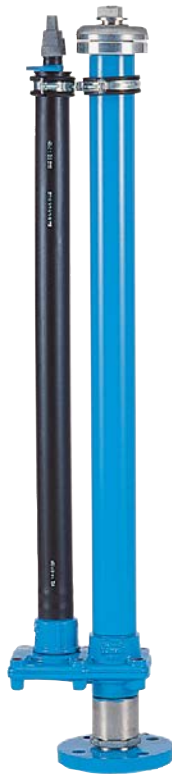


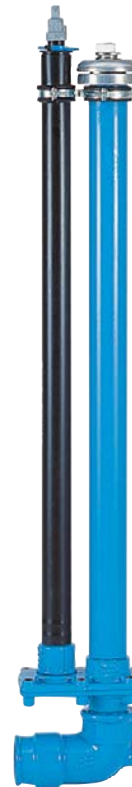
1. Intended use / product description



flange, straight



flange, 45°



push-fit elbow d63/90°

symbol images
potable water

Medium: Potable Water / Municipal Sewage water

Max. operating temperature: 0°- 40°

Max. operating pressure: 16 bar

Material: Cast components: GJS-400, Hawle epoxy powder coated
Medium pipe: steel, Hawle epoxy powder coated / protective pipe-extension spindle: PE-HD
Spindle / shut-off blade / shut-off device: stainless steel
Gaskets: EPDM for potable water / NBR for sewage water
Fitting: clamping ring: delrin, support liner: POM

Via the free outlet area Hawle flushing valves permit a flushing of pressure lines, culverts or transmission lines in the field of water.

The compact design of the flushing valve makes complex and high-maintenance manhole constructions unnecessary, Therefore, all the dangers possibly related with the entering of manholes can be avoided.

Upper outlet: fixed coupling C acc. to DIN 14317, max. outlet area: 36mm

Lower outlet: flange or
push-fit elbow 90° for PE-pipes (DIN 8074/EN 12201) and PE-X (DIN 16893) and on also for PVC pipes (DIN EN ISO 1452-2) on request .

IMPORTANT: Flushing valves with draining function for potable water are not intended for use in sewage water areas!

If the flush valve for potable water is used in groundwater areas, the special version without drainage must be selected.

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:

		
 <p>212-00 Surface box with cover, rectangular</p>	 <p>204-05 Base plate of concrete for surface box</p>	 <p>985-05 Drainage element for flushing valve</p>
		
 <p>985-06 Standpipe for flushing valve</p>	 <p>985-07 Key adaptor - transition from three-square to four-square</p>	 <p>212-02 Transition adaptor for surface box Ord.No. 212-00</p>
		
 <p>341-00 Operating key acc. to DIN 3223</p>	 <p>986-02 Indicator plate</p>	

2. Assembly

ATTENTION: For flushing valves for potable water, we recommend the model without drainage when used in areas with a high groundwater level (at the level of the drain hole or higher) to prevent the ingress of dirt. It should be noted, however, that the service pipe must be drained after use. (danger of frost).

2.1 Flange connection

During the assembly of the flushing fitting in the pipe, the corresponding DVGW-regulations for the establishing of a flange connection are given.

2.2 Fitting connection

During the assembly of the flushing fitting with fitting outlet in the pipe, the following regulations must be observed.

Max. operating pressure:

PE 100	PN 16
PE 80	PN 12,5
PE-X	PN 12,5

Elbow 90° with female thread acc. to DIN ISO 228-1 and push-fit socket.

Hawle push-in fittings can be used in underground pipeline construction and in distribution systems for both potable water supply and wastewater disposal (no application in installation).

For PE pipes (DIN 8074/EN 12201) and PE-X (DIN 16893) and on request, also for PVC pipes (DIN EN ISO 1452-2).

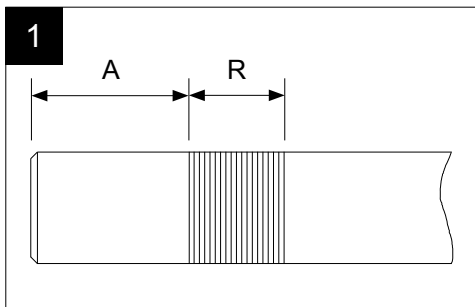
Reliable sealing for the pipe is provided by a large-volume O-ring made of highly elastic rubber. The respective grip ring holds the pipe. Even distribution of holding forces ensures that no notch stress is transferred to the pipe. Pulling on the pipe causes the grip ring to be pulled into the conical chamber and thus increases the tensile strength of the connection.

Cast fittings with internal or external threads should not be combined with components made of more precious materials (especially brass) in order to avoid contact corrosion.

⚠ Caution: With multiple use of the fitting, the grip ring and, if applicable, the O-ring must be replaced. When connecting PE pipes a support liner must always be used.

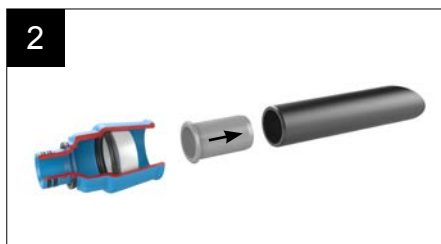
Hawle push-fit fittings for PE and PE-X pipes in sizes d 25 mm - d 63 mm in SDR 11 according to GW 335 - B4 or DIN 8076 are certified in accordance with the DVGW-type examination certificate (registration number DW-7511AR2048).

2.2.1 Assembly Fitting connection

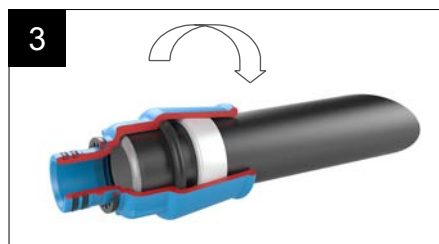


For pipes with a very smooth surface (e.g. PE-X pipes) we recommend roughening the pipe end only in the clamp area (see table) perpendicular to the pipe axis!

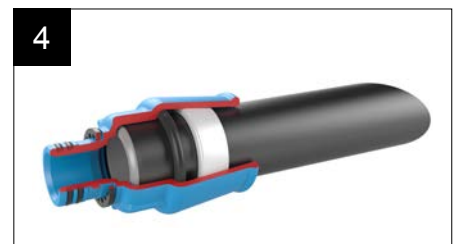
ISO Fitting	Roughening area R in mm	
	A	R
d 63	39,5	30,0



Use pipe end without notches and grooves on the surface. Cut pipe straight with sharp PE shears. Insert the support liner into the PE pipe as far as it will go. When using the included Hawle POM support liner, only deburr the cut surface (Chamfering tool Ord.No. 600-00 or Chamfering tool Ord.No. 598-00). When using MS support liners, the tube should be chamfered at 30 °.

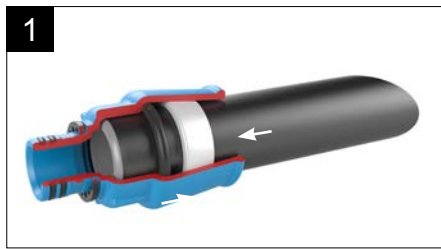


The pipe and fitting must be clean and free of lubricants. Mark the insertion length on the pipe. Caution: Before assembly, the push-fit fitting must be checked for completeness and for correct seating of O-ring and clamp! Push on the push-fit fitting completely, turning and rocking it while doing so. As an assembly aid, only wet the pipe with clean water or Hawle installation spray(no grease or soap).

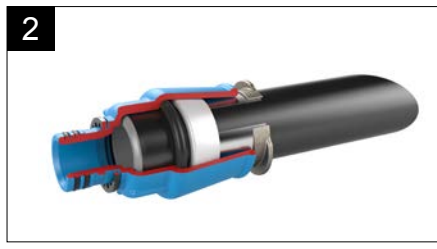


Check tensile strength and tightness by pressure test.

2.2.2 Dismantling Fitting connection



Release the load on the fitting or pipe in the mounting direction: (short jerk) !



Insert extractors (Ord. No. 601-00) completely. Pull out pipe by turning it.



When reusing the fitting, replace the grip ring. Inspect O-ring seal and replace if necessary.



The grip ring as shown in Fig. deform and press into the fitting. Ensure correct seating in the direction of pull.

2.3 Drainage element Ord.No. 985-05

The drainage element for the flushing valve for potable water serves the purpose of receiving and slowly draining of the residual water accumulating during closing. Moreover, the drainage element protects the drainage opening from roots growing in.

PLEASE NOTE: to be used only for potable water flushing valve!

Assembly:

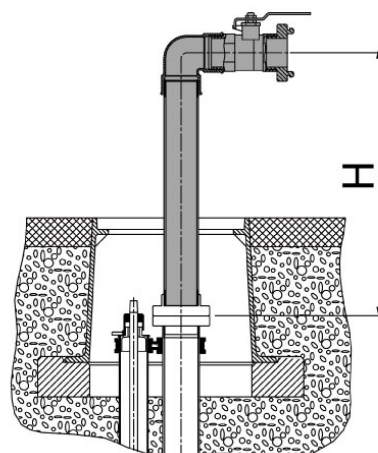
1. Loosen the screws of one cover part of the drainage element and remove the cover part.
2. Put the drainage element over the garden hydrant from above and push it down until it stops.
3. Refit the cover part and fasten it with the screws.
4. Surround the drainage element with permeable backfilling.
Optionally, the drainage element can be prevented from clogging with fleece wrap strips Ord.No. 490 080 0500.

2.4 Standpipe Ord.No. 985-06

Material: Standpipe/Elbow: steel, galvanized
C-coupling: aluminium
Ball valve: brass, nickel-plated

Special standpipe with C-coupling acc. to DIN 14317 for putting onto Hawle flushing valves Ord.No. 985-04 as an extension.

Attention: Before assembly the standpipe, close the operating shut-off of the flushing valve!



Dimension H = 660mm

2.5 Key adaptor - transition from three-square to four-square Best.Nr. 985-07

Material: Stainless steel

The key adaptor is used in combination with the operating key/valve key Ord. No. 341-00/341 001 0000 to open the flush fitting on the C-coupling. No. 341-00/341 001 0000, to open the flushing valve on the C-coupling.

2.6 Transition adaptor for surface box Ord.No. 212-00 - Ord.No. 212-02 and Operating key / valve key Ord.No. 341-00

Material: Stainless steel / steel galvanised

The transition adaptor is used to operate the square of the surface box Ord.No. 212-00 in combination with the operating key/valve key Ord.No. 341-00/341 001 0000.

2.7 Rinsing process

- Open the cover of the surface box with the operating key/valve key Ord.No. 341-00/341 001 0000 and the transition adaptor order no. 985-07.
- Close the operating shut-off of the flushing valve if the flushing valve is not yet closed. To do this, place the operating key/valve key order no. 341-00/341 001 0000 on the actuating square of the flushing valve and turn the flushing valve 180° to the right to bring it into the closed position.
- Open the cover of the C fixed coupling. If necessary, use the key adaptor, Ord.No. 985-07 (see 2.5).
- If necessary, mount standpipe Ord.No. 985-06 on the C-coupling (see 2.4).
- Connect the flushing hose to the C-coupling or to the standpipe.
- Depressurise the pipe section to be flushed.
- Pressurise the flushing valve with flushing water or water/air mixture.
- Slowly open the operating shut-off valve. Place the operating key/valve key Ord.No. 341-00/341 001 0000 on the actuating square of the flushing valve and turn the flushing valve 180° to the left to open it.
- Flush the line section
- Stop the flushing water supply

3. 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.

4. Servicing and maintenance

Hawle flushing valves do not require any maintenance.

* 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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