Operating and maintenance instructions for HAKU pipe saddle with 45° ZAK<sup>®</sup> outlet Ord.No. 524-00



## 1. Intended use / Product description



Medium:	Potable Water / Municipal Sewage
Max. operating temperature:	0° to 40°
Max. operating pressure:	16 bar
Material:	Body: GJS-400, Hawle epoxy powder coated Gasket: EPDM acc. to UBA-KTW-BWGL

HAKU tapping saddles with ZAK<sup>®</sup> outlet 45° are to the used for installation on PE pipes PE80/100 acc. to DIN 8074 and PVC pipes acc. to DIN 8062. The two saddle halves are exactly calibrated to the respective outside diameter. When connecting the saddle halves, an inadmissible deformation of the pipe is prevented by the metal stops.

The ZAK®69 socket outlet (45°) serves the purpose of establishing a form-locked connection with valves and fittings featuring ZAK®69 spigot ends (sewage water service valve Ord. No. 483-01, a shut-off adaptor with ZAK® outlet Ord. No. 372-01), and fittings Ord. No 616-00 and Ord. No 649-00.

In combination with the sewage water service valve Ord. No. 483-01 or shut-off adaptor with ZAK<sup>®</sup> outlet Ord. No. 372-01 for potable water or sewage water, a drilling device e.g. HAWLOMAT Ord. No. 830-00 and the ZAK<sup>®</sup>69 drilling set for 45° drilling Ord. No. 830-02, the main pipe can be drilled even with the pipe in service.

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.

#### Accessories:





# 2. Assembly

Open-ended wrench, torque wrench

1. The surface of the pipe must be clean and free from notches, score marks, and lubricants.

- 2. Place the HAKU shut-off saddle at the desired position.
- 3. Fix the HAKU top and bottom halves by means of the four screws provided, observing following torques:

D	63	-	D140 (	(M10)	=	max.	50 Nm
D	160	-	D225 (	(M12)	=	max.	70 Nm

## Standard installation:

Tighten the hexagon head screws evenly and crosswise until the two parts get in contact and the maximum torque is reached.

IMPORTANT: Do not use any extensions!

## Installation on old pipes:

When the saddle is to be installed on existing PE lines (old pipes), the outside diameter may be beyond the standard tolerance. Pretighten the HAKU with two longer screws, if necessary. After final assembly of the saddle, check the maximum torque **twice after 15 minutes**, each!

4. Perform drilling using the HAWLE drilling device Ord: No. 830-00 and the ZAK<sup>®</sup>69 drilling set for 45° drilling Ord. No. 831-02 (see accessories) / separate operating instructions).

Observe the relevant operating instructions.

## 3. Commissioning and pressure testing

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.

### 4. Servicing and maintenance

Hawle pipe saddles are maintenance-free.

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

Hawle Armaturen GmbH - Application Engineering -Liegnitzer Str. 6 D-83395 Freilassing Phone: +49 (0)8654 6303-0 Telefax: +49 (0)8654 6303-222 E-Mail: info@hawle.de Web: www.hawle.de