Operating and maintenance instructions for
Hawlinger® service valve
Order No. 220-00, 220-01, 221-00, 221-01, 222-00, 222-01, 226-00, 227-00, 228-00, 230-00, 231-00, 232-00, 235-00, 235-01, 235-02, 236-00, 237-00, 238-00, 239-00, 239-01, 239-02, 240-00, 241-00, 242-00, 243-00, 244-00, 245-00

1. Intended use:
Hawlinger „service valves“ are used for assembly on the pipeline in the drinking water supply and gas sectors. Due to the change in the rubber qualities required by the DVGW for drinking water („W270 conformity“), the seals were separated into water and gas seals.
For differentiation, a ring on the spindle in blue with the inscription „Water“ or in yellow with the inscription „Gas“ is used.

Drinking water supply:
The Hawlinger for drinking water applications are supplied with seals for potable water, which may be used up to a max. operating pressure of 16 bar.
CAUTION:
Hawlinger with potable water seals must not be used in the gas sector, as sufficient gas resistance is not guaranteed!

Gas sector:
The Hawlinger for gas are supplied with gas-proof rubber seals. They can be used up to a max. operating pressure of 5 bar (or 10 bar for service valves with welding saddle).

Hawlinger are available with the following outlet types:
1. ZAK®-outlet ZAK 34 or ZAK 46
2. Internal thread outlet 1“ - 1 1/2“

Please observe the applicable standards and regulations, accident prevention regulations and the regulations of the employers‘ liability insurance associations. According to DVGW regulations, valves must be installed „stress-free“. Installation should only be carried out by appropriately trained personnel.
Please pay particular attention to DVGW Code of Practice W 333 for drilling water pipes, the regulations for working with asbestos cement pipes and the regulations which apply when handling gas fittings and gas pipes. When drilling gas pipes, care must be taken to ensure that the escaping gas
quantity is safely discharged (according to DVGW Worksheets G 465-2 and G 459-1, as well as accident prevention regulations according to BGR 500 - previously BGV D2, previously VBG 50 „Work on gas pipes“)!

2. Product description:
The „Hawlinger“ service valves with integrated service shut-off enable drilling under pressure. The shut-off takes place with half a turn and by means of a splitter-driven washer disc with fixed stops.
There are different types of fixing on the pipe - these are described below:
„Universal service valves“ (assembly on pipe with straps, Fig. 1), „Screw-in service valves“ (assembly on pipe with external thread for drilling saddles with internal thread, Fig. 2), „Weld-in service valves“ (assembly on pipe with PE-X connection for heating coil shells, Fig. 3), „HAKU-Hawlinger“ (assembly on pipe with half shells, Fig. 4) and „Service valves with electrofusion pipe saddle“ (assembly on pipe by welding, Fig. 5).

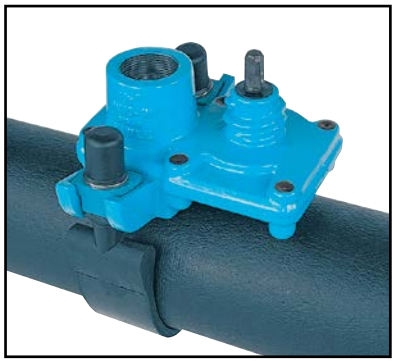
3. Assembly:
Universal service valves (for cast iron, steel and AC pipes)

1. Procedure for metal pipes with a jacket near the tapping valve:
For use with water as a media, the procedure described in DVGW Code of Practice W 333 „service valves and drilling process in water supply“ (as of May 1997) under Section 9.2.2 „Pipe coatings for metal pipes“ must be followed.
The PE coating remains on pipes according to DIN 30674-1, provided good adhesion is achieved.
The extra cement mortar coating on a PE-coated pipeline should be removed from around the tapping valve site, unless the borehole wall is sealed using appropriate measures.
The cement mortar coating on cast iron pipes according to DIN 30672-2 remains on the pipe provided that it complies with the KTW recommendations, sufficient adhesion and surface smoothness as well as low mortar porosity in the area of the service valve are achieved.

For use with gas as a media, the PE jacket or other coatings in the area of the service valve must be professionally removed according to the pipe manufacturer‘s instructions down to the bare metal pipe surface. Any adhesive residue and unevenness on the pipe must be removed, especially in the contact area of the seal.
After professional installation of the service valve, the unprotected pipe area between the clamping strap, valve and

PE coating must be properly protected by means of post-wrapping measures in accordance with the raw material manufacturer‘s recommendations (e.g. suitable bandages, shrink sleeve solutions).
These instructions apply unless the pipe manufacturers expressly make other recommendations for their coated pipes.

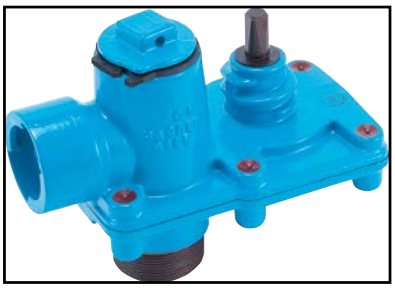
2. The surface of the pipe must be free of dirt, soil or grease.
3. Attache valve.
4. Hang the strap on one side of the saddle body and bend it around the pipe.
5. Mount the second clamp.
6. Tighten the hexagonal bolts alternately and evenly using the specified torque (60 - 70 Nm / max 100 Nm).
Do not use an extension!
7. Drill a hole with a Hawle drilling machine - (observe the corresponding operating instructions)!
8. Perform pressure testing.



Note:
To screw in the threaded connection, use the wrench face of the round thread (for the extension spindle) to hold it in place!

Screw-in service valves (for screwing into threaded valves)

1. The surface of the thread must be free of dirt, soil or grease.
2. Screw the screw-in Hawlinger into the internal thread. The sealing is carried out with a DVGW-approved sealant.
3. Drill a hole with a Hawle drilling machine - (please observe the corresponding operating instructions)!
4. Perform pressure testing.



HAKU-Hawlinger (for PE- /PVC-pipes)

1. The surface of the pipe must be free of dirt, soil or grease.
2. Place half shells around the pipe.
3. Tighten the hexagonal bolts evenly crosswise to the metal stop with the torque specified below. Do not use an extension! With any aged pipes with oversize, tighten Haku with two longer screws if necessary.
   D 90 – D 140: max. torque: 32 Nm
   D 160 – D 225: max. torque: 56 Nm
   D 250 – D 315: max. torque: 130 Nm
4. Drill a hole with a Hawle drilling machine - (please observe the corresponding operating instructions)!
5. Perform pressure testing. Potable water: PE, PVC
   Gas: PVC, max. 5 bar

Service valves with electrofusion pipe saddle (for PE pipes)

1. The surface of the pipe must be free of dirt, soil or grease.
2. Mount the service valve with the heating coil shell on the pipe and weld. Please observe the operating instructions for the electrofusion pipe saddle!
3. Drill a hole with a Hawle drilling machine - (please observe the corresponding operating instructions)!
4. Perform pressure testing.

4. Commissioning and pressure testing:
After installation, please perform a pressure test in an open pipe trench, as described in the DVGW regulations. Open gate valve, fill pipeline and perform pressure test with unfilled trench. The Hawlinger are designed for a max. operating pressure of 16 bar (water) and 5 bar or 10 bar (gas).

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

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