

## 1. Intended use / Product description

**Medium:** potable water / waste water ( acc. EN1085 )

**Max. operating pressure:** 10 bar / 16 bar

**Material:** Body: GJS-400, Hawle-epoxy powder coatet  
Gasket: EPDM acc. DVGW W 270 for water  
Grip ring: DN 50 - DN 250 brass, red brass for DN 300 and higher\*

Hawle valves and fittings with push-fit socket System 2000 for the restraint connection with PE pipes grades PE 80, PE 100 (EN 12201, DIN 8074) and PVC pipes (DIN EN ISO 1452-2).

The pipe is sealed via lip gasket. Due to the contour of the lip gasket the pipe end can be pushed into the sealing chamber without great effort. The restraint joint acts independently of the pipe gasket and is ensured by tightening the lock ring.

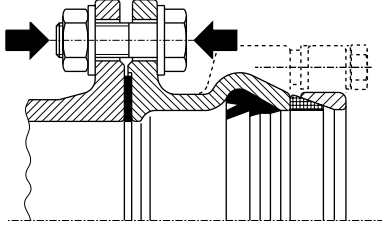
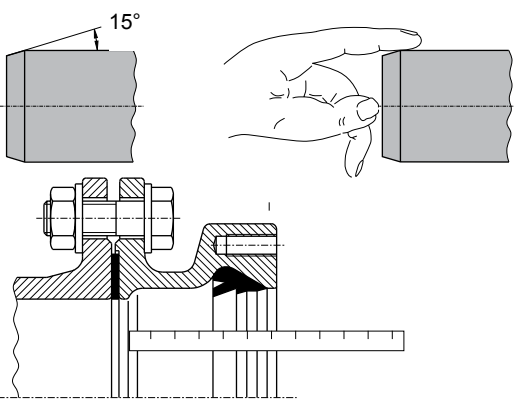
When connecting thin-walled PE pipes  $\geq$  SDR21 and vacuum pipes a support liner must always be used.

For installation, assembly, and maintenance, the applicable standards and regulations, accident prevention regulations, as well as the trade associations' provisions shall be complied with.

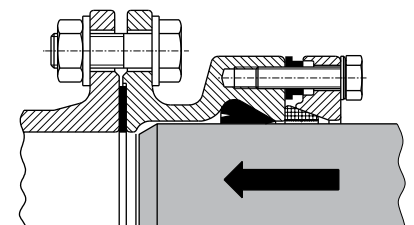
Installation, assembly, and maintenance should be performed by skilled personnel only.

## 2. Assembly

### 2.1 Installation

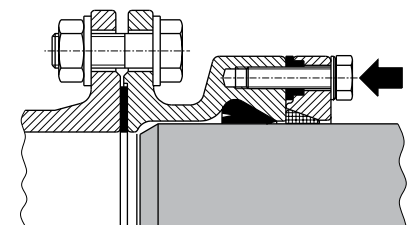
<p><b>1</b></p> 	<p><b>2</b></p> 												
<p>When using a flange: First screw the flange crosswise on the counter-flange with the following torque!</p>	<p>Chamfer the pipe and mark the push-in length. Gaskets must be provided with an approved lubricant. The pipe and clamp must be clean and free of lubricant.</p>												
<table border="1"> <tr> <td>DN 50 - DN 125</td> <td>DN 150 - DN 200</td> </tr> <tr> <td>M 16 - max. 100 Nm</td> <td>M 20 - max. 120 Nm</td> </tr> <tr> <td>DN 300 - DN 350</td> <td>DN 400 - DN 450</td> </tr> <tr> <td>M 24 - max. 160 Nm</td> <td>M 27 - max. 220 Nm</td> </tr> <tr> <td>DN 500</td> <td>DN 600</td> </tr> <tr> <td>M 30 - max. 280 Nm</td> <td>33 - max. 350 Nm</td> </tr> </table>	DN 50 - DN 125	DN 150 - DN 200	M 16 - max. 100 Nm	M 20 - max. 120 Nm	DN 300 - DN 350	DN 400 - DN 450	M 24 - max. 160 Nm	M 27 - max. 220 Nm	DN 500	DN 600	M 30 - max. 280 Nm	33 - max. 350 Nm	
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**3**



Push the pipe into the socket until it stops.

**4**

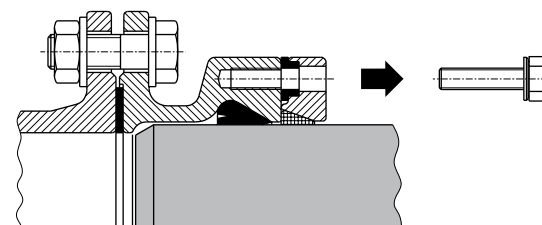


Tighten the pull safety screw crosswise with the following torque until the lock ring is present on the body:

D 63 - D 110	D 125 - D 140	D 160 - D 200
M 10 - max. 60 Nm	M 12 - max. 70 Nm	M 14 - max. 80 Nm
D 225 - D 280	D 315 - D 450	
M 16 - max. 100 Nm	M 20 - max. 120 Nm	

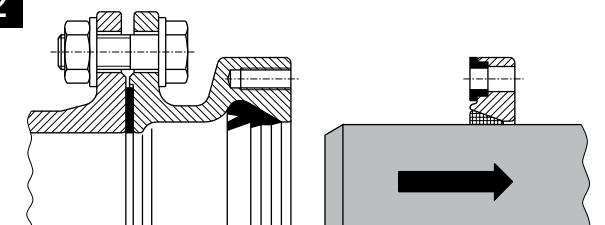
## 2.2 Dismantling

**1**



Loosen and remove the pull safety screws.

**2**



Pull out pipe by turning it.

## 3. Service and maintenance

The Hawle-System 2000 is maintenance-free.

## 4. Commissioning and pressure testing

After successful installation, a pressure test must be carried out in an open pipe trench in accordance with DVGW regulations.

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

**Should you have questions or need further information, please contact:**

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