Operating and maintenance instructions for

Tele-Hydrant® Set “Berlin”

Assembly of the hydrant and attachment of the tapping unit Ord.No. 492-01

1. Intended use / Product description

Item No. 492 999 1010

Item No. 492 999 1150

Medium: Potable water
Max. operating temperature: 0° bis 40°
Max. operating pressure: 16 bar
Material: see table structure
UBA-BWGL-metals*

Accessories:

		
206-02 Surface box for Tele-Hydrant® for rolling in, with locking bolt with PE-protection pipe L=300 mm (Included in the scope of delivery) Ord.No. 206 081 2000	206-06 Operating key	Setting device to surface box Tele-Hydrant®-set Berlin Ord.No. 206 081 2050
See separate operating instructions	The operating key serves the purpose of operating tele hydrant Ord. No. 492-01 and unlocking the tele hydrant box for rolling in/for locking Ord. No. 206-02. The special inside contour ensures access to the surface box. Material: stainless steel	The setting device is used to set the surface box with the required installation dimensions. Material: stainless steel

		
490-10 Seepage hose	620-01 End fitting	549-00 MMN-fitting BAIO®
See separate operating instructions	See separate operating instructions	See separate operating instructions

The Hawle Tele-Hydrant® set with tapping unit „Berlin“ is a further development of the Hawle Tele-Hydrant® Ord. No. 492-00 and is suitable for tapping water in public places or at events. The set ensures a hygienic supply of potable water, even during temporary operation.

It consists of a Tele-Hydrant®, which is integrated in the PE shaft, and an associated special tapping unit.

In the event of maintenance or repair work, the hydrant can be reached through the PE shaft without excavation work.
The Tele-Hydrant® „Berlin“ set does not require a standpipe for water withdrawal, as the standpipe and withdrawal unit are integrated into the hydrant. This enables quick and easy access when water is required. The tapping unit consists of an integrated water meter with digital data transmission, two pipe network separators, two outlet fittings and a pipe aerator.

Shutting off is effected via a shut-off blade of stainless steel with all Hawle freeflow underground hydrants®.
The shut-off blade is moved horizontally against fixed stops via an eccentric mechanism and gear in a housing, with low wear.

To use the Tele-Hydrant® set Berlin, the cover of the surface box is removed and the mounted tapping unit with the integrated standpipe is pulled upwards above the level of the road or ground surface. Once the water has been extracted, the extraction unit with the standpipe can be lowered back into the surface box. The Tele-Hydrant® Berlin set is thus protected against unauthorised use.

The hydrant has a drainage function using a push-fit for PE pipe d32.

Tapping unit can be rotated 360°
Connection: GEKA-Plus coupling
Opening/closing: 15 turns
Draining: acc. with DIN EN 1074-6

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 may be performed by qualified personnel only.

2. Assembly

	Allen key size SW4

2.1 General information

Place the Tele-Hydrant® on the pipework (e.g. flanged spigot fitting- BAIO® system) or on a base elbow (e.g. Duck foot bend) for lateral installation.

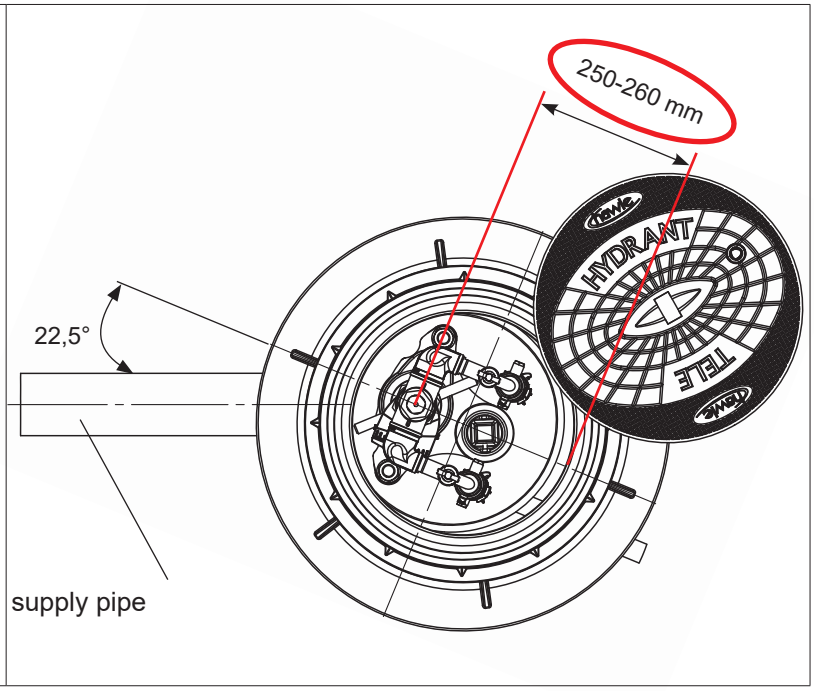
DVGW data sheets W408 and W405 and DIN EN 1717 must also be observed for the installation and operation of underground hydrants.

ATTENTION: The Tele-Hydrant® is equipped with a drainage function. When used in areas with a high groundwater level (at the level of the drain fitting or higher), measures must be taken to prevent the ingress of dirt (e.g. suction drain or end fitting Ord. No. 620-01 (see accessories)).

Auf den genauen Sitz der Tele-Hydrant® Kappe (ACHTUNG: runde Straßenkappe erforderlich) ist beim Einbau besonderes Augenmerk zu legen, damit der Hydrantenkopf kollisionsfrei ausgefahren und abgesenkt werden kann (siehe Punkt 2.2 Setzen der Straßenkappe und des PE-Schutzrohres)

Flange connection:
During the assembly of the auxiliary shut-off device in the pipe, the corresponding DVGW- or DWA-regulations for the establishing of a flange connection are must be observed.

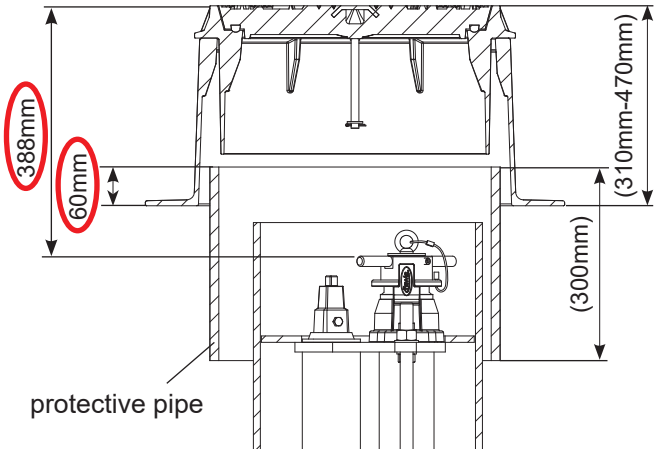
2.2 Positioning the road cap (see also separate operating instructions for tele-hydrant surface box with cover, can be rolled in, lockable version, Ord. No. 206-02)

Pay attention to the following when setting the road cap: Road cap is aligned with the centre of the pipe. Observe the dimension 250-260 mm from the centre of the pipe to the edge of the passage, otherwise there will be collisions with the tapping unit. Offset angle 22.5° to supply pipe	

Observe height dimensions according to drawing.

We recommend the use of the setting device (see accessories). Easy to maintain the correct installation height.

Use of PE protective pipe is recommended (supplied with Tele-Hydrant surface cover version lockable Ord. No. 206-02).



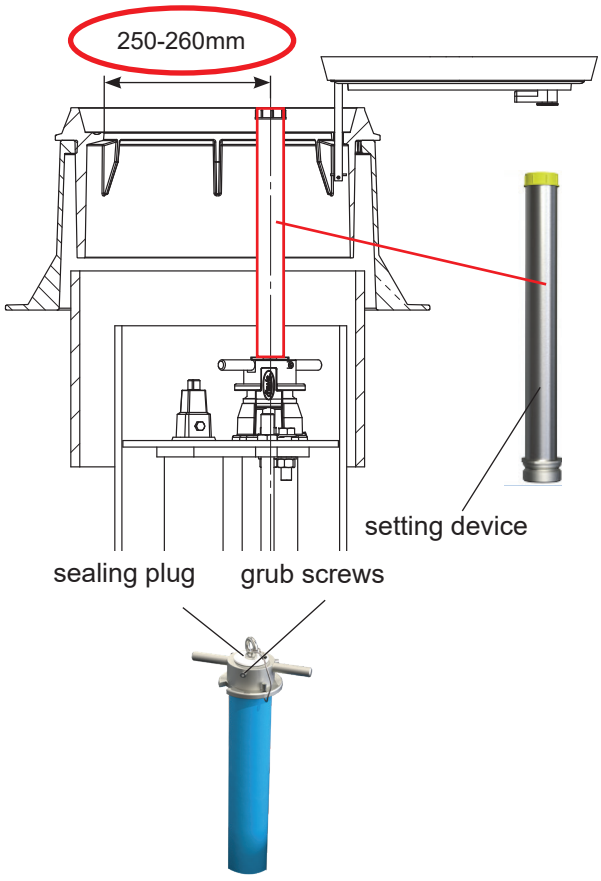
Positioning the surface box with the setting device

Loosen the three grub screws on the circumference of the tele unit and pull out the sealing plug on the eyebolt.

Attach the setting device to the carrier pipe.

Top edge corresponds to road level.

After setting the surface box, remove the setting device and reinsert the sealing plug. Screw in three grub screws around the circumference hand-tight using an allen key.

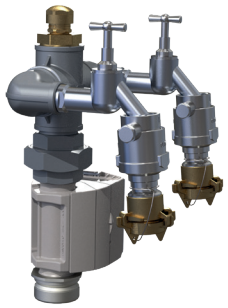
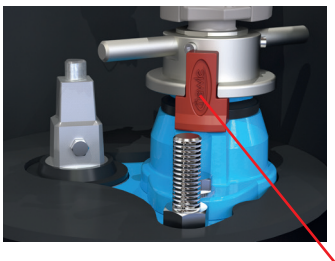
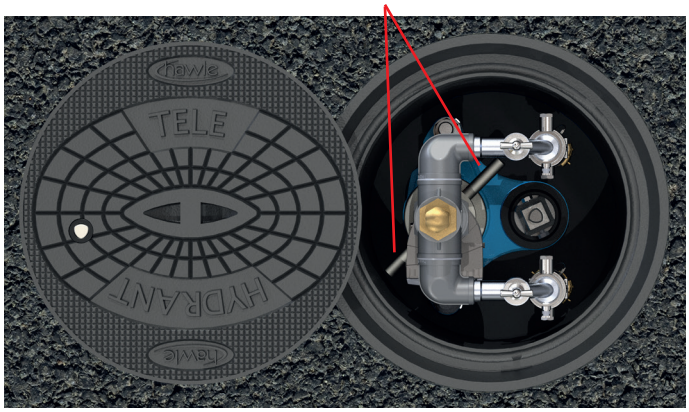
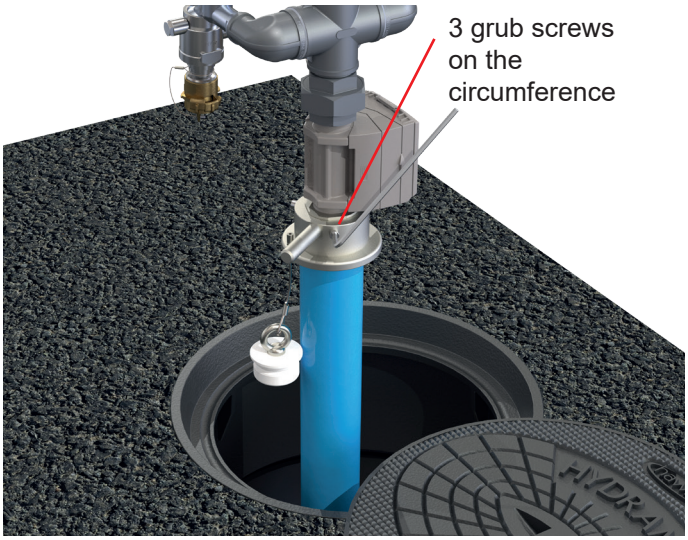


2.3 Assembly of the setting device

Once the surface box has been fitted, the setting device is installed in the hydrant.

To do this, pull out the tele unit using the two handles until it clicks into place.

Loosen the three grub screws on the circumference and pull out the sealing plug on the eyebolt.

Insert the removal unit (pos. 2) into the tele unit and push it in as far as it will go. Align the installation position of the removal unit with the road cap and the positioning piece of the transition flange as shown in the illustration. To do this, lower the tele unit again as required and allow it to engage in the red positioning piece on the transition flange.	  positioning piece removal unit handles Tele-unit 
To fix the removal unit in place, screw in the three grub screws around the circumference hand-tight using an allen key.	

2.4 Sickerpackung

If the drainage opening is not closed (see product description), a seeping water drain packing made of permeable backfilling (grain size > 5 mm) must be installed in the area of the drainage, which absorbs the residual water produced during the closing process and at the same time prevents the Freeflow Underground Hydrant Assembly from being flushed out.
The installation of a seepage hose, order no. 490-10, in connection with permeable backfilling is recommended.

2.5 Seepage hose Ord.No. 490-10

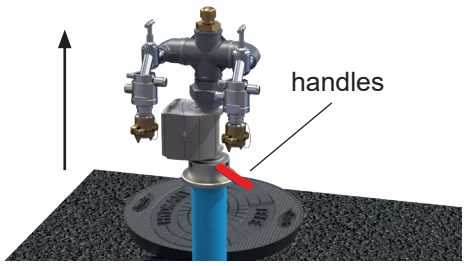
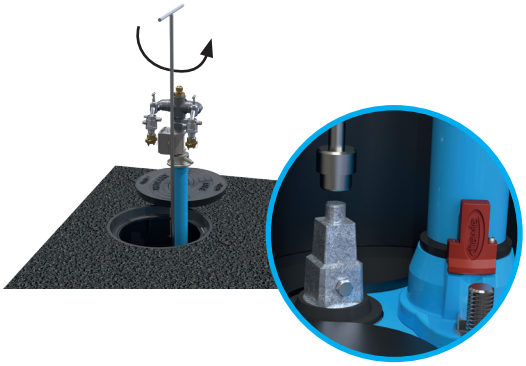
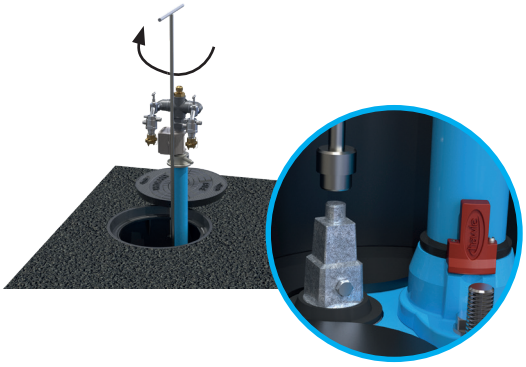
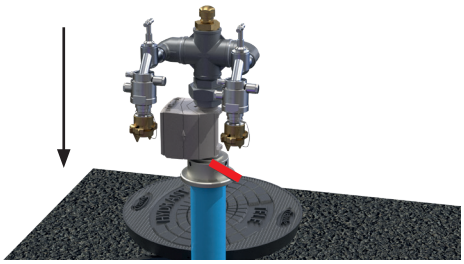
The seepage hose for the Freeflow Underground Hydrant Assembly is used to collect and slowly drain off the residual water that accumulates during the closing process. In addition, possible root ingrowth is prevented.
The seepage hose consists of a flexible drainage pipe d 50 mm covered with filter fleece.
The residual water is discharged evenly over the large surface area.
Penetration of fine-grained soil material via the seepage hose into the interior of the Freeflow underground hydrant or the set is largely prevented by the filter fleece.

Use in:
- „Fine-textured“ soils
- Installation situations where mud ist exprected to be wasched into the housing (groundwater)

See operating instructions Seepage Hose Ord.No. 490-10.

3. Commissioning/Pressure test

3.1 Commissioning

Unlock and open the surface box with the operating key (see accessories) (see also separate operating instructions surface box). Pull the removal unit upwards using the handles until it is noticeably engaged. Remove the end caps from the GEKA couplings (pos. 2.5) and connect the hoses. We recommend using hoses for potable water with KTW approval for connection to the GEKA couplings. Open the outlet fitting (pos. 2.4) for operation. The built-in backflow preventer (pos. 2.2 Safety device - pipe network separator) prevents contamination of the pipe network.	
Use the operating key (see accessories) to move the hydrant to the open position by approx. 15 turns until the stop is felt and relieve the pressure on the gearbox by turning it 1/2 turn in the CLOSE direction. The hydrant is now pressurised.	
After tapping the water, use the operating key (see accessories) to turn the hydrant to the closed position by approx. 15 turns until you feel it stop. No increased closing torque is necessary. After the hydrant has been emptied, the hose connections on the GEKA couplings are removed. Open the outlet fitting (pos. 2.4) to allow residual water to drain. Replace the end caps on the GEKA couplings (pos. 2.5). Close the outlet fitting (pos. 2.4) again.	
Release the telescopic unit from the latching mechanism by gently pulling down on the handles. When lowering into the surface box, ensure that there is no collision with the removal unit. Note: When lowering, residual water that has not yet run out may spray out to the side. Pay attention to the red lock and check the correct lowering height so that the surface box can be closed again. Lock and close the surface box with the operating key (see accessories).	

3.2 Pressure test

After successful installation a pressure test must be carried out in an open pipe trench, observing the maximum operating pressures and in accordance with DVGW regulations.
A functional check must be carried out after the pressure test.

4. Maintenance and servicing

	Allen key size SW4, grease with KTW approval

Hawle Tele-hydrants® do not require any maintenance. Inspection acc. to DVGW sheet W400-3.
At regular intervals, visual and functional checks as well as the resultant maintenance work shall be carried out and documented.
To avoid any soiling of the hydrant's interior, the claw cover must be closed properly. Dirt accumulating inside the surface box, at the claw, and at the hydrant head shall be removed.

Die Entnahmeeinheit ist mit zwei Systemtrennern versehen, die einer jährlichen Wartung unterliegen.
Ein Wartungsservice wird hierfür angeboten von:

The removal unit is equipped with two system separators that are subject to annual maintenance.
A maintenance service is offered by:

Fa. Luitpold Schott Armaturenfabrik GmbH
Brunckstraße 18
D-67346 Speyer
Phone: +49 6232 6459-0
Fax: +49 6232 6459-30
info@luidpoldschott.com

The removal unit is fitted with a Hydrus 173-R1 water meter. For maintenance, see the instructions in the enclosed Diehl operating manual.

Dirt inside the surface box and on the hydrant head must be removed.
In particular, the tube aerator for draining, which is located on the removal unit, must be kept free of dirt.
When the drain hole is closed, the assembly shall be checked at regular intervals for water transfer from above and drained, if required, via a suction lance, hand pump, or similar equipment.

4.1 Removing the hydrant from the set

1. Before the hydrant is removed from the set, the supply line to the set must be shut off.

⚠ **CAUTION:** There is an acute risk of injury if the hydrant is dismantled under operating pressure!

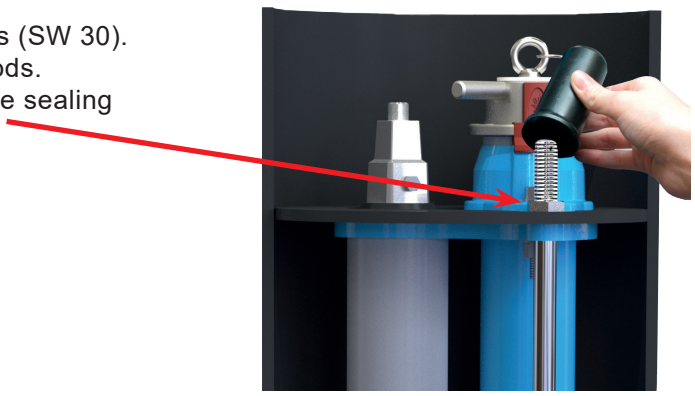
2. dismantle the removal unit (see point 2.3 Assembly of the removal set in reverse order).

⚠ **CAUTION:** Replace the sealing plug! Tighten the grub screws hand-tight!

3. Remove the rubber protective cover from the top of the set.

4. Open the hydrant to release the residual pressure in the pipe.

5. Remove the protective caps from the hexagon nuts (SW 30).
   Loosen the upper hexagon nuts on the retaining rods.
   Take care not to accidentally loosen the nuts on the sealing flange (SW 24).



6. Remove the hydrant upwards (it may be necessary to tilt it).

4.2 Reinstalling the hydrant

1. Clean the O-rings and spigot end of the hydrant as necessary and lightly grease the O-rings with KTW-approved grease.
2. Insert the spigot end of the hydrant into the sleeve of the set base plate from above.
3. Tighten the hexagon nuts (SW 30) above the retaining rods by hand, thereby securing the hydrant firmly in the set again.
4. Place the protective caps with grease packing on the hexagonal nuts (SW 30).
5. Insert the rubber protective cover into the set.
6. Install the tapping unit (see point 2.3).

For further testing of the hydrant, see point 5 Commissioning and pressure testing.

* Brass/red brass components > 0.1% lead acc. to Regulation (EU) No. 1907/2006 (REACH Regulation)

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

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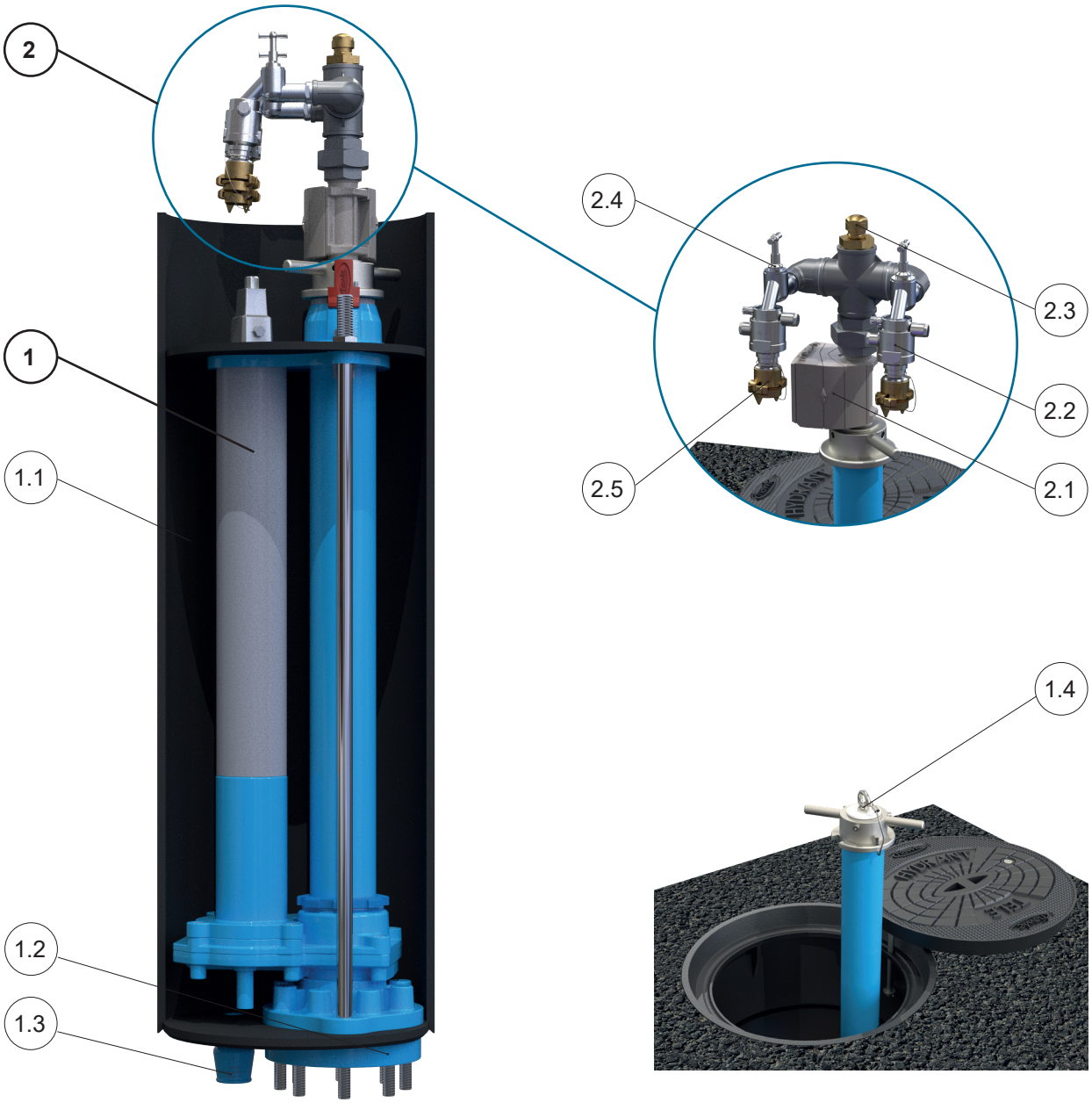
Internet: www.hawle.de

Tele-Hydrant® Set “Berlin”

parts list



Pos.	Quant.	Shortdescription	Material
1	**1**	**Tele-Hydrant®**	Cast components: GJS-400, Hawle epoxy powder coating Medium pipe: stainless steel, Hawle epoxy powder coating Spindle/plug disc/plug disc drive: stainless steel Protective pipe: PP (polypropylene) Seals: EPDM in accordance with UBA-KTW-BWGL
1.1	1	shaft	HDPE
1.2	1	connection flange DN80 with stud bolts	steel, Hawle epoxy powder coating stainless steel
1.3	1	push-fit fitting d32	GJS-400, Hawle epoxy powder coating
1.4	1	sealing plug with eye bolt	POM galvanised steel
2	**1**	**tapping unit complete with standpipe**	
2.1	1	water meter with digital data transmission	stainless steel
2.2	2	safety device – pipe network separator type BA DIN EN 1717	brass
2.3	1	pipe aerator	brass
2.4	2	drain valve	stainless steel
2.5	2	GEKA plus coupling and end cap GEKA plus blind coupling	brass