

## 1. Intended use / product description



BAIO® spigot end DN 80



Flange connection DN 80

**Medium:** Potable water

**Max. operating pressure:** 16 bar

**Material:** Cast iron components: GJS-400, Hawle epoxy powder-coated  
Medium pipe: stainless steel, Hawle epoxy powder-coated  
Spindle/shut-off blade/shut-off blade driving mechanism: stainless steel  
Protection jacket: PP (polypropylene), gaskets: EPDM acc. to DVGW W 270  
Metal materials in contact with potable water according to positive list of German Federal Environment Agency (UBA)\*

**Accessories:** (see respective separate operating instructions)

- Drainage element for underground hydrant, Ord. No. 490-03
- Seepage hose for underground hydrant, Ord. No. 490-04
- Dirt cover and locking ring, Ord. No. 490- 05 (**Important note: mandatory for hydrants with spigot ends**)
- Tele-hydrant surface box for rolling in, with locking pin, Ord. No. 206- 02 (**Important note: a round hydrant surface box must be used for installing a Tele-Hydrant**)

### Special version

For information regarding the height-adjustable version of the Tele-Hydrant® see operating instructions “Freeflow Underground Hydrant Height-Adjustable”.

Hawle Tele-Hydrant® acc. to EN 14339, DIN EN 1074 and DVGW W386 (Storz instead of claw coupling). Fixed coupling acc. to DIN 14317 and 14318.

Due to the separation of operating and medium pipe, all Hawle freeflow underground hydrants®, as well as the Tele-Hydrant®, feature considerably better hydraulic conditions in opened position than hydrants with conventional shut-off via valve plug.

Shut-off is effected via a shut-off blade of stainless steel. The shut-off blade is moved horizontally at low wear against fixed metal stops in a housing via an eccentric mechanism and gear.

The Tele-Hydrant® is an advanced version of the freeflow underground hydrant. Due to its special design, the Tele-Hydrant® combines the advantages of above ground and underground hydrants.

In case of the Tele-Hydrant®, no standpipe is needed for tapping the water as the standpipe and the hydrant head are integrated in the hydrant. This permits quick and easy access when water is needed.


When the Tele-Hydrant® is to be used, the surface box cover is removed and the integral standpipe is pulled upward above road level or ground level. After tapping the water, the standpipe can be lowered back into the box. Thus the Tele-Hydrant® is protected in areas with increased traffic volume and also safeguarded against unauthorized use.

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.

## CE marking:

- Cast parts: GJS-400 (GGG-40), high-quality corrosion protection by Hawle epoxy powder coating inside and outside acc. to DIN 3476 (P) and DIN 30677-2, colour similar to RAL 5012 (coating thickness >250 µm, zero-porosity at 3000 V, adhesion inside and outside >16 N/mm<sup>2</sup> after exposure to hot water)
- Drainage acc. to EN 1074-6
- Corrosion-resistant to disinfectants permitted in the field of potable water

 1085	
Hawle Armaturen GmbH, D-83395 Freilassing 07 1085 - CPR -0025	
EN 14339 Telescopic underground hydrant Square of spindle acc. to W386	
PN	16
Number of revolutions for opening (total and ineffective)	15 und 4
Closing direction	im Uhrzeigersinn
MOT and mST	105 und 210 Nm
Kv (m <sup>3</sup> /h) 2/1 B outlet 2/1 C outlet	160 / 100 140 / 80
Inlet	Flange EN 1092-2, BAIO®-spigot end
Outlets	Fixed coupling acc. to DIN 14317 and 14318

## 2. Assembly

### 2.1 General

Depending on the type of connection, put the Tele-Hydrant® either on the pipeline (e.g. B-fitting, all socket tee, flanged spigot, etc.) or, in case of lateral installation, on duckfoot bends (e.g. EN-fitting, MMN-fitting, and/or N-fitting).

Moreover, for installing and operating underground hydrants, the DVGW sheets W331 and W405, as well as DIN EN 1717 shall be observed.

**IMPORTANT:** The Tele-Hydrant® is provided with a drain-off function. When used in areas with high groundwater levels (on a level with the drain-off fitting or higher) measures must be taken to prevent the ingress of dirt (e.g. forced drainage).

During installation, special care shall be taken that the Tele-Hydrant® surface box (important: round surface box required) fits accurately to ensure that the hydrant head can be moved out and lowered without colliding with any parts.

#### **BAIO®-connection:**

When installing the underground hydrant in the pipeline, the BAIO® installation instructions shall be observed.

In a Hawle freeflow underground hydrant with a BAIO® spigot end a dirt cover and locking ring Ord. No. 490-05 must always be used between the hydrant spigot end and the BAIO® socket. In addition to preventing unintentional unlocking, the dirt cover and locking ring also serves as a protection against dirt.

#### Securing the BAIO® fittings in the unfilled utility trench

As long as the utility trench is not filled, all BAIO® pipe fittings installed in horizontal and vertical position shall be properly secured against unlocking (tilting, rotating, etc.). See BAIO installation instructions.


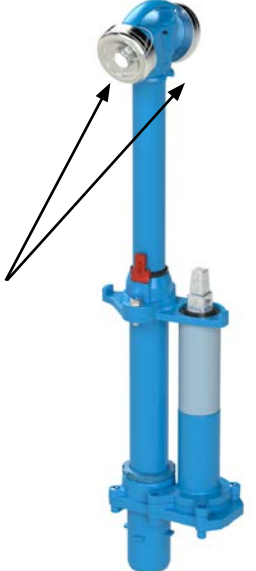
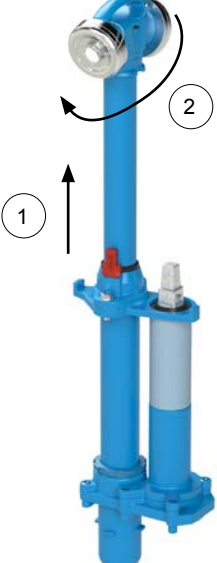

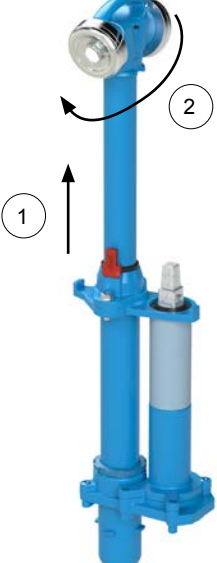
#### **Flange connection:**

When installing the underground hydrant in the pipeline, the respective DVGW provisions for establishing a flange connection shall be observed.




## 2.2 Operation

### Opening

1. Remove the cover of the tele-hydrant box.	
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<p>2. Grasp the handle at the hydrant head</p>		<p>5. Screw off the cover of couplings C and/or B and connect the hose/s</p>	
<p>3. Pull the hydrant head upward until you can feel it engage ( 1 )</p>		<p>6. Put the hydrant operating key onto the spindle head and move the hydrant to open position by approx. 15 revolutions</p>	
<p>4. Turn the hydrant head by at least 45° so you can put on the operating key ( 2 ).</p>			

**Closing**

<p>1. Put the hydrant operating key onto the spindle operating square and move the hydrant to closed position by approx. 15 revolutions</p>		<p>3. Release the hydrant head from engaged position by pushing it downward with a jerk.</p> <p>When lowering the head into the surface box, turn it in such a way that one of the two couplings B or C covers the operating square.</p>	
<p>2. When the hydrant is drained, dismantle the hose/s from couplings B and/or C and screw on the cap</p>	<p>See Figure 5 above.</p>	<p>4. In lower position, make sure that the recess of the hydrant head is pushed over the red position element</p>	

5. Put on the surface box cover	See Figure 1 above
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### 2.3 Seeping water drain packing

In the area of the drainage mechanism, a seeping water drain packing consisting of permeable material (grain size > 5 mm) should be installed which absorbs the residual water accumulating during closing and simultaneously prevents the hydrant from being undermined by water.

We recommend installing a drainage element Ord. No. 490-03, or alternatively a seepage hose Ord. No. 490-04 in connection with permeable backfilling.

### 2.4 Drainage element Ord. No. 490-03

The drainage element for Hawle hydrants serves the purpose of receiving and slowly draining off the residual water accumulating during closing. Additionally, a possible penetration of roots is prevented.

#### Use in:

- Normal soils
  - Installation situations where no mud is expected to be washed into the body (no groundwater)
- See operating instructions for drainage element Ord. No. 490-03

### 2.5 Seepage hose Ord. No. 490-04

The seepage hose for Hawle underground hydrants serves the purpose of receiving and slowly draining off the residual water accumulating during closing. Additionally, a possible penetration of roots is prevented.

The seepage hose consists of a flexible drainage pipe d 50 mm wrapped in filter fleece. Via the big surface area, the residual water is released evenly.

The filter fleece largely prevents the penetration of fine soil material into the interior of the underground hydrant via the seepage hose.

#### Use in:

- Fine-textured soils
  - Installation situations where mud is expected to be washed into the body (groundwater)
- See operating instructions for seepage hose Ord. No. 490-04

## 3. Servicing and maintenance

Hawle Tele-Hydrants® do not need 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.

Dirt accumulating inside the surface box and at the hydrant head shall be removed. The ventilation valve for drainage, in particular, which is located at the hydrant head, must be kept free from dirt.

## 4. Commissioning and pressure testing

After the successful installation, the hydrant has to be subjected to pressure testing in the open trench considering the maximum operating pressures as specified in the DVGW regulations.

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

\* 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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