Operating and maintenance instructions for
Air release valve for sewage water
Order No. 989-01

1. Intended use / Product description

Medium: Municipal sewage (acc. to EN 1085)

Max. operating pressure: 10 bar

Material: Air valve body: stainless steel
Valve basket: POM
Float rod/pressure spring: stainless steel
Float: PP
Outlet elbow: PE 100
Dirt strainer: stainless steel

The Hawle air release valve Ord. No. 989 with reduced installation height can be used for air intake and release in sewage pressure pipes.
The air release valve operates continuously from 0 to 10 bar, properly sealing even when unpressurized.

Due to the patented roll-on membrane, the air release valve is perfectly suitable for releasing major amounts of air under operating pressure. Moreover, the roll-on membrane and the spring mechanism absorb water hammers. The valve seat is not in contact with the medium.

The air release valve is provided with a flushing connection. By connecting a flushing line, dirt can be flushed out of the air release valve easily and quickly. In case of major soiling, the function unit has to be dismantled, cleaned, and re-installed (see item 3).

During installation and maintenance operations, the applicable standards and guidelines, accident prevention regulations and the regulations of professional associations are to be observed and complied with.
Installation and maintenance operations should only be carried out by qualified personnel.

2. Installation

The air release valve has to be installed on a vertical outlet directly on the pressure pipe.
Important: A laterally displaced arrangement of air release valves should be avoided. The air release valve is designed for installation in manholes.
Below the air release valve, a shut-off valve has to be provided to enable maintenance work.
The outlet elbow allows connection to a sufficiently large vent pipe to be established by customer.
For installation and operation of air release valves, see also DVGW sheet W 334.

3. Commissioning:

After the successful installation of the air release valve, a function check has to be performed.

If the pipeline is subjected to pressure testing, the air release valve has to be put out of operation. To this end, the shut-off valve below the valve must be closed.
After the successful pressure test, the shut-off valve has to be opened slowly, and the air release valve must be subjected to a function test and visual inspection under operating pressure.

When filling the pipeline, the maximum filling rate as specified in DVGW sheet W334 shall be observed. Before filling the pipeline, it has to be checked if the air release device of the manhole is able to discharge the air volume.

Important: Before flushing with compressed air, the air release valve must be closed or provided with an air release stop Ord. No. 986-01 performing this function automatically. Valves already installed can be retrofitted with an air release stop.

4. Servicing and maintenance

Important: Air release valves contain compressed air. Prior to any maintenance work, air release valves must be put out of operation and depressurized via a ball valve!

Pursuant to DVGW W392-2 and/or W400-3, air release valves have to be maintained at least once per year, or also more frequently, especially when installed in sewage pressure pipes with a high soiling tendency.

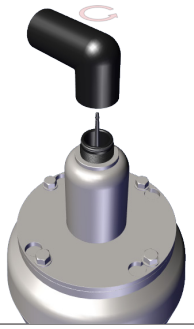
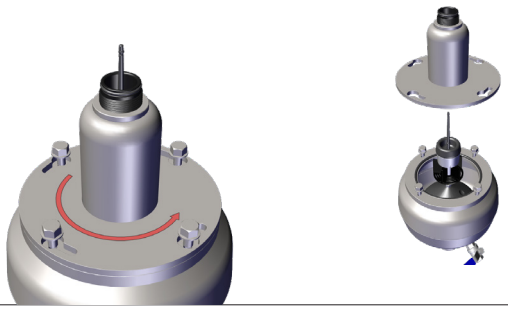
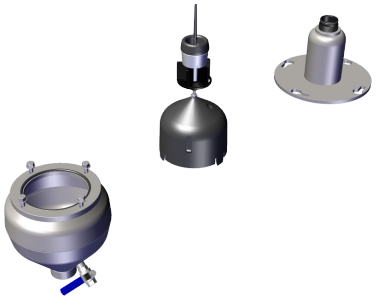
We recommend performing the first maintenance after a period of approx. 4 - 8 weeks and taking the result of this maintenance as a basis for determining further maintenance intervals.
Inspections at regular intervals will increase the functional reliability of the air release valve.

Before any maintenance work, the air release valve has to be disconnected from the pipe network by closing the shut-off valve. Any excess pressure in the air release valve must be released by briefly opening the ball valve.

When entering manholes, the general safety precautions must always be observed. When working in manholes, we recommend the construction to be force-ventilated and maintenance work to be carried out only with pumps switched off.

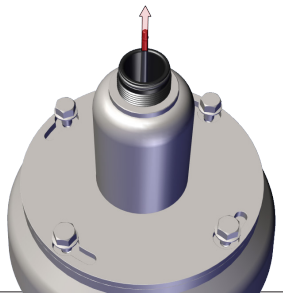
After maintenance work, perform a function check.

4.1 Cleaning the valve

1. Screw off the outlet elbow.	
	2. Loosen the body screws.
3. Turn the upper part of the body counterclockwise and pull it upward and off the function unit.	
	4. Pull the whole valve mechanism upward and out of the body.

5. Clean and flush the body and all soiled components, especially the slots of the upper body part.
6. Turn the roll-on membrane at the rubber nipple outside and check it for deposits and mechanical damage. Remove any deposits by wiping them off with a damp cloth. If the membrane has to be exchanged, take it out of the retaining groove and replace it by a new one.

4.2 Installation of the membrane

1. Pull the membrane over the cup and check its correct seat in the groove.	
	2. Fixing the membrane in the upper body part: Pass the rubber nipple through the bore of the black valve head and pull it through the hole from above until you can clearly hear and feel the bulge engage on the rubber nipple.
3. Further installation is carried out in reverse order of dismantling.	
4. Functional check	

5. Further information

If you need more information, please request our comprehensive specialist information on air release valves.

If you have any other questions or if you need more information please contact:

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