVGW W 334 (ventilation and venting of water transport and distribution systems) and W 392 (pipe network inspection and water losses), accident prevention regulations and the regulations of the employers' liability insurance associations.

2. Product description:

For maintenance work, the automatic shut-off means that the ventilation fitting can be easily removed and installed under pressure (DVGW Worksheet W 392: Maintenance at least 1x per year). It is not necessary to remove the protection pipe. It is also not necessary to close gate valves or other shut off mechanism!

The splashing water is drained through the drain (push-fit fitting DN 1/2") and the PE pipe supplied with the air release valve set, or through the drainage element. (Discharge in drainage water absorber)

Types of construction:

- Air release valve for operating range 0 - 16 bar (standard version)
- Flange DN 50 and DN 80
- BAIO®-spigot end DN 80 (use dirt cover and locking ring!)

Accessories:

- Hawle surface box for air release valve set, Order No. 211
- Drainage element for air release valve set, Order No. 992
- Flushing stand pipe, Order No. 9922
- Indicator plate for air release valve set, Order No. 986
- Dirt cover and locking ring (for spigot end DN 80), Order No. 490 see separate operating instructions
- Flood protection for air valve set for potable water, Order No. 992ÜS

3. Assembly:

Air release valves are placed on the pipeline at geodetic and hydraulic high points. The outlet on the outlet side must be directly connected to the atmosphere. Any downstream pipe parts, e.g. for the discharge of splashing water, must be large enough to ensure the atmospheric connection. If water can collect in these pipeline parts and/or build up back pressure, the function of the air release valve may no longer be guaranteed. Leakage of the air release valve would be the result.

To prevent entry of rainwater, the standpipe (5) from the pipeline to the bonnet must be surrounded by a drainage water absorber of rolled gravel (Figure. 1 and 2). The installation into the ground water requires additional measures (e.g. closing the draining bore, regular inspections at short intervals)

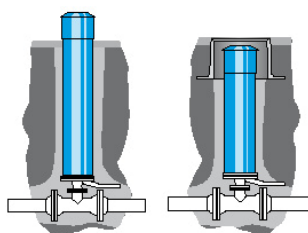


Figure 1

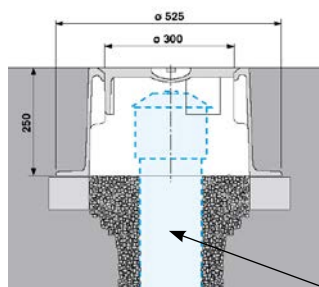


Figure 2

5



The air release valve set can be shortened by 100 mm on site at the points provided for this purpose (standpipe 5, operating pipe 2) - see drawing - as standard on the red marking. Caution: No reduction is possible for versions with RD 1.0 m and special function „only ventilation“ or „only aeration“!

With BAIO®-spigot end DN 80 is between the spigot end and BAIO®-counter sleeve, use a dirt cover and locking ring.

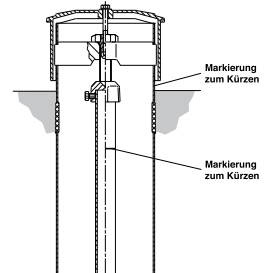
Drainage element assembly:

- Remove cover hood
- Place the drainage element (stop ring on top) over the standpipe from above and push it down to the stop.

#### 4. Service and maintenance:

Valve - removal:

Open the surface box. Unscrew the hexagonal bolt (16). Remove the bonnet (14). Loosen the screw (13) until the spindle holder (12) can be lifted out of the standpipe (5) (see figure A). At the same time the sealing plunger (1.5) closes. Together with the operating pipe (2), the air release valve can now be pulled out upwards.



Unscrew the housing cover with the commercially available face-spanner (6 mm) (Figure B). Remove the internal valve unit (float with valve mechanism). Remove any foreign bodies that may have been flushed in, e.g. drilling chips. Carefully clean the valve body elements and sealing areas (sealing seat on the housing cover for flat gasket), operating vent (rolling diaphragm and valve basket) and sealing element (flat gasket in the valve basket) of possible sedimentary deposition which may occur depending on the water composition (e.g. iron or manganese precipitates). Check the sealing elements for possible signs of wear.

After cleaning has been carried out, all components are reassembled (as shown in Figure C) in reverse order. Ensure correct seating of the O-ring sealing and the guide rod.

The thread and O-rings may need to be greased with Hawle fitting grease (Order No. 600 000 0015).

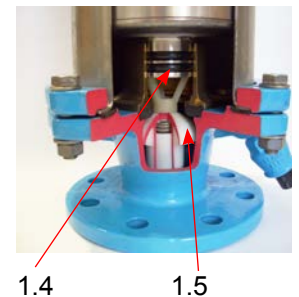


Figure A



Figure B



Figure C

Valve - installation:

Insert the air release valve with the operating pipe from above into the standpipe (5) and the sealing flange (1.4). Insert the spindle holder (12) into the standpipe. Tighten the screw (13). At the same time, the valve fills and vents audibly. Put on the bonnet (14). Tighten the hexagonal bolt (16). Close the surface box.

During installation, pressure test and every functional test, please ensure that any water escaping from the valve can drain off via the drain fitting. When installing the air release valve set in the ground water sector, the ventilation hole must be closed. The air release valve set must then be checked at regular intervals and emptied with a hand pump if necessary.

If this is not observed, there is a danger that contaminated water may get into the potable water during the ventilation process!

#### 5. Commissioning and Pressure Testing:

The air release valve set is designed for a maximum operating pressure of 16 bar, i.e. a test pressure of up to 24 bar is permissible (pressure testing of the body). The function of the valve is factory tested at 16 bar. During the pressure test of the pipeline, the air release valves must be shut down because venting may occur during the pressure test. This would result in a drop in pressure. After the pressure test, please put the valve back into operation and carry out a pressure testing at operating pressure (visual inspection)! Decommissioning is carried out as described under point 4 „Valve removal“. Commissioning is carried out in reverse order.

#### 6. Further Information:

If required, please request our detailed technical information on air release valves.

[Should you have questions or need further information, please contact:](#)

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